# **ESSEX HEALTH PROTECTION UNIT**

Part of the



# **INFECTION CONTROL GUIDELINES**

FOR

# TATTOOISTS, BODY PIERCERS AND ACUPUNCTURISTS



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# ESSEX HEALTH PROTECTION UNIT INFECTION CONTROL GUIDELINES FOR TATTOOISTS, BODY PIERCERS & ACUPUNCTURISTS

# **SECTION A – INTRODUCTION AND CONTACTS**

## 1. Introduction

These guidelines have been written for Tattooists, Body Piercers and Acupuncturists. They replace all previous infection control guidance from the Essex Health Protection Unit (EHPU). This document has been written as a general guide, and is not intended as an exhaustive guide to all infectious diseases.

Infection control is an important part of an effective risk management programme to improve the quality of client care and the occupational health of staff.

Intact skin is one of the most important defences against microbial invasion. Any activity which involves the piercing of this skin poses a potential risk of infection. It is therefore very important to maintain strict hygiene controls and monitor sterilisation techniques to prevent this risk.

Poor and unhygienic practice can result in localised infections at the site of puncture or the transmission of blood-borne viruses, for example Hepatitis B/C or HIV, which have more serious consequences. The routes of transmission of infection may be different from one client to another.

The risk of transmission of infection may be minimised by the following:

- The cleanliness of the registered premises, and the fixtures and fittings in those premises
- The personal hygiene of the person registered to undertake treatment and any assistants
- The cleaning and sterilisation of instruments, materials and equipment
- In addition, any person who undertakes cosmetic piercing must have a suitable qualification.

#### 2. Contacts

Infection Control advice can be obtained from:

Essex Health Protection Unit 8 Collingwood Road Witham Essex CM8 2TT

Tel: 0845 1550069 Fax: 01376 302278

The Consultants in Communicable Disease Control and Communicable Disease Control Nurses are contactable via this number.

Advice is also available on the Internet at <u>www.hpa.org.uk/essex</u>. Users are encouraged to ensure they have access to this site as it has advice and information on a wide range of local communicable disease issues, and during incidents will be updated at least daily with the current state of affairs.

Out of office hours - for URGENT communicable disease enquiries:

Contact 01245 444417, and ask for the on-call Public Health Person to be paged.

# ESSEX HEALTH PROTECTION UNIT INFECTION CONTROL GUIDELINES FOR TATTOOISTS, BODY PIERCERS & ACUPUNCTURISTS

# **SECTION B – LEGAL FRAMEWORK**

## 1. Legislation

There are 2 pieces of legislation used by Local Authorities in England and Wales to control skin piercing activities.

- 1) The London Local Authorities Act 1991 used by some local authorities in London. An annual licence is granted by the local authorities.
- 2) The Local Government (miscellaneous provisions) Act 1982 skin piercing activities that may be controlled under this act by a 'one-off' registration and not annual licensing and the subsequent application of bylaws are:
  - Acupuncture
  - Tattooing
  - Ear piercing
  - Electrolysis.

Practitioners have responsibilities under the Health and Safety at Work Act 1974 and associated legislation.

The Tattooing of Minors Act 1969 makes it an offence to tattoo a person under 18 years of age. The issue of parental consent or proof of age should be considered when dealing with young people.

There is no statutory age limit for body piercing. Body piercing should not be undertaken on any person under the age of 18. Some practitioners will do so on 16-18 year olds with parental consent. Proof of age should be sought if there is any uncertainty.

The Prohibition of Female Circumcision Act 1985 prohibits mutilation or circumcision of female genitalia. It states that mutilation, cutting, piercing or surgically modifying genitalia for non-medical reasons is illegal.

Administering a local anaesthetic by injection or topical cream may only be practiced in law by a registered medical practitioner. The administration of local anaesthetic gels, creams and sprays is not recommended. Body piercers should not administer prescription-only medicines to their clients e.g. Emla cream. Ethyl Chloride is a highly flammable anaesthetic spray that is not recommended for use under any circumstances.

In September 2001, the first comprehensive UK guidance including infection control for Body Art was published (Barbour Index 2001).

In October 2001, the Health and Safety Executive/Local Authorities Enforcement Liaison Committee (HELA) produced their enforcement circular on health and safety issues related to body piercing, tattooing and scarification.

This guidance aims to reflect advice given in both the Barbour index and HELA documents.

#### **Mobile Tattooing and Body Piercing**

Any person wishing to set up a mobile tattooing or body piercing business should seek advice from the Borough Licensing Department in the area before any tattooing or body piercing is undertaken.

# ESSEX HEALTH PROTECTION UNIT INFECTION CONTROL GUIDELINES FOR TATTOOISTS, BODY PIERCERS & ACUPUNCTURISTS

# SECTION C – INFECTION, ITS CAUSES AND SPREAD

## 1. The Causes of Infection

Micro-organisms are integral to infections, and a basic insight into the characteristics of commonly encountered micro-organisms is essential for good infection control practice. Micro-organisms that cause disease are referred to as pathogenic organisms. They may be classified as follows:

**Bacteria** are minute organisms about one-thousandth to five-thousandth of a millimetre in diameter. They are susceptible to a greater or lesser extent to antibiotics.

**Viruses** are much smaller than bacteria and although they may survive outside the body for a time they can only grow inside cells of the body. Viruses are not susceptible to antibiotics, but there are a few anti-viral drugs available which are active against a limited number of viruses.

**Pathogenic Fungi** can be either moulds or yeasts. For example, a mould which causes infections in humans is *Trichophtyon rubrum* which is one cause of ringworm and which can also infect nails. A common yeast infection is thrush caused by *Candida albicans*.

**Protozoa** are microscopic organisms, but larger than bacteria. Free-living and nonpathogenic protozoa include amoebae and paramecium. Examples of medical importance include *Giardia lamblia*, which causes an enteritis (symptoms of diarrhoea).

**Worms** are not always microscopic in size but pathogenic worms do cause infection and some can spread from person to person. Examples include threadworm and tapeworm.

**Prions** are infectious protein particles. For example the prion causing (New) Variant Creutzfeldt-Jakob Disease (vCJD).

## 2. The Spread of Infection

There are various means by which micro-organisms can be transferred from their reservoir to susceptible individuals. These are:

**Direct Contact.** Direct spread of infection occurs when one person infects the next by direct person-to-person contact (e.g. chickenpox, tuberculosis, sexually transmitted infections etc.).

**Indirect Contact.** Indirect spread of infection is said to occur when an intermediate carrier is involved in the spread of pathogens e.g. fomite or vector.

A *fomite* is defined as an object, which becomes contaminated with infected organisms and which subsequently transmits those organisms to another person. Examples of potential fomites are instruments, trays or practically any inanimate article.

Crawling and flying insects are obvious examples of *vectors* and need to be controlled.

**Hands.** The hands of practitioners are probably the most important vehicles of cross-infection. The hands of patients can also carry microbes to other body sites, equipment and staff.

**Inhalation.** Inhalation spread occurs when pathogens exhaled or discharged into the atmosphere by an infected person are inhaled by and infect another person. The common cold and influenza are often cited as examples, but it is likely that hands and fomites (inanimate objects) are also important in the spread of respiratory viruses.

**Ingestion.** Infection can occur when organisms capable of infecting the gastrointestinal tract are ingested. When these organisms are excreted faecally by an infected person, faecal-oral spread is said to occur. Organisms may be carried on fomites, hands or in food and drink e.g. Hepatitis A, *Salmonella, Campylobacter*.

**Inoculation.** Inoculation infection can occur following a "sharps" injury when blood contaminated with, for example, Hepatitis B virus is directly inoculated into the blood stream of the victim, thereby causing an infection. Bites from humans can also spread infection by the inoculation mode.

# ESSEX HEALTH PROTECTION UNIT INFECTION CONTROL GUIDELINES FOR TATTOOISTS, BODY PIERCERS & ACUPUNCTURISTS

# SECTION D – STANDARD PRINCIPLES OF INFECTION CONTROL

# 1. Standard Principles of Infection Control

It is not always possible to identify people who may spread infection to others, therefore precautions to prevent the spread of infection must be followed at all times. These routine procedures are called **Standard Principles of Infection Control (or Universal Precautions).** 

Standard Principles of Infection Control include:

- Hand Hygiene and Skin Care
- Protective Clothing
- Safe Handling of Sharps (including Sharps Injury Management)
- Spillage management.

