



Kent Health Protection Unit

INFECTION CONTROL GUIDELINES FOR BODY PIERCERS [including EAR PIERCERS], TATTOOISTS, and PRACTITIONERS OF SEMI-PERMANENT TATTOOING, ACUPUNCTURE AND ELECTROLYSIS.

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INTRODUCTION

These guidelines have been prepared by Kent Health Protection Unit, in conjunction with a working group from the Environmental Health Officers in Kent. This is the first revised edition of the guidelines.

These guidelines offer “best practice” advice for all tattooists, body piercers, [including ear piercers], and individuals who carry-out semi-permanent tattooing, electrolysis and acupuncture.

The aim of the guidelines is to show operators how to minimise the risk of spreading infection to clients. There is evidence to prove that clients have acquired infections, sometimes with life-long consequences [e.g. hepatitis B infection], because unsafe practices were followed in skin piercing establishments.

These guidelines will enable you to protect your clients, yourself and your families from the risks of infection by explaining how to decontaminate equipment effectively and how to maintain the environment to a safe standard of cleanliness.

If tattooing and body piercing procedures were carried out in medical premises, there would be many more regulations to be observed by operators. Skin piercing procedures may introduce potentially harmful micro-organisms to both the client and the operator, although there is little specific legislation governing the equipment used for these procedures. However, if a manufacturer classifies a piece of equipment as a medical device and marks it with the CE mark, there **are** specific guidelines for practice. The advice of an Environmental Health Officer should be sought if you use equipment marked in this way.

Local authorities should be consulted for guidance regarding the suitability of premises for skin piercing businesses.

USEFUL CONTACTS

If you have any concerns about infection control in your work environment, contact one of the organisations in Appendix A for advice.

MICRO-ORGANISMS AND THE CHAIN OF INFECTION

Infections are caused by the introduction of micro-organisms [microbes, “germs” or “bugs”] to the body in sufficient numbers to cause infection. Not all micro-organisms are as dangerous as others, therefore the number of micro-organisms needed to cause infection varies.

The “chain of infection” describes how micro-organisms, the source of infection, get out of their natural reservoir [i.e. where they normally live] and are spread to a new site [i.e. into the body’s tissues or onto clean equipment] where they may cause harm.

The term “micro-organisms” includes bacteria, viruses, fungi, worms and ectoparasites. The following are some examples:

Bacteria

Examples of bacteria are *Staphylococcus aureus*, Streptococcus, Listeria, Legionella, Pseudomonas, Klebsiella, *Escherichia coli*. There are many more bacteria, some of which live in or on our bodies, protecting us against other potentially harmful bacteria. Other bacteria live in the environment and act in the breakdown of organic material.

Viruses

Examples of blood-borne viruses are hepatitis B, and C, and human immunodeficiency virus [HIV]. The hepatitis B and C viruses and the HIV virus can live undetected in the blood for many years; the hepatitis B and C viruses affect how the liver works, while the HIV virus affects the body’s immune system.

Other viruses cause measles, mumps, rubella, chickenpox, the common cold and flu. These viruses do not live harmlessly in the body, but are always present in a certain number of people and are spread in blood, respiratory secretions, and exudate from lesions [e.g. chickenpox].

The hepatitis A virus is mainly food or water borne, and can be passed from person to person by the faeco-oral route [e.g. if an infected person does not wash their hands properly after going to the toilet, then touches or prepares food or drink, or equipment used in the preparation of food or drink, for someone else].

Fungi

Some examples of fungi are Athletes’ Foot, aspergillus, and candida [thrush]. Some fungi can be extremely dangerous if they get into the tissues of a person whose immune response is poor [e.g. through a break in the skin].

Worms (helminths)

Examples of helminths are threadworms, tapeworms, round worms. These do not usually present a risk of infection in skin piercing establishments.

Ectoparasites

Examples of ectoparasites [which live on the surface of the skin or just beneath it] are headlice and scabies. These are spread by prolonged, direct, skin-to-skin contact.

