

STR36

INFECTION CONTROL GUIDELINES FOR BODY PIERCING/EAR PIERCING, ACUPUNCTURE/TATTOOING/ELECTROLYSIS

CONTENTS

SECTION 1 - LICENSING AND REGISTRATION

- 1.1. - Introduction.

SECTION 2 - PRACTICAL PROCEDURES

- 2.1. - Universal Infection Control Procedures
 - 2.1.1. - Hand Hygiene.
 - 2.1.2. - Skin.
 - 2.1.3. - Gloves.
 - 2.1.4. - Blood/Body Fluids.
 - 2.1.5. - Aprons.
 - 2.1.6. - Sharps.
 - 2.1.7. - Clinical Waste.
- 2.2. - Cleaning
 - 2.2.1. - Cleaning.
 - 2.2.2. - Disinfection.
 - 2.2.3. - Sterilisation.
 - 2.2.4. - Decontamination.
 - 2.2.5. - General Comments.
- 2.3. - Equipment used for Sterilisation
 - 2.3.1. - Autoclaves.
 - 2.3.2. - Hot Air Ovens.
 - 2.3.3. - Glass Bead Sterilisers.
- 2.4. - Chemical Disinfection.
- 2.5. - Decontamination of specific instruments in skin piercing premises.

SECTION 3 - GENERAL COMMENTS ON HYGIENE SKIN PIERCING

SECTION 4 - BLOOD BORNE DISEASES

- 4.1. - Hepatitis B.
- 4.2. - Hepatitis C.
- 4.3. - Aids.
- 4.4. - Transmission of Hepatitis B/C and HIV.

SECTION 5 - INFORMATION SOURCES

- 5.1. - References.

SECTION 1 - LICENSING AND REGISTRATION

Local Authorities are assigned a range of licensing and registration functions, which are applied to a variety of activities, premises and persons. The purpose of the licence or the registration is to ensure that the health, safety and welfare of the public are protected.

Any activity, which involves the piercing of skin, carries an obvious risk of transmission of infection if hygiene controls or sterilisation techniques are not maintained. The increase in the numbers of premises offering these practices or services led to controls being introduced, with the powers being made available to the Local Authority.

Any person who practices body piercing/ear piercing/acupuncture/tattooing and electrolysis must register with the Local Authority. The Local Authority in addition will also register the premises.

1.1. Introduction

These Infection Control Guidelines are for Registration/Licensing Officers in London Borough of Redbridge and Waltham Forest who carry out inspection, registration and licensing of the premises of those who carry out body piercing/ear piercing/tattooing/acupuncture and electrolysis. An intact skin is the most important defence against microbial invasion. Therefore, any activity, which involves the piercing of skin, poses a risk of transmission of infection if scrupulous hygiene controls or sterilisation techniques are not maintained. Outbreaks of Hepatitis B from unhygienic practices have been well documented in the United Kingdom and United States of America.

The risk if transmission of infection from client to client or from operator to client may be minimised by the following:

- The cleanliness of the registered premises and the fittings on those premises.
- The cleanliness of the registered person undertaking treatment and any one who assists.
- The cleaning and the sterilisation of instruments, materials and equipment.

It is essential that all operators are familiar with these guidelines so that a high standard of infection control is maintained, thereby minimising the potential for cross infection. This also helps to achieve better compliance, ensuring that infection control measures are effective.

The person who undertakes cosmetic piercing must have a suitable qualification.

SECTION 2 - PRACTICAL PROCEDURES

2.1. Universal Precautions

It is not always possible to identify people who may spread infection to others. Therefore, precautions to prevent spread of infection must be followed at all times when carrying out the practice of body piercing/ear piercing/acupuncture/tattooing and electrolysis.

All blood and body fluids are potentially infectious and precautions are necessary to prevent exposure to them. These precautions include avoiding injury by sharp objects.

Basic Infection Control Principles

2.1.1. Hand Hygiene

From the moment we are born our skin becomes colonised with micro-organisms which under normal circumstances are not harmful, but if the environment is right e.g. puncture site, wound site, these organisms multiply and cause infection. If hand washing is not scrupulous the risk of cross infection is great, therefore effective hand washing and drying the hands with paper towels is the most important way of breaking the chain of infection.