All blood and body fluids are potentially infectious and precautions are necessary to prevent exposure to them. A disposable apron and latex or vinyl gloves should always be worn when dealing with excretions, secretions, blood and body fluids.

Everyone involved in providing tattooing, body piercing and acupuncture should know and apply the standard principles of hand decontamination, the use of protective clothing and the safe disposal of sharps. Each member of staff is accountable for his/her actions and must follow safe practices.

## 2. Hand Hygiene and Skin Care

There are two methods of hand decontamination which are handwashing and handrubs, both alcohol and non-alcohol based.

Hand decontamination is recognised as the single most effective method of controlling infection.

Hands must be decontaminated:

- Before and after each session. Remove jewellery (rings)
- Before and after physical contact with each client
- Before putting on, and after removing, protective clothing, including gloves
- After using the toilet, blowing your nose or covering a sneeze
- Whenever hands become visibly soiled
- After contact with body fluids
- Before eating, drinking or handling food, and before and after smoking.

#### How to Wash Your Hands

Hands that are visibly soiled, or potentially grossly contaminated with dirt or organic material, must be washed with liquid soap and water.

An effective handwashing technique involves three stages:

#### 1. Preparation

- Before washing hands, all wrist and, ideally, hand jewellery should be removed
- Cuts and abrasions must be covered with waterproof dressings
- Fingernails should be kept short, clean and free from nail polish
- Hands should be wet under warm running water before applying liquid soap or an antimicrobial preparation.

#### 2. Washing and Rinsing

- The handwash solution must come into contact with all of the surfaces of the hand
- Hands must be rubbed together vigorously for a minimum of 15-30 seconds, paying particular attention to the tips of the fingers, the thumbs and the areas between the fingers (see figure 1)
- Hands should be rinsed thoroughly.

#### Hygienic Hand Disinfection for Tattooing, Body Piercing and Acupuncture

This can either be achieved by using antiseptic liquid soap, or by routine handwashing as demonstrated below, followed by 5mls of an alcohol handrub.



Handwashing technique. (Ayliffe et al. 1978; Lawrence 1985)

and forwards, with clasped fingers vice versa.

## Figure 1

#### 3. Drying

- Dry hands thoroughly using good quality paper towels
- Disposable paper towels are the method of choice because communal towels can be a source of cross-contamination
- Store paper towels in a wall-mounted dispenser next to the washbasin, and throw them away in a pedal-operated domestic waste bin
- Do not use your hands to lift the lid or they will become re-contaminated.

Hot air dryers are not recommended. However if they are used, they must be regularly serviced and users must dry hands completely before moving away.

#### **Alcohol Handrubs/Gels**

Hands should be free from dirt and organic material. The handrub solution must come into contact with all surfaces of the hands. They should be rubbed together vigorously, paying particular attention to the tips of the fingers, the thumbs and finger webs until the solution has evaporated and the hands are dry, as described in Figure 1.

#### How to Apply:



This may be used for general decontamination of hands with alcohol gel or liquid. This method has been developed by Ecolab.

#### Hand Creams

An emollient hand cream should be applied regularly to protect skin from the drying effects of regular hand decontamination.

If a particular soap, antimicrobial hand wash or alcohol product causes skin irritation, the General Practitioner (GP) should be consulted.

#### Hand Decontamination Facilities

#### Hand Washing

Facilities should be adequate and conveniently located. Ideally, handwashing facilities must be available in the room where client consultations and procedures take place. Alternatively, facilities to do so should be a short

distance away. They should have elbow or foot-operated mixer taps. A separate sink should be available for other cleaning purposes - such as cleaning instruments:

- Use wall-mounted liquid soap dispensers with disposable soap cartridges keep them clean and replenished
- Dispensers should be dismantled and washed regularly with particular attention to the nozzle
- Place disposable paper towels dispensers next to the basins soft towels will help to avoid skin abrasions
- Position foot-operated pedal bins near the hand washbasin ensure they are the right size for the amount of waste generated (note: Health & Safety regulations recommend a mental, fireproof bin).

#### Location of Alcohol Handrubs/Gels

- Dispensers should be wall-mounted outside all treatment rooms
- Wall-mounted or free-standing in all examination areas
- Wall-mounted at the entry and exits to clinical areas

## 3. **Protective Clothing**

#### Assessment of Risk

Another element of standard principles of infection control is the wearing of protective clothing. The aim is to protect customers from micro-organisms that may be present on the operator's hands, and also to shield the operator from the customer's blood or skin micro-organisms.

Selection of protective equipment must be based on an assessment of the risk of transmission of infection between the client and practitioner.

# WHAT TO WEAR WHEN



#### **Types of Protective Clothing**

#### **Disposable Gloves**

Gloves must be worn for invasive procedures and all activities that have been assessed as carrying a risk of exposure to blood, body fluids, secretions and excretions, or to sharp or contaminated instruments.

Gloves that conform to European Community (CE) standards must be available.

**DO NOT USE** powdered gloves or polythene gloves.

Gloves must be worn as single-use items. They must be put on immediately before an episode of client contact and removed as soon as the activity is completed.

Gloves must be changed between caring for different clients, and disposed of as clinical waste.

Hands should be washed after gloves have been removed. Note that gloves are not a substitute for handwashing.

Sensitivity to natural rubber latex in clients and staff must be documented. Alternatives to natural rubber latex gloves must be available, such as nitrile gloves.

To prevent transmission of infection, gloves must be discarded after each procedure. Gloves should <u>not</u> be washed between clients as the gloves may be damaged by the soap solution and, if punctured unknowingly, may cause body fluid to remain in direct contact with skin for prolonged periods.

#### 1. Non Sterile Gloves

Should be used when hands may come into contact with blood/body fluids and when cleaning up items contaminated with body fluids such as equipment.

#### 2. Sterile Gloves

Should be used when the hand is likely to come into contact with normally sterile areas or during any tattooing or body piercing procedure.

#### 3. General-purpose Utility Gloves

General-purpose utility gloves e.g. rubber household gloves, can be used for cleaning instruments prior to sterilisation, or when coming into contact with surfaces or items possibly contaminated with blood or body fluids. Ideally, colour coding of such gloves should be used e.g. blue for the kitchen, yellow for general environmental cleaning, and pink/red for 'dirty' clinical duties. This will help prevent cross-infection from one area of work to another. The gloves should be washed with general-purpose detergent (GPD) and hot water, and dried between uses. They should be discarded weekly, or more frequently if the gloves become damaged.

#### 4. Polyurethane/polythene Gloves (Non Sterile and Sterile)

Polyurethane/polythene gloves do not act as a barrier to infection. They do not meet the Health and Safety Commission regulations and they do not have a place in clinical application. **DO NOT USE.** 

Hands must be decontaminated prior to, and after use of gloves when performing any tattooing or body piercing procedure.

#### **Disposable Plastic Aprons**

Apart from gloves, the operator should wear clean and washable clothing. A disposable plastic apron is useful for keeping work clothes clean and should be worn when there is a risk that clothing may be exposed to blood, body fluids, secretions or excretions.

Plastic aprons should be worn as single-use items, for one procedure or episode of client care. These should then be discarded and disposed of as clinical waste.

#### **Face Masks and Eye Protection**

These must be worn where there is a risk of blood, body fluids, secretions or excretions splashing into the face and eyes. Their use will be very dependent on a risk assessment of the type of procedure being envisaged, such as manual decontamination of equipment where aerosols can be generated.

# 4. Safe Handling of Sharps

All staff should be fully immunised according to national policy. In addition, all those handling sharps should have had a course of Hepatitis B vaccine. A record of Hepatitis B antibody response should be kept for all staff who have regular exposure to blood/blood-stained body fluids.

Care should be taken to avoid accidental needlestick injury, as exposure to contaminated blood may be associated with transmission of blood-borne viruses (BBVs).

Sharps include needles, scalpels, stitch cutters, glass ampoules, sharp instruments and broken crockery and glass. Sharps must be handled and disposed of safely to reduce the risk of exposure to blood-borne viruses. Always take extreme care when using and disposing of sharps. Avoid using sharps whenever possible.