HAND HYGIENE

1. Hand washing is the most important intervention in the prevention of the spread of infection. A liquid anti-microbial soap is recommended for hand washing. The protocol on the following page takes 15 – 30 seconds for regular hand washing, and 2 minutes for hand washing before a skin piercing procedure:

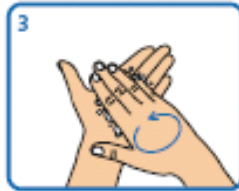
Hand-washing technique with soap and water



1 Wet hands with water



2 Apply enough soap to cover all hand surfaces



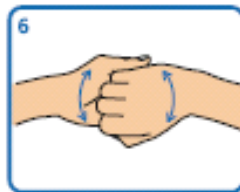
3 Rub hands palm to palm



4 Rub back of each hand with palm of other hand with fingers interlaced



5 Rub palm to palm with fingers interlaced



6 Rub with back of fingers to opposing palms with fingers interlocked



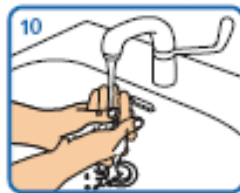
7 Rub each thumb clasped in opposite hand using a rotational movement



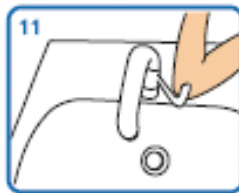
8 Rub tips of fingers in opposite palm in a circular motion



9 Rub each wrist with opposite hand



10 Rinse hands with water



11 Use elbow to turn off tap



12 Dry thoroughly with a single-use towel



13 Hand washing should take 15-30 seconds

After washing your hands, rinse them under running water to remove all the germs loosened during hand washing, then dry your hands thoroughly on paper towels, ideally from a wall mounted towel dispenser. [Please refer to the above poster].

2. Hand washing must be done at the following times:
 - Before and after carrying out a skin piercing procedure.
 - Before and after eating and drinking.
 - After using the toilet.
 - After smoking [see 6 below].
 - After accidental contamination of hands with body fluids.
 - If hands are visibly dirty.
 - Before putting on gloves at the start of a procedure.
 - After taking off gloves and apron at the end of a procedure.
 - If gloves are removed during a procedure [e.g. to get more equipment] hands must be washed after removal, and again before putting on a new pair of gloves to resume the procedure.
3. Cuts, sores and grazes on exposed skin [e.g. hands or forearms] must be covered with a clean, waterproof dressing. This protects the operator [from risk of infection from the client's blood splashes] and the client [from risk of infection if the operator has an oozing lesion].
4. Finger-nails should be clean and short so that they can be kept clean more easily.
5. There should be no eating or drinking in the procedure area. This is to protect the operator from consuming food or drink that may have been in contact with a contaminated surface or piece of equipment.
6. The operator should not smoke during any procedure in case micro-organisms are transferred from the smoker's mouth, via the fingers, to the client. The "Smoke - free (Premises and Enforcement) Regulations 2006" must be observed.
7. The wearing of wrist watches or wrist bands is not advised while carrying out skin piercing procedures because it is not possible to wash the hands thoroughly up to the wrists.
8. **The hand washbasin is for hand washing only.** It should be sited in the room where skin piercing procedures are carried out, and should have:
 - Hot and cold running water, preferably via a mixer tap, to deliver water at a comfortable temperature
 - Foot, elbow, wrist or sensor taps: recommended so that once washed, clean hands are not re-contaminated by turning off dirty taps
 - If hand-operated taps are in place, use a paper towel to turn them off after hand washing
 - Effective drainage to prevent pooling of contaminated water in the basin
 - Liquid soap from a wall-mounted dispenser close to the basin
 - Paper towels from a wall-mounted dispenser close to the basin.