- Hands must be washed and dried before and after contact with a client. A liquid soap is recommended for washing, and paper towels for drying.
- Nailbrushes if used, should only be single use as they can be a reservoir for microorganisms.
- Before piercing the skin, hands should be washed with an alcohol or iodine based disinfectant.
- Eating, drinking or smoking should not be allowed in areas where body piercing, ear piercing, acupuncture, tattooing or electrolysis is being carried out.

2.1.2. Skin

Cuts or abrasions in area of exposed skin should be covered with a waterproof dressing.

2.1.3. Gloves

- Single use latex gloves are recommended for use. Latex gloves have been thoroughly tested, they are strong, durable and seamless, and they fit the contours of the hand and wrist.
- Although single use latex gloves are not essential for tattooing, it is recommended that tattooist might consider the routine use of these gloves. They protect hands from chapping. With practice, they should not hinder fine artistic work.
- Single use latex gloves must be worn when dealing with blood and body fluids.
- Sterile gloves must be worn when handling instruments.
- Gloves should not be washed or disinfected as this can compromise the continuity of the latex.

2.1.4. Blood and body fluid spillages

- Wear disposable latex gloves and a plastic apron. Spillage should be covered with disposable towels to soak up excess. The towels should then be treated as clinical waste. The remaining spillage should be treated with appropriate disinfectant.
- Splashes into eyes or mouth should be rinsed freely with water. A note of the incident should be made in the premises Accident/Incident book.
- Spills on upholstery - mop up excess fluid with a J-cloth or kitchen roll, sponge with cold water, then clean with hot soapy water.
- Spills on hard floors - disinfect with 1-2% hypochlorite, then clean as above.

- Spills on clothing - sponge off with warm soapy water and wash as soon as possible in the hottest wash the clothing will stand. Iron if possible.

2.1.5. Aprons

Disposable plastic aprons or a clean apron should be worn if there is a possibility of splashing onto your clothes with blood/body fluids. If clean apron or overall is worn, this should be laundered regularly on a hot wash and if visibly contaminated with blood. These should be removed, before leaving the premises.

2.1.6. Sharps

Extreme care must be exercised during the use and disposal of sharps. Needles are not to be re-sheathed prior to disposal into approved sharp boxes. Sharps should be disposed of by the user in a BS 7320 container (available from the Local Authority). These should never be overfilled. If sharps injury does occur, document in an Accident Book and contact your GP for advice.

2.1.7. Clinical Waste

- Disposable articles contaminated with blood/body fluids or tissues are classed as clinical waste. Clinical waste should be disposed off in yellow bags, clearly marked 'clinical waste for incineration'. When 2/3rds full, the bag should be sealed, marked with the point of origin, and stored in a lockable, vermin-proof enclosure for collection.
- Clinical waste is incinerated and therefore more expensive to dispose of than non-clinical/household waste. It is therefore important to use clinical waste bags appropriately.
- Batteries, aerosol cans etc. should not be placed in yellow bags.
- Sharps should be disposed in a sharps container, which complies with the British Standard (BS 7320) and carries the 'Kite mark'.
- All clinical waste (yellow bags and sharps boxes) must have their point of origin marked on them prior to disposal.
- Clinical waste should be collected by a licensed operator. Phone your Local Authority for information on this service.

2.2. Cleaning

2.2.1. Cleaning and Disinfection

A process that removes contaminants including dust, soil, large number of microorganisms and the organic matter that protects them. Cleaning is a useful, sometimes essential, prerequisite to disinfection and sterilisation.

2.2.2. Disinfection

A process used to reduce the number of microorganisms. This process does not necessarily kill or remove all microorganisms, but reduces their number to a level which is not harmful to health. This term is also applicable to the treatment of objects, materials and also the treatment of skin, mucous membranes and other body tissues and cavities.

2.2.3. Sterilisation

A process used to render an object free from all living organisms. This is required for instruments, equipment and dressings, etc., that come into contact with intact skin in body piercing, ear

piercing, acupuncture, tattooing and electrolysis procedures. This can be achieved by the following methods:-

- Steam under pressure by autoclaving.
- Dry heat in the hot air oven.

2.2.4. Decontamination

A general term for the destruction or removal of microbial contamination to render an item safe. This will include methods of cleaning, disinfection and sterilisation.