- Sharps should be single-use only, or if re-useable, be capable of sterilisation
- Do not re-sheath a used needle if this is necessary a safe method, i.e. a resheathing device, must be used
- Discard sharps directly into a sharps container immediately after use and at the point of use
- Sharps containers should be available at each location where sharps are used
- Sharps containers must comply with UN 3921 and BS7320 standards
- Close the aperture to the sharps container when carrying or if left unsupervised to prevent spillage or tampering
- Place sharps containers on a level stable surface
- Do not place sharps containers on the floor, window sills or above shoulder height - use wall or trolley brackets
- Assemble sharps containers by following the manufacturer's instructions
- Carry sharps containers by the handle do not hold them close to the body
- Never leave sharps lying around
- Do not try to retrieve items from a sharps container
- Do not try to press sharps down to make more room

- Lock the container when it is three-quarters full using the closure mechanism
- Label sharps containers with the source details prior to disposal
- Place damaged sharps containers inside a larger container lock and label prior to disposal. Do <u>not</u> place inside yellow clinical waste bag.

#### For Management of Sharps Injuries, see section E

#### 5. Spillage Management

Deal with blood and body fluid spills quickly and effectively (see sub-sections 1 and 2).

A <u>'grab bucket'</u> containing all the relevant equipment should be readily available to deal with a spillage of body fluids. The kit should be kept in a designated place (depending on the size of the establishment there may be more than one kit).

The kit should comprise:

- 'Nappy' type bucket with a lid
- Non-sterile, unpowdered latex gloves or vinyl gloves
- Disposable plastic apron
- Disposable paper towels
- Disposable cloths
- Clinical waste bag
- Small container of general-purpose detergent
- Hypochlorite solution (e.g. Household bleach or Milton) or Sodium Dichloroisocyanurate compound (NaDCC) (e.g. Presept, Sanichlor) – to comply with COSHH 1988. Note that this compound should be stored in a lockable cupboard
- Absorbent powder e.g. Vernagel (absorbent crystals) to soak up the liquid content of the spillage. Alternatively, disposable paper towels can be used to soak up excess fluid.

The kit should be immediately replenished after use. Ready made spillage kits are available from manufacturers.

For spillage of high-risk body fluids such as blood, method 1 below is recommended. For spillage of low-risk body fluids (non-blood containing fluids) such as excreta, vomit etc., use method 2.

#### 1. Hypochlorite / Sodium Dichloroisocyanurates (NaDCC) Method

- Prevent access to the area containing the spillage until it has been safely dealt with
- Open the windows to ventilate the room if possible
- Wear protective clothing
- Soak up excess fluid using disposable paper towels and/or absorbent powder e.g. vernagel
- Cover area with NaDCC granules (e.g. Presept, Sanichlor).

or

- Cover area with towels soaked in 10,000 parts per million of available chlorine (1% hypochlorite solution = 1 part household bleach to 10 parts water) e.g. household bleach, Milton, and leave for at least two minutes
- Remove organic matter using the towels and discard as clinical waste
- Clean area with detergent and hot water
- Rinse area with water, and dry thoroughly
- Clean the bucket/bowl in fresh soapy water and dry
- Discard protective clothing as clinical waste
- Wash hands.

#### 2. Detergent and Water Method

- Prevent access to the area until spillage has been safely dealt with
- Wear protective clothing
- Mop up organic matter with paper towels and/or absorbent crystals
- Clean surface thoroughly using a solution of detergent and hot water and paper towels or disposable cloths
- Rinse the surface and dry thoroughly
- Dispose of materials as clinical waste
- Clean the bucket/bowl in fresh hot, soapy water and dry
- Discard protective clothing as clinical waste
- Wash hands.

#### N.B. - For spills on carpets and upholstery with or without visible blood

- Wear protective clothing
- Mop up organic matter with paper towels or disposable cloths and/or absorbent crystals
- Clean area with cold water
- Clean area thoroughly with detergent and hot water
- Allow to dry
- Discard protective clothing
- Wash hands
- Ideally, once dry, go over area with a mechanical cleaner.

# ESSEX HEALTH PROTECTION UNIT INFECTION CONTROL GUIDELINES FOR TATTOOISTS, BODY PIERCERS & ACUPUNCTURISTS

# SECTION E – AVOIDANCE AND MANAGEMENT OF SHARPS INJURIES

## 1. Occupational Injuries

All blood and body fluids should be considered as potentially infectious. Some clients may be infected (knowingly or unknowingly) with Hepatitis B, Hepatitis C or HIV and it is important to know what action to take in the event of a sharps injury or contamination incident.

Sharps injuries/contamination incidents include:

- Inoculation of blood by a needle or other 'sharp'
- Contamination of broken skin with blood
- Blood splashes to mucous membrane e.g. eyes or mouth
- Contamination where the individual has an open wound, and clothes have

been soaked by blood

• Bites (where the skin is broken).

The risks of transmission from infected carriers in the event of a sharps injury have been estimated to be approximately:

- Hepatitis B (high-risk carrier) 1 in 3
- Hepatitis C 1 in 30
- HIV 1 in 300.

## 2. Prevention

#### a) Vaccination

It is strongly recommended that you receive a full course of Hepatitis B vaccine which can be provided through your GP or at a travel clinic. For preexposure prophylaxis we would recommend an accelerated schedule consisting of 4 doses at 0, 1, 2 and 12 months. It is very important that you have a blood test 2 months after completion of the course to check that you have responded adequately.

If the response is not sufficient, the doctor will investigate whether there is a specific reason for non-response to the vaccine. It is most important for non-responders to know their status. They may need to be protected by other measures (e.g. immunoglobulin) following a needlestick injury. There are, as yet, no vaccines available against Hepatitis C or HIV.

#### b) Safe Handling of Sharps

The best protection against sharps incidents is prevention.

#### See Section D – 4 Safe Handling of Sharps.

#### c) Management of Sharps Injuries

If a sharps injury/contamination incident occurs:

- 1. Encourage bleeding from the wound
- 2. Wash the wound in soap and warm running water (do not scrub)
- 3. Cover the wound with a dressing
- 4. Ensure the sharp is disposed of safely into a sharps container
- 5. If a splash to the skin, eyes or mouth occurs, wash in plenty of water
- 6. An incident form should be completed as soon as the recipient of the injury is able
- 7. The incident should be reported to the Accident and Emergency Department or GP.

Contact your GP without delay. The doctor will take an exposure history from you and determine what further action needs to be taken. Note that if the surgery is closed you may have to seek advice from the local Accident and Emergency Department.

You may be offered a booster dose of vaccine (even if you have been fully vaccinated) to provide additional protection. If you have not yet completed the course of vaccine you will be given the next dose of vaccine and advised on how to complete the schedule. If you have not started a course of vaccine, an accelerated course consisting of 4 doses at 0, 1, 2 and 12 months should be started immediately.

Dependent on the incident your doctor may also take a blood sample from you at the time and retest you approximately 6 months later to provide reassurance that you have not been infected.

If the client involved in the contamination incident is known to be a Hepatitis B or Hepatitis C carrier, please pass on this information to the doctor so they can organise appropriate follow-up blood tests for you.

If the client involved in the contamination incident is known to be HIV positive you should attend the Accident and Emergency Department without delay (preferably within the hour) explaining clearly to the receptionist/triage nurse what has happened so you can be seen as priority. This is to enable a rapid risk assessment to be done and to decide whether there is an indication for offering you post-exposure prophylaxis. This is likely to be most effective if given as quickly as possible after the exposure hence the need for prompt assessment.

# ESSEX HEALTH PROTECTION UNIT INFECTION CONTROL GUIDELINES FOR TATTOOISTS, BODY PIERCERS & ACUPUNCTURISTS

# **SECTION F – DECONTAMINATION OF EQUIPMENT**

## 1. Introduction

The aim of decontaminating equipment is to prevent potentially pathogenic organisms reaching a susceptible host in sufficient numbers to cause infection.

Certain items are classified as single-use only. These items must **never** be re-used. If in doubt, refer to the manufacturer's recommendations.

Re-usable equipment should be appropriately decontaminated between each patient using a risk assessment model. Use only the method advised by the manufacturer - using any other process may invalidate warranties and transfer liability from the manufacturer to the person using or authorising the process. If you have any doubts about the manufacturer's recommendations, seek further advice.