9. After hand washing, dry the hands thoroughly on disposable, paper towels, which should be discarded into a foot-operated waste bin. The use of fabric, washable towels is not recommended since they remain damp, encouraging the growth of micro-organisms.
10. Use hand moisturiser regularly to prevent the skin becoming sore; the moisturiser should be available from a pump dispenser, ideally wall-mounted, to reduce the risk of cross infection.

PERSONAL HYGIENE

11. A good standard of personal hygiene is essential to minimise the risk of infection to clients [HSE 2003].

PERSONAL, PROTECTIVE EQUIPMENT [PPE]

12. Gloves must be worn at all times when the operator may be in contact with blood or other body fluids.
13. Single-use, disposable, non-powdered latex gloves are recommended when contact with blood or body fluids is expected. If the client or operator has a latex sensitivity, disposable nitril gloves should be worn instead of latex. Vinyl gloves that are not CE marked do not offer the same level of protection as latex or nitril gloves against all the micro-organisms that may be in blood or body fluids, therefore they are not recommended when contact with blood or body fluids is expected.
14. If your skin starts to become sore when wearing latex gloves, remember that you may be developing sensitivity to latex. Alternatives [e.g. nitril gloves] are available. If your skin is sore or broken (see 3), you should discuss this with your GP.
15. Hands should be washed before gloves are put on and after they are taken off.
16. Gloves should be discarded as clinical waste when taken off.
17. Gloves **must** be changed after every client.
18. If you are doing two procedures on the same client [e.g. a tattoo on an arm and a tattoo on the back], gloves must be changed in between the two procedures. This is to avoid taking micro-organisms from one site of the body to another.
19. Gloves must be changed if they become punctured during use.
20. The operator should wear clean, practical clothing, preferably with short sleeves, to allow thorough hand washing up to the wrists.

21. The operator should wear a disposable, single-use plastic apron to protect his/her own clothing during procedures and to prevent possible cross-contamination. The aprons should be changed between each client.
22. Fabric towels should not be used to protect the operator's clothing from the client's body fluids. If needed, paper towel [e.g. kitchen roll] should be used for this purpose **in addition** to the plastic apron. Paper towel used in this way must be discarded as clinical waste.
23. Aprons should be changed after every client and disposed of as clinical waste after use.
24. If heavy bleeding occurs, or if dealing with a large spillage of blood or body fluids, the operator should consider the use of eye protection and/or a full-face visor to protect the eyes and/or the mucous membranes of the nose and mouth from body fluid [including blood] splashes.

HEPATITIS B VACCINATION

25. All operators who come into contact with blood or body fluids, or who use or handle sharp instruments, should have a course of hepatitis B vaccination [HSE 2001; DH 2006]. If rapid protection is **not** required, this consists of three injections given over a period of six months at 0, 1 and six months, with a blood test to check levels one to four months after the completion of the primary course. If rapid protection **is** required, (i.e. because a non-immune person has been exposed to the hepatitis B virus) hepatitis B vaccination consists of three injections given at 0, 1 and 2 months with a booster and blood test at 12 months.
26. The DH now recommends that all individuals at continuing risk of hepatitis B infection should have a booster five years after the primary course. There is no need for a blood test at this time.
27. Antibody responses to hepatitis B vaccine should be checked one to four months after the completion of the primary course or, if the schedule to provide rapid protection is given, when the 12 month booster is given. Individuals should discuss the implications of the antibody titre levels with their GP; these levels inform you whether or not you are protected against hepatitis B.
28. A hepatitis B booster may be recommended after exposure to the hepatitis B virus (e.g. sharps' injury).
29. Hepatitis B vaccination can be organised through your GP, who may refer to you to another GP. You may have to pay for the vaccination [DH 2003], however if you are **not** self-employed, your employer should pay for it.
30. Keep a record of the dates of vaccination and the results of future tests to check whether or not you have an adequate level of protection against

hepatitis B and whether or not a booster is needed, as indicated by a Consultant Microbiologist on the test reports to your GP.