2.2.5. General Comments

- All working areas can be cleaned with hot soapy water. The use of disinfectants is of little value. This includes couches and trolleys.
- Any area that is visibly contaminated with blood/body fluids should be cleaned with hot soapy water first and then disinfected with Hypo chlorite 0.1% (1 part household bleach to 10 parts of water), or bleach tablets as per manufacturer's instructions. (Bleach tablets in the form of Actichlor, Sanichlor or Presept can be bought from major chemists/pharmacies).
- Disposable cloths from environmental cleaning should be dedicated to one area only.
- Soaking of equipment is not recommended.
- Ultrasound baths are recommended for pre-cleaning equipment prior to sterilisation.
- Skin disinfection before any skin procedure should be with 70% alcohol or an iodine based solution. If alcohol swabs are used to clean skin prior to piercing the skin, it should be allowed to dry. Do not wipe the skin area.
- Lining sheets on couches are not recommended; disposable paper sheeting is an alternative.
- Glutaraldehyde or Cidex must not be used for sterilising equipment as these are highly toxic to tissues and the vapour is irritant.

2.3. Equipment used for Sterilisation

General Principle:

Instruments used to pierce a person's skin, or objects in contact with broken skin, should be considered to be contaminated and should not be used again unless they have been sterilised.

Sterilisation is the complete removal of microbes. The most efficient and reliable form of sterilisation is heat. Moist heat is far more efficient than dry heat.

2.3.1. Autoclaves

- This is the most reliable method of sterilising, using steam under pressure to transfer the latent heat of condensation to the microorganisms.
- Before sterilisation, instruments must be thoroughly cleaned, soaking is unnecessary.
- Training must be given to the user on the use and maintenance of the autoclave.
- Unless the autoclave has a pre-vacuum and drying cycle, instruments must be left unwrapped in the machine.
- Autoclaves should have a timing device and a pressure gauge for the user to check that optimum pressures are being maintained.
- The autoclave must be filled with de-ionised water and should not be allowed to run dry.

- At the end of the cycle, the instruments should be left to cool, then removed with sterile gloves.
- Instruments should ideally be used immediately after sterilisation, as no adequate method exists to store and maintain sterility.
- Autoclaves should be regularly serviced by a competent engineer. Every 4 months is recommended.
- Autoclaves should be checked daily and a log retained for maximum pressure, holding times and temperature. Do not rely on chemical indicators.
- Any fault should be reported immediately to the service engineer for attention.

2.3.2. Hot Air Ovens

- This method of sterilisation is less efficient than the autoclave, needing higher temperatures and longer holding times.
- As dry heat ovens require higher temperatures, this may damage metal instruments.
- There may be temperature variations within the oven (hot and cold spots) and a long time is necessary to reach the required temperature and for cooling down.
- A fan-assisted oven may help to reduce the tendency to hot and cold spots.
- With the high temperatures of these ovens, there is always the danger of fire, and they are not as economical to run as autoclaves. They are however cheaper to buy.

General recommendations if Hot Air Ovens are used:

- Items should be thoroughly cleaned before insertion into the machine.
- There should be a regular maintenance schedule. Every six months is recommended, and there should be a weekly recording of holding times and temperatures.
- Operator should receive full training on how to use and maintain the oven.

2.3.3. Glass Bead "Steriliser"

- This method is sometimes used by acupuncturists but is not recommended, as the high temperature required for sterilisation is not always reached.
- The "steriliser" is a gadget very like a baby's warmer, which heats glass beads instead of water in a compartment; this enables a higher temperature to be reached.
- This method employs dry heat.
- Models tested have not proved satisfactory, as there is considerable variation in temperatures within the glass compartment.
- This is not suitable for whole needle or instrument.
- The outside of the steriliser has a tendency to reach very high temperatures, with the consequent danger of burns.
- Please refer to Approved Instruments by the Department of Health (taken from HE1 185 - 1988) if you are considering purchasing a glass bead "steriliser".
- Instructions provided with approved glass bead "sterilisers" must be closely observed, particularly those relating to time and warming up period.

Check temperatures regularly, and return to manufacturer for adjustment if not as specified.

2.4. Chemical Disinfection

Disinfectants do not sterilise, they only reduce the number of some microbes. All chemicals should be treated as disinfectants. Misuse of disinfectants is ineffective, expensive and potentially harmful. The place of disinfectants in the control of infection is clear when the distinction between sterilisation and disinfection is understood.