The Department of Health and Medical & Healthcare Products Regulations Agency (MHRA) defines the following terms:

• Cleaning is a process, 'which physically removes contamination but does not necessarily destroy micro-organisms.' The reduction of microbial contamination cannot be defined and will depend upon many factors including the efficiency of the cleaning process and the initial bio-burden (amount of contamination).

Cleaning is an essential prerequisite of equipment decontamination to ensure effective disinfection or sterilisation can subsequently be carried out

- Disinfection 'is a process used to reduce the number of viable microorganisms, which may not necessarily inactivate some viruses and bacterial spores.' Disinfection will not achieve the same reduction in microbial contamination levels as sterilisation
- Sterilisation 'is a process used to render the object free from viable microorganisms, including spores and viruses'.

## 2. Risk Assessment

Equipment is categorised according to the risk that particular procedures pose to clients - by assessing the microbial status of the body area being manipulated during the procedure. For example, items that come into contact with intact mucous membranes are classified as intermediate risk and require disinfection between each use as a minimum standard. Items that enter normally sterile body areas, or come into contact with broken mucous membranes, are classified as high risk and must be sterile before use.

Risk	Application of Item	Minimum Standard
Low	In contact with intact skin or	Clean
	Not in contact with patient e.g. furniture, surfaces	
Intermediate	In contact with intact mucous membranes or	Disinfect or
	<ul> <li>Contaminated with virulent or readily transmissible organisms (body fluids) or</li> </ul>	single-use
	Prior to use on immuno-compromised clients	
High	<ul> <li>In contact with a break in the skin or mucous membrane or</li> </ul>	Sterilise, or single-use
	For introduction into sterile body areas	

#### **Risk Assessment for Decontamination of Equipment**

Adapted from Medical Devices Agency, Part 2 (1996) now MHRA

#### 3. Cleaning Methods

Cleaning is the first step in the decontamination process. It must be carried out before disinfection and sterilisation to make these processes effective. Thorough cleaning is extremely important in reducing the possible transmission of all micro-organisms, including the abnormal prion protein that causes vCJD.

Thorough cleaning with detergent and warm water - maximum temperature 35<sup>o</sup>C - will remove many micro-organisms. Hot water should not be used as it may coagulate protein making it more difficult to remove from the equipment.

Mechanical cleaning using a washer/disinfector or ultrasonic bath is recommended.

Manual cleaning must be undertaken in a designated sink, which is deep enough to completely immerse the items to be cleaned. Scrubbing can generate aerosols, which may convey infective agents. Therefore if scrubbing is necessary, it must be carried out with a brush beneath the surface of the water.

Personal protective equipment, including aprons, gloves, and goggles or visors, must be readily available for staff.

Cleaning equipment - such as brushes, cloths and ultrasonic washers - must be stored clean and dry between uses. Use single-use, non-shedding cloths rather than re-usable cloths. Do not store brushes in disinfectant solutions. Brushes should be disposable or changed at least weekly.

After cleaning and thorough rinsing, the items should be dried using a disposable non-shedding absorbent cloth.

Ultrasonic cleaning baths:

- Use a detergent solution as recommended by the manufacturer
- Empty at least twice daily before the solution becomes heavily contaminated depending on work load
- Empty, clean and dry at the end of the session/day
- Staff must record the results of periodic testing in accordance with HTM2030 and manufacturer's instructions
- Service frequently include checking the power output of the transducer
- Inspect instruments for residual debris after cleaning, and repeat if necessary
- Instruments that are rusty or have a build-up of limescale must not be used.
- Document all servicing and repairs.

#### Note:

Compatibility of all materials and items to be processed should be established by reference to the manufacturer's instructions. For example, plastics and other similar materials which absorb the ultrasonic energy are not successfully cleaned by this method. Cannulated instruments must be flushed with the cleaning solution in addition to ultrasonication.

## 4. Disinfection Methods

Disinfection methods apply to handwashing, skin preparation and equipment. Disinfection of equipment should be limited and, where possible, disposable or autoclavable equipment used instead. If disinfection is required, use the method recommended by the manufacturer. The table below outlines the advantages, disadvantages and uses of some of the more popular disinfectants.

Chemical	Advantages	Disadvantages	Uses
Chlorine-based: Hypochlorites (e.g. Domestos, Milton) NB Undiluted commercial hypochlorite usually contains approx. 100,000ppm available chlorine	<ul> <li>wide range of bactericidal, virucidal, sporicidal and fungicidal activity</li> <li>rapid action</li> <li>non-toxic in low concentrations</li> <li>can be used in food preparation</li> <li>cheap</li> </ul>	<ul> <li>inactivated by organic matter</li> <li>corrosive to metals</li> <li>diluted solutions can be unstable</li> <li>need to be freshly prepared</li> <li>does not penetrate organic matter</li> <li>bleaches fabrics</li> <li>needs ventilation</li> </ul>	can be used on surfaces and for body fluid spills
Sodium Dichloroisocyanu- rates (NaDCC) e.g. Presept, Haz- Tab, Sanichlor	<ul> <li>slightly more resistant to inactivation by organic matter</li> <li>slightly less corrosive</li> <li>more convenient</li> <li>long shelf-life</li> </ul>	as above	as above
Alcohol 70% e.g. isopropanol	<ul> <li>good bactericidal, fungicidal and virucidal activity</li> <li>rapid action</li> <li>leaves surfaces dry</li> <li>non-corrosive</li> </ul>	<ul> <li>non-sporicidal</li> <li>flammable</li> <li>does not penetrate organic matter</li> <li>requires evaporation time</li> </ul>	can be used on surfaces, or for skin and hand decontamination
Chlorhexidine e.g. Hibiscrub, Chlorhexidine wound cleaning sachets	<ul> <li>most useful as disinfectants for skin</li> <li>good fungicidal activity</li> <li>low toxicity and irritancy</li> </ul>	<ul> <li>limited activity against viruses</li> <li>no activity against bacterial spores</li> <li>inactivated by organic matter</li> </ul>	for skin and hand decontamination

## 5. Sterilisation Methods

You can obtain sterile instruments by:

- **Purchasing pre-sterilised single-use items** These avoid the need for re-sterilisation and are a practical and safe method. You must store items using a stock rotation system according to manufacturer's instructions. Do not use after the expiry date
- Tattooists may sterilise their own equipment using a benchtop steam steriliser/ vacuum steam steriliser Increasingly, providers are required to comply with a number of quality assurance standards, outlined in the following pages of this document.

#### Sterilisation of Instruments – Responsibilities

If sterilisation is to be carried out, then management and other personnel are required to ensure that the sterilisers are operated safely and effectively and in compliance with legislation and standards. This is dependent on training and a sound general knowledge of the principles of sterilisation.

The key responsibilities of management can be summarised as follows:

- To ensure that sterilisation is carried out in compliance with the law
- To ensure all personnel connected with sterilisation, including any contractors, are suitably qualified and trained for their responsibilities
- To ensure that purchased sterilisers conform to legal requirements, the minimum specifications set out in British and European standards and any additional requirements of the UK health departments
- To ensure that sterilisers are installed correctly and safely with regard to proper functioning, safety of personnel and environmental protection
- To ensure that newly installed sterilisers are subject to a documented scheme of validation comprising installation checks and tests, commissioning and performance qualification tests before they are put into service
- To ensure that sterilisers are subject to a documented scheme of prevention maintenance
- To ensure that sterilisers are subject to a documented scheme of periodic tests at yearly, quarterly, weekly and daily intervals

- To ensure that procedures for production, quality control and safe working are documented and adhered to in the light of statutory requirements and accepted best practice
- To ensure that procedures for dealing with malfunctions, accidents and dangerous occurrences are documented and adhered to
- To ensure that there is a procedure for the de-commissioning of unsafe units and removing from service
- To ensure the vessel is insured as a pressure vessel according to the Pressure Vessel Regulations1991.

#### Installation and Validation

MDA 2002(06) contains guidance on purchase, operation and maintenance.

HTM 2010 contains detailed Department of Health advice on installation, maintenance and operation. After installation the steriliser must be validated prior to use.

Validation is a documented procedure for obtaining, recording and interpreting data required to show that a process will consistently comply with predetermined specifications. The process of validation consists of performance qualification. All records of the validation process should be retained by the owner for inspection.

Following validation a schedule for periodic testing and planned preventative maintenance should be drawn up.