31. There are currently no vaccines available against hepatitis C or HIV.

NEEDLESTICK INJURY OR SPLASH FROM BLOOD OR BODY FLUIDS

32. All inoculation injuries [i.e. when the skin is pierced by a used, sharp instrument or piece of equipment], or splashes to the eyes, mouth, or an exposed area of broken skin, must be treated extremely seriously and urgent action taken. You must do this even if the instrument or piece of equipment looks clean.
33. If the injury has happened during the cleaning of equipment, it must be treated as a needlestick injury. This is because there is a continuing risk of contamination with potentially harmful micro-organisms until the equipment has been sterilised.
34. Any wound should be made to bleed under clean running water - squeeze the area gently to do this. The aim of this is to squeeze out any potentially harmful micro-organisms. Do **not** suck the wound. Cover the wound with a clean dressing.
35. Rinse the mouth, eyes or broken skin thoroughly under clean, running water. If you have sterile eye wash solutions in your first aid kit, use this to flush the eyes.
36. Go to your GP **or** to the nearest hospital A + E Department immediately so that a risk assessment can be done in case further treatment is needed. This is necessary even if you have had hepatitis B vaccination. Post-exposure prophylaxis treatment, if indicated, started within one hour of the injury can be effective in protecting against HIV. Remember, there is no vaccine available against hepatitis C and HIV.
37. Inform the owner, manager or supervisor about the incident, which must be logged in the accident book [Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) (1995)].

TETANUS VACCINATION

38. All individuals handling sharps are advised to ensure they are up-to-date with tetanus vaccinations [DH 2003]. Your GP will be able tell you whether or not you are fully protected against tetanus.

USE OF LOCAL ANAESTHETIC AGENTS

40. The use of ethyl chloride spray to “freeze” the skin before a procedure is not recommended. If left on the skin for too long, ethyl chloride has the same effect as frost-bite, damaging the skin and increasing the risk of infection at the site [HSE 2001].
41. In the United Kingdom, any medicinal product that is injected becomes a “Prescription Only Medicine” [POM], which can **only** be administered on the orders of a qualified doctor or dentist.
42. Certain topical application creams are POMs, therefore they cannot be used unless the client’s GP has prescribed it. If anyone other than a doctor or dentist prescribes such a cream, they are in breach of the Medicines Act [1968].
43. Certain lignocaine-based creams and sprays are classified as [P] products and can be used legally as a topical anaesthetic by the purchaser but they must **not** be injected.
44. Anaesthesia to the tongue or to the mucous linings of the mouth can only be given using a topical preparation licensed for use on the tongue or in the mouth. Sprays should not be used in the mouth because of the risk of inhalation of the spray [which may numb the respiratory tract and cause breathing problems] or accidental spraying of the eyes.

CLEANING SOLUTIONS

45. The treatment area must be kept clean and dust-free. Normal environmental cleaning can be done using detergent and warm water. Paper towel or disposable cloths [discarded after every use] should be used for cleaning.

BLOOD SPILLAGES

46. If the environment is contaminated with blood or body fluids containing blood, use chlorine-releasing granules or a 10% hypochlorite solution to deactivate any micro-organisms [e.g. hepatitis B, hepatitis C or HIV] that may be in the spillage.

Control of Substances Hazardous to Health [COSHH] risk assessments must be carried out on all hazardous substances used at work; this includes detergents, disinfectants and body fluids [e.g. blood] (DH 2003). Blood and body fluids are included because of the potentially harmful micro-organisms they could contain.

Follow the following protocol when dealing with blood spillages:

- **IF YOU HAVE NOT HAD TRAINING IN THE USE OF SODIUM HYPOCHLORITE SOLUTIONS OR CHLORINE-RELEASING**

GRANULES, DO NOT USE THEM. REPORT THE SPILLAGE TO THE PERSON IN CHARGE.