Disinfection is the removal or destruction of adequate number of potentially harmful microorganisms so as to make the item safe to handle or use. The simplest, and often quite adequate, method of disinfection is by washing with hot water and detergent followed by thorough drying.

Disinfection also can be applied to the decontamination of hands, skin and mucous membranes by washing with or without chemical agents. Disinfectants that are appropriate for reducing the bacterial load on skin or mucous membranes are also called 'antiseptics'.

All disinfectants must be stored, reconstituted and used in accordance with the COSHH (Control of Substances Hazardous to Health) Regulations. Disinfectants may not work properly when they are:

- Used on dirty objects.
- Not freshly made up.
- Made up in the wrong concentration (stronger concentrations are not better than the correct dilution).

Hypo chlorite (sodium hypo chlorite, bleach) is the common disinfectant for use by operators. This is effective against hepatitis B/C virus and HIV virus. Hypochlorites are easily inactivated by organic matter, and solutions deteriorate rapidly. Therefore, hypo chlorites must be stored as a concentrated solution, e.g. 'neat bleach' or 10% hypo chlorite, which yields 100,000 parts per million (ppm) of chlorine. This concentrated solution is used to make up working dilutions freshly each day. Dilutions used include:

- One part of bleach to 10 parts of water for disinfection of heavy spillages of blood and body fluids.
- One part of bleach to 100 parts of water for general cleaning when disinfection is required.

Other concentrations are also available for use according to the manufacturer's instructions.

2.5. Decontamination in skin piercing premises

Equipment	Method of Decontamination	Alternative
Care of skin after tattooing.	Apply sterile non-stick gauze (melolin).	None.
Care of skin after acupuncture.	Leave punctured area of skin uncovered.	None.
Care of skin after skin piercing including nose.	Leave pierced skin area clean and dry.	None.
Capsule holders.	Autoclave between clients.	None.
Holder for stainless steel needle bars.	Autoclave between clients.	None.
Holding tubes for motors.	Autoclave between clients.	None.
Kidney dishes.	Autoclave.	Use single use kidney dishes.
Needles.	Single use only.	None.
Needles (Tattoo).	Disengage with the tubes from the machine and dispose of as sharps waste.	Some needles may be autoclave.
Needles (acupuncture).	Thoroughly wash with hot soapy water, and autoclave after client.	Use disposable needles.
Needles (electrolysis).	Disposable needles for single use only. The operator may use one needle to remove, as many hairs from the client, but the needle must be discarded after treatment.	None. Needles must be disposed of in a yellow sharps box.
Metal syringes.	Autoclave after session.	None.
Metal forceps.	Autoclave.	None.
Metal spatula.	Autoclave.	None.
Motors.	Damp wipe between clients.	None.
Pigment capsules.	Single use only.	None.
Paper cups.	Single use only.	None.
Paper towels.	Single use only.	None.
Swab.	Sterile single use only.	None.
Razors.	Disposable.	Metal safety razor with disposable blade.

SECTION 3 - GENERAL COMMENTS ON HYGIENIC COSMETIC SKIN PIERCING

- The operator and client should not be under the influence of drugs or alcohol.
- Ensure premises are visibly clean and dust free.
- Premises should not be cluttered unnecessarily.
- It is recommended that floors and walls should be washable.
- Elbow operated hot and cold water tap wash basin is essential.
- Liquid soap and disposable paper towels are recommended.
- Foot-operated bins are recommended.
- Surfaces in the premises should have an impervious surface.

- Tattooing should not be carried out within six inches of an infected area of skin or skin covered with rash.
- Antibiotic or antiseptic creams should not be used without medical advice.
- The temper or sharpness of a needle must not be tested on the client's skin before use.
- It is advisable to use the recommended piercing guns for piercing the body.
- The piercing gun designed for ear piercing must not be used for other areas of the body.
- As the inner surfaces of the nose harbour harmful bacteria, which can cause infection, it is not advisable for professional ear-piercers to perform nose piercing, as the risk of complications is higher than with ear-piercing. However, if nose piercing is performed it is recommended that only complete disposable piercing guns are used (e.g. Coren or Medisept).
- Skin should ideally be marked prior to piercing with a marker pen.
- Skin should be cleaned with alcohol impregnated skin swabs prior to piercing.
- Local anaesthetic patches if used must not be used on sensitive areas such as the genital area.
- Administration of local anaesthetic injections by other than a medically qualified practitioner is illegal.
- Ethyl Chloride must not be used as a local anaesthetic as this cools skin but does not have anaesthetic properties.
- All surgical instruments in contact with broken skin and jewellery should be autoclaved to facilitate a sterile field.
- All operators should have a licence from their appropriate local authorities.
- It is recommended that records of clients are kept for a minimum of at least one year to deal with any infection queries after the procedure.