An appropriately qualified person should carry out validation of the steriliser. This will probably be the person who also conducts the required periodic testing and maintenance. The manufacturer's programme of planned maintenance should be used. If no manufacturer's programme is available then advice should be sought from an appropriately qualified maintenance engineer.

#### Periodic Testing of Benchtop High Temperature Steam Sterilisers

#### Failure to carry out periodic tests and maintenance tasks could compromise safety and may have legal and insurance implications for the user or owner of the steriliser.

Sterilisation is a process whose efficiency cannot be verified retrospectively by inspection or testing of the product. Routine monitoring of the process, combined with periodic testing of the sterilisers performance is therefore needed to give assurance that sterilising conditions are consistently being achieved.

A daily, weekly, quarterly and yearly testing schedule is required.

Each steriliser should have a log book in which details of maintenance, tests, faults and modifications are recorded.

#### **Daily Testing**

The owner/user is responsible for daily testing. These tests are designed to show that the operating cycle functions are correctly shown by the values of the cycle variables indicated and recorded by the instruments fitted to the steriliser.

#### **Procedures for Daily Testing**

- 1. A normal cycle is operated with the chamber empty except for the usual chamber "furniture" (e.g. trays, shelves, etc.)
- A record should be made in the log book of the elapsed time and indicated temperature and pressure (the values shown on the dials or other visual displays fitted to the steriliser) at all significant points of the operating cycle – the beginning and end of each stage or sub-stage, and the maximum temperature and pressure values attained during the holding time
- 3. If the steriliser is fitted with a temperature and pressure recorder, the printout should be compared with the records in the steriliser log book and retained for future inspection.

The test can be considered satisfactory if all the following apply:

- A visual display of "cycle complete" is indicated
  - The value of the cycle variables are within the limits established by the manufacturer as giving satisfactory results
- The steriliser hold time is not less than that specified in Table 1
  - The temperatures during the hold time are within the appropriate temperature range specified in Table 1
- The door cannot be opened until the cycle is complete
- No mechanical or other anomaly is observed
- If the steriliser is fitted with a temperature and pressure recorder, then during the plateau period:
  - the indicated and recorded chamber temperatures are within the appropriate sterilisation temperature range
  - the difference between the indicated and recorded temperatures does not exceed 2°C
  - the difference between the indicated and recorded pressure does not exceed 0.1 bar.

# Table 1 - Sterilisation temperature ranges, holding times andpressure for sterilisers with high temperature steam

Option	Sterilisation Temperature Range (°C)			Approx. Pressure (bar)	Minimum Hold (min)
	Normal	Minimum	Maximum		
А	136	134	137	2.25	3
В	127.5	126	129	1.50	10
С	122.5	121	124	1.15	15

## Weekly Testing

- Examine the door seal, check security and performance of door safety devices
- Check that safety valves, or other pressure limiting devices, are free to operate.

## **Quarterly and Annual Checks**

A suitably qualified person, sometimes referred to as the Authorised Person, should conduct these tests as they require the use of specialised equipment and will probably be conducted by the person who undertakes the maintenance. Guidance on these tests is contained in HTM 2010.

#### **Technical Aspects and Safety Considerations**

- 1. Steam sterilisation is dependent on direct contact between the load material and saturated steam under pressure, at one of the temperatures shown in Table 1, in the absence of air.
- 2. Benchtop steam sterilisers achieve the above conditions by electrically heating water (usually sterile water for irrigation, but manufacturers may recommend purified) within the chamber to produce steam at the required pressure and temperature, with air being passively displaced from the chamber by steam.
- 3. During the sterilising cycle the steriliser door must prevent access to the chamber whilst it is under pressure. The door should not be able to be opened until the "cycle complete" signal is indicated.

# 6. Maintenance of Sterilisers

## **Record sheet**

# **Unwrapped Instrument Steriliser**

Daily weekly record

#### **Clinic:**

# Week Commencing:

#### Machine reference number:

Warm up cycle completed?

## YES/NO

Daily Test Results	Mon	Tues	Wed	Thurs	Fri	Sat
Cycle counter number						
Cycle start time						
Time to attain temp.						
Pressure gauge reading						
Temp. gauge reading						
Time at 134°C (min 3 mins)						
Total cycle time						
Initial of authorised user						

Note: in the event of a malfunction notify the engineer at once.

## 7. Use of Displacement Benchtop Steam Autoclaves

#### British Standard 3970

Autoclaves vary in sophistication, and it is essential that the downward displacement benchtop steriliser be to an acceptable standard, such as BS 3970 and C E Standards.

#### Maintenance

Regular maintenance is advised to ensure the monitoring equipment is functioning correctly (refer to previous pages).

#### **Temperatures and Pressures**

Each autoclave should include temperature and pressure-indicating equipment, a cycle stage indicator, and a fault and cycle complete indicator. Temperatures and pressures achieved should be observed each time it is used, and documented at least once for each day that it is used (refer to previous pages). Retain records for 11 years.

#### Solutions

Only use sterile, distilled, de-ionised water or water for irrigation in sterilisers as per manufacturer's guidance. Reservoirs should be emptied and cleaned as per manufacturer's recommendation.

#### **Protective Clothing**

The use of protective clothing is recommended when handling or dealing with blood and/or body fluids. As these instruments will have been contaminated with blood and body fluids, and whilst the action of cleaning such instruments may give rise to splashing with these fluids, disposable latex gloves, disposable aprons and eye protection should be worn.

#### **Pre-cleaning**

The physical cleaning of instruments is a pre-requisite to sterilisation, as this will ensure all surfaces are free of debris and able to be completely sterilised. Hot soapy water is recognised as the most thorough and cost-effective means for physical cleaning. A better alternative is an ultrasonic cleaner.

#### **Scrubbing Brushes**

Whilst the use of scrubbing brushes is generally not advocated, it may prove impossible to effectively clean instruments without them. Therefore if they are used it is suggested they are either single-use or they are themselves sterilised after use, and changed at least weekly.

#### Inspection

Prior to sterilisation, items should be checked for both cleanliness and operation i.e. that forceps align, the handle grip is firm, joints move freely - but are not loose, instruments are not rusted, etc.

#### Loading the Machine

When loading instruments into the steriliser, ensure they are dry and not touching. Place bowls and receivers on edge and leave hinged instruments open. Do not overload machine.

#### **Unwrapped Instruments**

A displacement steam autoclave should be used for <u>unwrapped</u> instruments. It is essential that instruments are sterilised unwrapped (unless a specific porous load autoclave is used). If instruments are wrapped prior to sterilisation in the benchtop displacement steam autoclave, there is no guarantee that the instruments inside the wrapping will be sterilised. It is equally important to ensure that the steam can reach all surfaces of the instruments, i.e. they do not overlap or touch when loaded into the autoclave.

Hollow-lumen items will not be effectively sterilised in a displacement autoclave. If hollow-lumen instruments, or other instruments, require wrapping, a vacuum autoclave should be used.

#### **Use of Instruments**

Instruments should be used immediately after sterilisation (up to 3 hours after the cycle is finished when the door remains shut), as no adequate method exists to store and also maintain sterility when instruments have been sterilised unwrapped.

For non-invasive procedures store instruments in a clean, dry and dust-free place, preferably a drawer or covered box.

#### Training

Training of staff to use the equipment correctly is an essential part of ensuring a safe procedure. No staff should be expected to use such equipment, or be involved in the sterilisation procedure, unless a clear understanding is first ensured.

#### Single-use Equipment

Single-use means that the manufacturer:

- Intends the item to be used once, then thrown away
- Considers the item unsuitable for use on more than one occasion
- Has insufficient evidence to confirm that re-use would be safe.

**Single client use** means that the item can be reused if re-processed using an appropriate method and is used on the **same client only**. The duration of use is dependent upon undertaking a risk assessment of individual risk factors.

The MDA (1995) guidance suggests that reprocessing and re-using such items may pose hazards for clients and staff, if the reprocessing method has not been validated. Therefore re-use of single-use products is not advisable unless the outcomes have been taken into account. The Consumer Protection Act 1987 will hold a person liable if a single-use item is re-used against the manufacturer's recommendations.

## 8. Decontamination Equipment Prior to Inspection, Service, Repair or Loan

Do not send contaminated equipment elsewhere without decontaminating first. Before dispatch, complete and attach a certificate which states the method of decontamination used, or the reason why it was not possible (NHS Management Executive 1993). Equipment that is impossible to decontaminate is likely to be complex, high technology and heat-sensitive. Often it cannot be decontaminated without being dismantled by an engineer - in this case attach a bio-hazard label to the item. Complete the clearance certificate and advise staff on protective measures.