- **IF YOU HAVE HAD TRAINING INTO THE USE OF HYPOCHLORITE SOLUTIONS OR CHLORINE-RELEASING GRANULES, FOLLOW THIS PROTOCOL:**
- **IT IS IMPORTANT TO FOLLOW THE MANUFACTURER'S INSTRUCTIONS WHEN USING CHEMICAL DISINFECTANTS.**
- Wear disposable gloves and a plastic apron [PPE]. If dealing with a large spillage of blood or body fluids, consider whether eye and face protection should be worn, as described in [24].
- Cover the spillage with chlorine-releasing granules or a 10% hypochlorite solution and leave for two minutes.
- Use paper towels or a disposable cardboard scoop and pusher to remove the spillage and granules or solution; discard into a clinical waste bag.
- Change gloves [discard as clinical waste] and wash hands. Put on new gloves.
- Rinse the area with detergent and hot water to remove any staining.
- Remove PPE [discard as clinical waste] and wash hands again.

USES OF SODIUM HYPOCHLORITE AND STRENGTHS OF SOLUTION

Guidance on the use of Sodium Hypochlorite and the recommended strengths is showing below:

USE	DILUTION OF STOCK SOLUTION		AVAILABLE CHLORINE ppm
		%	
Blood Spills	1 in 10	10	10,000
Environmental Disinfection Hard surfaces	1 in 100	1	1,000

Undiluted commercial hypochlorite (bleach) solutions contain approximately 10% (100,000ppm) available chlorine.

- Hypochlorite concentration is expressed in terms of parts per million (ppm) available chlorine. Unfortunately, this varies from brand to brand and also depends on how the product has been stored. Liquid bleach should be stored in a cool, dark place and used within six months of purchase.
 - Chlorine-releasing agents should not be diluted in hot water, nor mixed with acids nor inappropriate cleaning solutions, as a rapid release of chlorine may occur, causing irritation to the eyes and respiratory tract of the user.
47. Refer to the manufacturer's instructions for cleaning equipment [e.g. tattoo motors] contaminated with blood or body fluids.

MAINTAINING A CLEAN ENVIRONMENT

48. It is important to understand how to maintain “clean” and “dirty” zones in the treatment area. Zoning prevents the transfer of “dirty” equipment used during a procedure back to a “clean” area.
49. Once equipment has entered the “dirty” zone, even if it is not used, it must be decontaminated before it is put back into the “clean” zone. This is in case it becomes contaminated when in the dirty zone, which can happen if liquids or body fluids splash unused equipment, or if the unused equipment comes into contact with dirty equipment.
50. All surfaces [e.g. piercing chair, work surface] liable to become contaminated should be protected with paper roll during use; this should be changed after every client and discarded as clinical waste. If the paper roll is not contaminated, it can be discarded as non-hazardous waste.
51. Surfaces can be protected by cling film and paper/kitchen roll to protect them from contamination by blood or body fluids. The cling film and kitchen roll must be changed after every client.
52. Electric cables and motors should be covered by a protective impermeable plastic sleeve, which must be changed after every client.
53. The surface should be wiped over with detergent and warm water in between each client, or with a 10% hypochlorite solution if there is contamination with blood or body fluids. This should be left on for two minutes to kill any potentially harmful micro-organisms, then rinsed off to avoid damaging metal surfaces.
54. Alcohol sprays or wipes should not be used to clean dirty surfaces because they do not penetrate organic matter [e.g. blood or body fluids] to reach underlying surfaces. Alcohol may also damage some materials, e.g. waterproof finishes.

DYES/PIGMENTS

55. All dyes or pigments used for tattooing, micro-pigmentation and semi-permanent tattooing should be sterile and inert. They should be bought from reputable suppliers and should be appropriate for their use [HSE 2003; DH 2003].
56. The dyes or pigments should be supplied with data sheets stating whether the dye or pigment is supplied in a sterile form, and whether or not it contains any metal impurities.
57. The containers used to hold the dyes or pigments for each customer should be **either** sterile, pre-packed, single-use and disposed of after each client, **or** decontaminated and sterilized after each client, and kept in clean conditions [refer to 78] until the next use [HSE 2003].