SECTION 4 - BLOOD BORNE DISEASES

"Inoculation risk" is used when referring to certain infections which can be transmitted when blood or some other tissue or body fluids from an infected person comes into contact with tissues, blood or body fluids of another person.

Of greatest concern at present are Hepatitis B Virus (HBV) infection, and Human Immunodeficiency Virus (HIV) infection, which can lead to Acquired Immune Deficiency Syndrome (AIDS).

4.1. Hepatitis B

- The Hepatitis B virus is transmitted by blood and body fluids from an infected client, and may transfer through eyes, mouth or breaks in the skin.
- The virus is very resilient and spreads readily from person to person by contact with very small amounts of infected blood, serum or tissue fluids.
- With tiny abrasions in the skin, or procedures such as tattooing, acupuncture, ear piercing and electrolysis where blood is not normally drawn, the serum that exudates is equally infectious.

- The source of Hepatitis B is man.
- This may be a person who feels well but is shortly to become ill with the disease or someone who has been carrying the virus in his blood for a long time (a “carrier”). In either instance, there will be no sign that the person is carrying the infection.
- The incubation period of Hepatitis B is usually about three months, but may be from about two to six months, and the person is very infectious for most of that period.
- The earliest symptoms of infection are fever accompanied by intense loss of appetite
- The skin and eyeballs may go yellow (though this may not always happen).
- The liver may fail and very occasionally the patient may die. At least one death has occurred after tattooing and one after ear piercing.

4.2. Hepatitis C

- This is another newly described virus, which causes similar problems to Hepatitis B and may lead to chronic liver disease and death.
- It is also transmitted via blood.

4.3. Aids

- Aids is a condition, which represents the late stage of infection with the Human Immunodeficiency Virus (HIV).
- The likely route of infection is a skin-piercing establishment in blood.
- In these establishments, Aids is transmitted in the same way as Hepatitis B/C.

4.4. Transmission of Hepatitis B/C, HIV and other infections by skin piercing

- When a needle breaks a person’s skin, blood, serum or small fragments of tissue inevitably adhere to the needle or instrument used.
- These can be transferred to the operator’s hands, dyes and other objects in the room.
- Cloth or paper tissues that come into contact with the pierced skin may also become contaminated.
- If adequate infection control precautions are not taken, when the next client comes in for a procedure that requires skin puncture, any of the contaminated items, especially needles, may transmit infection through the broken skin.
- Blood or serum does not have to be visible on the instrument or needle to transmit infection.

PREVENTION OF TRANSMISSION

It is the responsibility of every individual operator to ensure adequate infection control procedures are practised within his/her practice.

SECTION 5 - INFORMATION RESOURCES

References

The information for this document has been obtained from several sources and are in line with current legislation.

AIDS/HIV Infected Healthcare Workers: Guidance on the Management of Infected Healthcare Workers, Recommendations of the expert Advisory Group on AIDS, Department of Health March 1994.

Chemical Disinfection in Hospitals, by Ayliffe, Coates and Hoffman. Public health Laboratory Service - 1993.

Consumer Protection Act 1987.

Control of Substances Hazardous to Health Regulations, HMSO, London (1988).

Department of Health, Health and Safety Act etc London HMSO, 1992.

Department of Environment East Management; 'the duty of care' A Code of Practice, London HMSO, 1991.

Health Technical Memorandum 10 'Sterilisers' and HEI 185 (July 1988).

Health and Safety at Work Act 1974.

Health and Equipment Information HEI 196, 1990, published by the Department of Health.

Infection Control in General Practices, by Gladys Xavier and Dr. Bernadette Nazareth, Redbridge & Waltham Forest Health Authority, September 1995.

A Guide to Hygienic Skin Piercing (Tattoos, Acupuncture, Ear Piercing and Hair Electrolysis). Professor Norman D. Noah, Department of Public Health & Epidemiology, Kings College School of Medicine and Dentistry.