A proforma of such a certificate is available at the end of this section, and can be photocopied for use by operators.

## DOCUMENTATION

A completed clearance certificate must be attached to the equipment prior to work being carried out. A suggested letter is:

From:	
То:	
Make and description of equipment item:	
· · · · · · · · · · · · · · · · · · ·	
Model/Serial/Batch Number:	
Other distinguishing marks:	
This equipment/ item has not been in contact with blood or other body fluids	e It hae
been cleaned in preparation for inspection, servicing or repair.	). It has

This equipment has been decontaminated. The method used was

This equipment could not be decontaminated.	The nature of risk and safety
precautions to be adopted are:	

Signed

Date

Position

Address

# ESSEX HEALTH PROTECTION UNIT INFECTION CONTROL GUIDELINES FOR TATTOOISTS, BODY PIERCERS & ACUPUNCTURISTS

# **SECTION G – DECONTAMINATION OF THE ENVIRONMENT**

## 1. Cleaning Methods

The environment plays a relatively minor role in transmitting infection, but dust, dirt and liquid residues will increase the risk. They should be kept to a minimum by regular cleaning and by good design features in buildings, fittings and fixtures.

A written cleaning schedule should be devised specifying the persons responsible for cleaning, the frequency of cleaning and methods to be used and the expected outcomes:

- Work surfaces and floors should be smooth-finished, intact, durable, of good quality, washable and should not allow pooling of liquids and be impervious to fluids
- Carpets are not recommended in areas where tattooing/body piercing procedures will take place because of the risk of body fluid spills
- Where carpets are in place, there should be procedures or contracts for regular steam cleaning and dealing with spills
- Keep mops and buckets clean, dry and store inverted
- Mop head should be removable for frequent laundering, or single-use if this is not possible
- Provide single-use, non-shedding cloths or paper roll for cleaning
- Keep equipment and materials used for general cleaning separate from those used for cleaning up body fluids
- Colour-code cleaning equipment, such as mop heads, gloves and cloths for toilets, kitchens and clinical areas. Use different colours for each area
- Use general-purpose detergent (GPD) for environmental cleaning follow the manufacturer's instructions.

DOMESTIC	CLEANING
Bucket (plastic)	Empty contents down toilet Rinse with hypochlorite solution and dry
Mop (wet)	Rinse, dry and store head up after use; heat disinfect in washing machine and dry thoroughly weekly. Disposable mop heads can be used. Dispose of mop heads if heavily soiled
Mop (dry)	Vacuum after each use
Lavatory brushes	Rinse in flushing water and store dry
Suggested colour coding of cleaning equipment	See colour-code for hygiene table
Floors	Dust control - dry mop Wet cleaning - wet mop, wash with hot water and GPD If known contamination - follow with hypochlorite 1000 ppm
Furniture and fittings	Damp dust with hot water and detergent If known contamination - follow with hypochlorite 1000 ppm
Walls and ceilings	Not an infection problem. When visibly soiled use hot water and detergent to spot clean. Splashes of blood, urine or known contaminated material should be cleaned promptly with hypochlorite solution

# **Colour-code for Hygiene**

Based on the National Colour-coding System for the British Institute of Cleaning Science

#### National Colour Coding Scheme



# THE GOLDEN RULE: WORK FROM THE CLEANEST AREA TOWARD THE DIRTIEST AREA. THIS GREATLY REDUCES THE RISK OF CROSS-CONTAMINATION.

- 1. The aim of a colour-coding system is to prevent cross-contamination
- 2. It is vital that such a system forms part of any employee induction or continuous training programme
- 3. A minority of people are colour blind in one or more colours. Some individuals may not know this and colour identification testing should form part of any induction training
- 4. Always use two colours within the washroom/sanitary area
- 5. The colour-coding system must relate to all cleaning equipment, cloths and gloves.

Monitoring of the system and control of colour-coded disposable items against new stock release is extremely important.

Note: Not all of the colours are applicable to the tattooist environment.

# ESSEX HEALTH PROTECTION UNIT INFECTION CONTROL GUIDELINES FOR TATTOOISTS, BODY PIERCERS & ACUPUNCTURISTS

# SECTION H – WASTE MANAGEMENT

## 1. Responsibility

All organisations have a legal responsibility to dispose of waste safely, ensuring no harm is caused either to staff, members of the public or the environment. This responsibility begins when waste is generated and ends with its final disposal - even where properly authorised agents are used.

It is essential that persons handling waste exercise care to prevent injury or transmission of infection to themselves or others. This is to fulfil their responsibilities under the current legislation (for list see end of this Section).

## 2. Introduction

Good waste management is important to:

- Reduce the health and safety risk to staff, patients and visitors from waste
- Protect the environment
- Reduce waste disposal costs.

Waste legislation in England has been updated in line with that in Europe. The old clinical waste classification system using groups A to E can no longer be used, as the groups do not reflect the appropriate segregation for treatment or disposal.

These guidelines should be read in conjunction with Waste Management 2 (WM2), the European Waste Catalogue and the Department of Health's Environment and Sustainability – Health Technical Memorandum 07-01: Safe management of Healthcare waste. 2006 available at:

http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAn dGuidance/DH\_063274

Waste regulation requires the classification of waste on the basis of hazard characteristics and point of production. Examples are given in Figure 1 below.

Hazardous waste	Non-hazardous waste	
Infectious waste (see below)	Domestic waste (black-bag or	
	municipal waste)	
Fluorescent tubes	Food waste	
Laboratory chemicals	Offensive/hygiene waste	
Cleaning chemicals	Packaging waste	
Oils	Furniture	

Figure 1

Each tattooist, body piercer or acupuncturist should have a Waste Policy. The operator is responsible for ensuring that contracts are in place for collection and safe disposal of hazardous waste from the premises. Consultation with the waste management provider is essential to ensure appropriate documentation is generated when necessary i.e. consignment notes. The Operator is also responsible for monitoring the performance of their staff and waste contractors.

## 3. Definition of Healthcare Waste

# **3.1 Clinical Waste**

The Controlled Waste Regulations define clinical waste as:

- (a) .... Any waste which consists wholly or partly of human or animal tissue, blood or other bodily fluids, excretions, drugs or other pharmaceutical products, swabs or dressings, syringes, needles or other sharp instruments, being waste which unless rendered safe may prove hazardous to any person coming into contact with it:
- and
- (b) Any other waste arising from medical, nursing, dental, veterinary, pharmaceutical or similar practice, investigation, treatment, care, teaching or research, or the collection of blood for transfusion, being waste which may cause infection to any person coming into contact with it."

Broadly, clinical waste can be divided into two categories of materials:

- Waste which poses a risk of infection
- Medicinal waste.

# **3.2 Infectious Waste**

The Hazardous Waste Regulations define Infectious Waste as:

'Infectious Substances containing viable micro-organisms or their toxins which are known or reliably believed to cause disease in man or other living organisms'. Infectious waste is traditionally known as "**clinical waste**".

## **3.3 Medicinal Waste**

Medicinal waste can be classified into two categories:

- (a) Cytotoxic and cytostatic medicines (Classified as Hazardous Waste)
- (b) Medicines other.

Failure to segregate cytotoxic and/or cytostatic medicines from other medicines will mean that the entire medicinal waste stream will need to be classified as hazardous.

Cytotoxic and cytostatic classifications can be found in the National Institute of Occupational Safety and Health (NIOSH) Alert -<u>http://www.cdc.gov/niosh/docs/2004-165/pdfs/2004-165.pdf</u> or the British National Formulary (BNF).

# 3.4 Offensive/Hygiene Waste

Non-infectious waste (human waste and sanitary protection waste such as nappies, incontinence and sanitary pads etc,) which does not require specialist treatment or disposal, but which may cause offence to those coming into contact with it.

# 4. Waste Segregation

Segregation of waste at the point of production into suitable colour-coded packaging is vital to good waste management. Figure 2 and 3 outlines the colour coding of bags and sharps bins for different types of waste.

See: Health Technical Memorandum 07-01: Safe Management of Healthcare Waste section 7 for full details of colour-code tables, available at:

http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAn dGuidance/DH\_063274

Yellow bags will only be used in "high-risk" settings such as an infectious diseases hospital/ward.