EQUIPMENT

58. It is essential that equipment is decontaminated in a way to prevent the spread of infection to the operator or clients.

If the equipment has parts that can potentially be contaminated with dye or pigment **or** blood or body fluids by:

- Tracking back **or**
- Aerosol contamination

Then those parts should be :

- Single-use only **or**
- Steam sterilised


59. **However**, if equipment is not single-use and cannot be sterilised due to the nature of the equipment [e.g. some motorised equipment used in micro-pigmentation] the following five-stage cleaning method described by the DH [2003] should be used, **if** the manufacturer states that the piece of equipment is compatible with this:

- i. Any non-replacement part of the equipment that has or may have become contaminated must be partially submerged, i.e. to cover all contaminated regions, in an ultrasonic bath containing an appropriate ultrasonic cleaning solution.**
- ii. The cleaning solution should be made up and used in accordance with the manufacturer's instructions.**
- iii. The equipment must be rinsed in clean water following ultrasonification.**
- iv. The equipment must then be immersed in a disinfectant as recommended by the manufacturer of the instrument.**

It is important that the following are noted when carrying out disinfection procedures:

- Parts should be immersed for the correct contact time, which will be recommended by the manufacturer of the disinfectant.
 - Affected parts should be fully covered in the disinfectant.
 - The disinfectant must be at the correct concentration
 - The disinfectant must be fresh.
 - The disinfectant must be capable of killing bacteria and blood borne viruses including, hepatitis B, hepatitis C, and HIV.
 - Ensure the equipment is compatible with the disinfectant you are using.
- v. Finally, the equipment must again be adequately rinsed in clean water to remove all chemical residues and then dried using a clean, single use, disposable paper towel. [DH 2003].**

SINGLE-USE ITEMS

60. If a piece of equipment has been identified for “single use only” it must not be re-used on any other client.
61.  Any package with this symbol on the outer pack is designed for single-use only and must not be re-used.
62. All razors must be single-use only and must be discarded in a sharps’ bin after use.
63. Needles used for tattooing **must** be single-use only. They should be discarded into a sharps’ bin immediately after use.
64. Elastic bands on tattoo motors must be changed between **every** client.

DECONTAMINATION OF EQUIPMENT

65. All non-invasive equipment [e.g. tattoo motors] and invasive equipment that has been in the dirty zone must be decontaminated between every client, whether used or not. Decontamination must be done following the manufacturer’s instructions and may involve cleaning only, cleaning and disinfection, or cleaning and sterilisation.
66. The operator should ensure that all instruments and equipment used during an invasive procedure are kept sterile until used [DH 2003].
67. Equipment that is used invasively [i.e. goes through intact skin] **must** be sterile at the point of use. Great care should be taken to avoid any inoculation [needlestick] injury or splashing to the eyes and face while cleaning equipment used for invasive procedures.
68. The most essential part of decontamination is the initial cleaning done to remove organic matter. If an item of equipment is not clean before being sterilised, the item will **not** be sterile at the end of the process. The manufacturers’ instructions **must** be followed about the correct way to clean all instruments or equipment.

Washing equipment or instruments by hand

69. If washing dirty equipment or instruments by hand, you must use a dedicated sink. **You must not use the hand washbasin for instrument cleaning.** Wear disposable gloves and a plastic apron, and eye protection in case of splashing with dirty water.
70. It is **not** recommended that equipment or instruments used **invasively** are washed by hand. They should be washed in an ultrasonic cleaner to minimise the risk of needlestick injury and to ensure thorough cleaning.

71. The equipment or instruments should be cleaned in a sink deep enough to submerge items being cleaned manually. The items should be cleaned under water to prevent any spray or aerosol being generated.
72. The equipment or instruments should first be cleaned in cool water below 35°C to prevent proteins in the blood coagulating on the equipment. Then clean the items with hot water and detergent, and rinse them in clean water before they are sterilised.

Ultrasonic cleaning

73. Small items may be cleaned in an ultrasonic cleaner. The items should be held in a mesh basket [supplied by the manufacturer] and the lid of the ultrasonic cleaner should be in place when the machine is in use. Using the cleaner in this way enables the ultrasonic waves to reach the equipment being cleaned, and, if the lid is on during use, cleaning solution contaminated by organic matter cannot splash members of staff.
74. If a tattooist has soldered his/her own needles onto a needle bar, both the soldered needle and the needle bar should be cleaned in the ultrasonic cleaner and sterilised in the autoclave before use. After use, both the soldered needle and the needle bar should be cleaned in the ultrasonic washer and sterilised in the autoclave before the needle is removed and discarded into the sharps' bin.
75. An enzymatic agent recommended by the manufacturer of the ultrasonic cleaner should be used to clean the equipment in it.
76. The cleaning solution should be changed as soon as it is visibly soiled or every four hours [DH 2003].
77. The tank of the ultrasonic cleaner should be emptied at the end of every day, rinsed out and dried. The tank should be cleaned with a suitable agent as recommended by the manufacturer at least weekly. More frequent cleaning may be needed in hard water areas.
78. Ultrasonic cleaners should be periodically tested according to the manufacturer's instructions.

Steam sterilization [use of the autoclave]

79. Steam sterilization in a bench-top steam sterilizer is the preferred method of sterilization. This is **not** a suitable means of sterilization for equipment that is hollow, nor is it suitable for wrapped/packaged items **unless** the sterilizer is a vacuum steam sterilizer with pre-sterilization forced air removal and post-sterilization drying stages.
80. All items must be clean and dry before being put into the sterilizer. Do not overload the sterilizer – the load items will not be sterilized if steam cannot penetrate to all the surfaces of all the items.

81. Equipment sterilised in a bench-top sterilizer is only considered sterile if used straight from the sterilizer as soon as it is cool enough. The door of the sterilizer should remain closed until the equipment is removed for the equipment to be considered sterile.
82. If the equipment does not have to be sterile at the point of use, once sterilized it can be stored in a clean, washable, airtight, lidded container until used.
83. Equipment stored in an airtight, lidded container should be removed before a procedure begins. The person removing the equipment should have clean, gloved hands.
84. Steam sterilizers should be maintained and tested regularly. The owner or operator can be trained to carry-out daily and weekly checks, recording the written results to provide a record that the sterilizer was working safely within known parameters [MDA 2002].
85. In addition to routine maintenance and cleaning, quarterly and annual checks should be carried out by a registered, authorised person [AP] [sterilizers]. The details of APs are available from the Institute of Healthcare Engineering and Estates Management [0239 282 3186].
86. The sterilizer water chamber and reservoir should be drained and cleaned at the end of each day, and then left to dry.
87. Only sterile water for irrigation should be used to top-up the chamber and reservoir. If a bottle is partially used, the remainder should be discarded to avoid bacterial contamination of the contents and the introduction of impurities into the sterilization cycle.
88. The sterilizer's pressure system should be checked for safety. The results of all checks and details of repairs should be recorded. This is a legal requirement under the Pressure Systems Safety Regulations [2000].
89. The details of all sterilization cycles should be kept as a record. The MDA [2002] recommends the use of a sterilizer with an integral printer to provide a record of every sterilization cycle.

WASTE

90. All waste items contaminated with body fluids are classified as "clinical waste"; this includes used gloves, aprons, cotton wool and paper roll. You should discuss the need for a clinical waste collection from your premises with your local authority. Clinical waste must be disposed of into appropriately marked bags, which should be removed by an authorised contractor and taken for incineration. Premises producing over 200kg of hazardous waste per annum may need to be registered with the Environment Agency – discuss this with your local authority.