# Colour-coding key to segregation system

Colour	Description
	Waste which may be "treated" Indicative treatments/disposal required to be "rendered safe" in a suitable permitted or licensed facility. Usually alternative treatment plants (ATPs) However this waste may also be disposed of by incineration.
Orange	
Black	Domestic (Municipal) Waste Minimum treatments/disposal required is landfill in a suitable permitted or licensed site. Recyclable components should be removed through segregation. Clear/opaque receptacles may also be used for domestic waste.

Figure 2 - Table from HTM07-01: Safe management of healthcare waste.

# Waste Packaging and Colour-coding

Waste receptacle	Waste type	Example contents	Treatment / disposal
	Infectious waste, potentially infectious waste and autoclaved laboratory waste	Soiled dressings i.e. bandages, plastic single-use instruments	Licensed/ permitted treatment facility Needs to be treated to render safe
SHARPS	Sharps not contaminated with medicinal waste	Tattoo needles	Suitably authorised incineration or alternative treatment facility
	Domestic waste	General refuse, including packaging, confectionery products, flowers	Landfill

Figure 3 - Table adapted from HTM07-01: Safe management of healthcare waste.

# 5. General Principles for Handling of Waste

- Waste should be segregated at the point of origin
- Personal protective clothing should be worn when handling waste
- Waste should be:
  - Correctly bagged in appropriate colour-coded bags which must be UNapproved and comply with BS EN ISO 7765:2004 and BS EN ISO 6383:2004
  - Double bagged where:
    - The exterior of the bag is contaminated
    - The original bag is split, damaged or leaking
  - Kept in a rigid-sided, fire retardant holder or container with a foot-operated lid, and, so far as is reasonably practicable, out of the reach of children
  - Only filled to <sup>3</sup>/<sub>4</sub> full or as recommended by manufacturers
  - Securely sealed and labelled with coded tags at the point of use to identify their source
- Waste should not be:
  - o Decanted into other bags, regardless of volume
  - o Contaminated on the outside
  - o Re-used
  - $\circ~$  Sharps must be disposed of into approved sharps containers which meet BS 7320/UN 3291
  - Sharps containers should **NEVER** be placed into any waste bag.

## 6. Disposal of Waste

Waste should be placed in an appropriate bag.

The bag should be removed and securely fastened at least once a day or when  $\frac{3}{4}$  full, labelled with its place of origin (e.g. prison details) and placed in the designated clinical waste collection point.

# 6.1 Disposal of Sharps

Fully discharged syringes, needles, razors, ampoules and other sharps should always be placed in an appropriate sharps container. These items should never be placed in a waste bag of any kind.

Care should be taken to ensure that sharps containers are correctly assembled according to the manufacturer's instructions.

Use the appropriately sized sharps container to prevent used sharps being stored for long periods of time.

Sharps containers must be sealed, labelled with the point of origin and placed in the designated clinical waste collection point when <sup>3</sup>/<sub>4</sub> full.

Sharps containers should conform to BS 7230/UN 3291.

# 6.2 Disposal of Aerosol Cans/Glass/Bottles/Broken Crockery/Dry Cell Batteries

These must never be placed in any waste bag, especially a yellow clinical waste bag which is destined to be incinerated.

These items should always be placed in a designated cardboard box, lined with a plastic bag to render it leak-proof. The box should be labelled to indicate its contents and method of disposal.

## 7. Storage of Waste

Hazardous waste should be removed from point of generation as frequently as circumstances demand, and at least weekly.

Between collections, waste should be:

- Stored in correctly coded bags, with bags of each colour-code kept separate
- Situated in a centrally designated area of adequate size related to the frequency of collection
- Sited on a well-drained, impervious hard standing floor, which is provided with wash-down facilities
- Kept secure from unauthorised persons, entry by animals and free from infestations
- Accessible to collection vehicles.

## 8. Current Legislation

- Health & Safety at Work etc Act 1974
- The Management of Health and Safety at Work Regulations 1999
- Environmental Protection Act 1990
- Environmental Protection (Duty of Care) Regulations 1991
- The Waste Management Licensing Regulation 1994
- Controlled Waste Regulations 2002
- Healthcare Waste Management and Minimisation 2000
- The Waste Incineration (England and Wales) Regulation 2002
- The Pollution Prevention and Control (England and Wales) Regulation 2000)
- The Chemicals (Hazard Information and Packaging for Supply) Regulations 2002
- Control of Substances Hazardous to Health Regulations (COSHH) 2002
- The Landfill (England and Wales) Regulation 2002
- The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2004
- The Hazardous Waste (England and Wales) Regulations 2005
- The List of Waste (England) Regulations 2005

## 9. Current Guidance Documents

- Environmental Agency Hazardous Waste Technical Guidance WM2 2003
- DOH Environment and Sustainability Health Technical Memorandum 07-01: Safe Management of Healthcare Waste 2006
- The National Institute for Occupational Safety and Health (NIOSH) Alert Preventing Occupational Exposures to Antineoplastic and Other Hazardous Drugs in Health Care. September 2004.

# ESSEX HEALTH PROTECTION UNIT INFECTION CONTROL GUIDELINES FOR TATTOOISTS, BODY PIERCERS & ACUPUNCTURISTS

# **SECTION I – GENERAL STANDARD PROCEDURES**

## 1. Before treatment

The work area should be prepared in such a way so as to avoid having to leave the client in the middle of a procedure to get something which may be needed.

Ensure that the work area is clean and tidy.

Ensure that all items needed are in easy reach and that any items not required are removed from the immediate area.

Place a container labelled 'Dirty Instruments For Sterilising' in the work area for the collection of instruments.

Disposable tissues should be available for handling telephone, switches etc. during the procedure.

Prepare a new skin-cleaning spray daily according to the manufacturer's instructions.

Spray bottles should be covered in a good grade plastic bag to protect the bottle from contamination. The bag should be changed between each client.

Hands must be washed thoroughly prior to the procedure and disposable gloves worn.

Packages containing sterile needles should be checked for damage, and date.

WRITTEN SIGNED CONSENT must be obtained from the client PRIOR to procedure.

**VERBAL AND WRITTEN INSTRUCTIONS ON THE AFTER CARE** of the tattoo and/or piercing site must be given.

Antibiotic or antiseptic creams should not be used without medical advice.

## 2. After treatment

Place all dirty instruments into the container marked 'Dirty Instruments' for removal to cleaning area. Pre clean any re-usable instruments in the sink with hot soapy water. Re-usable instruments should then be placed into the ultrasonic cleaner and sterilised in the autoclave prior to re-use.

Wash and dry all equipment before autoclaving.

The operator should discard all needles into a sharps container immediately following use.

Dispose of all single-use items (spatula, pigment caps and tray, used tissues, wipes and paper towels etc.) into the yellow waste bag.

Clean containers used for collecting dirty instruments with GPD and hot water. Store dry.

Change paper towel on couch/chair- wipe down if soiled, and at the end of each session.

Remove gloves and disposable aprons and discard in the organge clinical waste bag.

Change bags around spray bottle and tattoo machine.

Wash, rinse and dry hands thoroughly.

#### **Choice of Instruments, Needles and Jewellery**

Pre-sterilised, single-use, disposable needles should be used in body piercing and acupuncture. Pre-sterilised single-use tattooing needles should be used in tattooing. Under no circumstances should any item marked as single-use by its manufacturer be cleaned and sterilised for re-use on another client.

Other instruments that have penetrated the skin or are contaminated with blood must be properly cleaned and sterilised before further use.

The jewellery used in body piercing should be either surgical grade stainless steel with very low nickel content or 14-18 carat gold. Once the piercing site has completely healed, jewellery may be changed for different metals if required.

# ESSEX HEALTH PROTECTION UNIT INFECTION CONTROL GUIDELINES FOR TATTOOISTS, BODY PIERCERS & ACUPUNCTURISTS

# **SECTION J – AUDIT TOOL**

# Answer Yes or No. Please tick a box for <u>all</u> questions

STA	NDARD 1	HAND HYGIENE		
			Yes	No
1.	Wash hand ba	asin is available		
2.	Liquid soap di	spenser is located near wash hand basins		
3.	Paper towels of wash hand ba	dispenser at all sinks in procedure areas and sin within operating room		
4.	Sinks are visib	oly clean		
5.	Sinks are free	from nailbrushes		
6.	Hot and cold v taps with elboy	vater is available at sinks (preferably via mixer w or food operation)		
7.	Wash hand ba tea cups and c	asin and sinks in procedure areas are free from drinking facilities		
8.	Access to was in sink	sh hand basin is clear e.g. no equipment soaking		
9.	There is a foot to handwashir	t-operated bin for waste towels in close proximity ng sinks		
10.	Is this bin ope	rational?		

11.	Is there a handwashing poster on display by handwashing area(s)?	
12.	Are there toilet facilities for staff with separate handwashing facilities?	
13.	There is a separate sink and area for cleaning instruments	

# **STANDARD 2**

# **PROTECTIVE CLOTHING**

# The following protective clothing is available for use:

		Yes	No	N/A
1.	Non-sterile latex/vinyl/nitrile gloves (non-powdered)			
2.	Disposable plastic aprons			
3.	Clean protective over-clothing that is changed daily (if plastic aprons not used)			
4.	Eye goggles or face shields available where risk assessment indicates their use			

#### **Comments:**

STANDARD 3	BODY FLUID SPILLAGE

		Yes	No	N/A
1.	Paper towels and appropriate disinfectant (e.g. bleach) is available for cleaning up body fluid spillage			
2.	Operators are aware of the procedure for dealing with body fluid spillage			

# MAINTENANCE OF THE ENVIRONMENT

		Yes	No
1.	All general areas are clean and uncluttered		
2.	There is a documented, regular cleaning programme in operation		
3.	There is no carpet in procedure area(s)		
4.	Sufficient surface for procedure and suitable layout of clean and dirty procedure fields		
5.	Procedure areas are clean and free from extraneous items		
6.	All sterile products are appropriately stored above floor level		
7.	Client couches/chairs/floors in the procedure areas have wipeable surfaces		
8.	Client couches/chairs in the procedure areas are in a good state of repair		
9.	Disposable paper is used to protect the couches/chairs in the procedure area(s)		
10.	Mops are stored dry and inverted		
11.	Buckets are clean, dry and inverted after use		
12.	Cleaning cloths are either single-use or non-shedding and washed with hot soapy water and left hung to dry after use		
13.	Modesty cover blankets are laundered and changed daily and when contaminated		
14	Surface joints and seals (e.g. sinks, worktop edges to wall) are free from mould		

# STANDARD 5

# USE OF DETERGENTS/DISINFECTANTS AND ANTISEPTICS

		Yes	No
1.	Disinfectants are used at the correct dilution and appropriately		
2.	Chemical disinfectants are used as per manufacturer's recommendations for non-autoclavable equipment (e.g. tattoo gun motors)		
3.	A deep sink is available for washing items separate to handwashing facilities		
4.	Data sheets are available on hazardous products for risk assessment and safe working method		
5.	Environmental surfaces are cleaned appropriately between clients		
6.	Environmental surfaces are protected with disposable paper sheets between clients		

		Yes	No
1.	Single-use sterile dressings are applied following tattooing		
2.	Disposable single-use razors are used to shave clients prior to procedure		
3.	Multiple-use items are not used for clients e.g. marking pens, deodorant sticks, petroleum containers, skin cream tubes		
4.	Verbal and printed after-care information on tattooing/piercing available for clients to take away		
5.	Clients receive an explanation about the procedure and are asked to sign a consent form		
6.	Details of clients are kept including name, address, age, proof of ID and part of body tattooed/pierced		

**STANDARD 7** 

# **DECONTAMINATION OF EQUIPMENT**

Indicate method of sterilisation used in the practice:

Front Loading Benchtop Autoclave e.g. Little Sister

Top Loading Benchtop Autoclave e.g. Prestige

Other (Details)

Vacuum

Non vacuum

		Yes	No
1.	There is no evidence of single-use equipment being re-used		
2.	Sterilising equipment is clean and in a good state of repair		
3.	Evidence from records Sterilising equipment is maintained on a quality maintenance programme (in accordance with HTM 2010)		
4.	Evidence from records Sterilising equipment cycle checked and recorded daily		
5.	Sterilising equipment is checked weekly (in accordance with HTM 2010)		
6.	There is a contract for the maintenance and service of the sterilising equipment. Name of service company:		
7.	Air temperature, pressure and holding times are recorded for all cycles		
8.	Water drained daily from steriliser		
9.	Instruments are unwrapped and not in pouches (unless vacuum autoclaved)		

10.	Sterile water used for irrigation, or as recommended by the manufacturer	
11.	Water boilers and glass bead heaters are not used for instruments requiring sterilisation, and UV chambers are not used	
12.	Ultrasonic cleaner is used <u>with</u> a lid <u>and</u> the correct solution <u>and</u> is emptied daily and kept dry overnight	
13.	A detergent is used to clean equipment before placing in ultrasonic bath	
14.	Items are rinsed after cleaning before placing in the ultrasonic bath and before placing in autoclave	
15.	Cleaning brushes are disposable or autoclaved after session use in marked container, and changed at least weekly	
16.	Used contaminated equipment is stored safely out of client areas after use	
17.	All sterilised equipment is stored dry and is covered	
18.	Sterile products are stored above floor level	
19.	All sterilised equipment is used within three hours (unless vacuum autoclaved)	
20.	Only trained staff are permitted to use the autoclave	
21.	A system is in place to accommodate breakdown and repair of equipment (autoclaves/ultrasonic cleaning machines etc.)	
22.	Sterile water for irrigation is used with autoclave	
23.	Dye containers are single-use only and are appropriately disposed of following use	
24.	Sterile disposable needles are single-use only	
25.	If needle bars are re-used they are appropriately sterilised between uses	

		Yes	No
1.	The operator has written instructions on the safe disposal of waste		
2.	Foot operational waste bins are in working order and lined with a plastic bag in procedure areas		
3.	Appropriate orange bags are used for disposal of clinical waste (group A)		
4.	Clinical waste and domestic waste are correctly segregated		
5.	Waste bags are less than <sup>3</sup> / <sub>4</sub> full and securely tied		
6.	Clinical waste is stored in a designated area prior to disposal		
7.	The storage area is locked and inaccessible to unauthorised persons and pests		
8.	Bags are labelled with source (Operator's Name) – in accordance with the Duty of Care		
9.	Collection of clinical waste is undertaken at least weekly with a registered company and disposed of by incineration		
10.	Storage facilities for clinical waste should be lockable e.g. lockable cupboard. The storage area should be marked with a bio-hazard sign		
11.	Waste transfer notes should be kept on site and must identify the waste, type of container, quantity of waste, time and place of transfer and name/address of transferor and transferee		
12.	Protective clothing (e.g. gloves and aprons) are available to staff handling clinical waste		

# SHARPS AND NEEDLE-STICK INJURY

		Yes	No
1.	Sharps boxes are available for use		
2.	Sharps boxes conform with BS7320 and UN3291		
3.	Sharps box is filled to the fill-line or less		
4.	Sharps box is assembled correctly – check lid is secure		
5.	Sharps box is labelled with source business name and address		
6.	Staff are aware of Hepatitis vaccination policy		
7.	Staff are aware of procedure in case of needle-stick injury		
8.	Sharps boxes are stored above floor level and safely out of reach of children and visitors		
9.	Sharps boxes are available when any clinical practice involving the use of sharps is in progress		
10.	Operators are vaccinated against Hepatitis B and there is documented proof of this		
11.	Sharps boxes are disposed of via a registered waste carrier		

# Are the following policies and records available?

		Yes	No
1.	Handwashing		
2.	Cleaning policy (inc. frequency rota/protocol)		
3.	Sterilisation and monitoring procedures		
4.	Management of clinical and general waste		
5.	Management of blood spillages		
6.	Use of protective clothing		
7.	Needlestick injury procedure		
8.	Sharps handling/disposal		
9.	COSHH risk assessment/safe use of chemicals		
10.	Training of staff		
11.	Staff health including Hepatitis B status		
12.	The policies are regularly reviewed/up to date (i.e. yearly)		

# SUMMARY OF ISSUES RAISED AND ACTION PLAN

# ESSEX HEALTH PROTECTION UNIT INFECTION CONTROL GUIDELINES FOR TATTOOISTS, BODY PIERCERS & ACUPUNCTURISTS

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