91. All waste should be tagged with the source details so that the source can be tracked in case of any problem after collection.
92. All other waste can be disposed of as non-hazardous waste, being discarded into non-hazardous waste bags that go to landfill for disposal.
93. There should be foot-operated, lidded bins to hold the hazardous and non-hazardous waste bags in the treatment area. This is to prevent cross contamination and to ensure proper segregation of waste.

SHARPS

94. Sharps must be discarded in a designated sharps' bin at the point of use. The term "sharps" includes used needles, or any single-use item of equipment that may pierce the skin if not disposed of in a rigid container.
95. The sharps' bin must be marked with either or both of the following two figures: BS 7320 or UN 3291, to ensure it meets current British Standard and European Union safety standards for sharps' disposal [BS 7320] and transport of sharps' bins [UN 3291].
96. Sharps' bins must be colour-coded and have the correct EWC (European Waste Code) label for the sharps they contain. You should discuss this with your local authority.
97. The details requested on the front of the sharps' bin should be completed when the bin is assembled and when it is locked. This is so that the source can be tracked if there is a problem after collection.
98. Sharps' bins should be positioned out of the sight and access of unauthorised personnel.
99. Sharps' bins should be handled with the lid in the "closed" position to avoid accidental spillage of the contents.
100. Before collection, sharps' bins should be stored in a locked area inaccessible to members of the public or unauthorised personnel.
101. Sharps' bins must be collected by licensed contractors and sent for incineration.
102. If staff are unsure about the correct use of sharps' bins, the company representatives selling them are usually willing to give training when necessary.

SKIN PREPARATION BEFORE A SKIN PIERCING PROCEDURE

103. The client's skin should be cleaned before any invasive procedure is carried out to prevent the introduction of bacteria living on the surface of the surrounding skin into the tissues of the body. If the client's skin is dirty, the

area to be pierced should be washed with soap and water before using alcohol to disinfect it.

104. An alcohol - based skin disinfectant [e.g. solution of 70% alcohol in 0.5% chlorhexidine or wipes containing 70% alcohol] should be used in accordance with the manufacturer's guidelines. Alcohol preparations kill micro-organisms by drying them out; therefore in order to be effective, the alcoholic preparation must be allowed to dry before the start of a procedure.
105. If the client's skin is broken, sore, infected or damaged in any way at or near the site to be tattooed or pierced, the invasive procedure should be postponed until the skin is healed. Skin in a poor condition is more likely to become infected, with potentially fatal consequences for the client.
106. Solutions used to wipe procedure sites must be freshly made-up for each client to discourage the growth of potentially harmful micro-organisms [germs] in the solution. It is recommended that these solutions are used from a disposable cup that is thrown away after a single use. The use of squeezable bottles for these solutions is not recommended [even if the bottle is covered with cling-film that is changed after every client].

AFTERCARE OF THE CLIENT

107. Written information should be given to all clients so that they know what to expect about the healing times after their procedure. Verbal advice is rarely heeded [HSE 2001]. The written information should be specific to the procedure the client has had done.
108. Clients should be advised to maintain a good standard of personal hygiene to avoid the introduction of potentially harmful micro-organisms [germs] into the body's tissues [HSE 2001].
109. The procedure site should not be touched by the client for four days [HSE 2001], but must be checked at least twice daily by the client. When checking the site, hands should be clean and care should be taken not to cough over the site. If the client has been advised to turn a piece of jewellery, it should be handled as little as possible, using a clean tissue to touch the jewellery [Chartered Institute of Environmental Health 2001].
110. When salt water is recommended for use to clean a site, it should have been boiled and allowed to cool before use. Sterile salt water [e.g. Normasol] can be bought from chemists for this purpose.
111. If any of the following signs or symptoms are seen, urgent medical attention should be sought:
 - Redness spreading around the site and extending away from it
 - Pus or green/yellow fluid oozing
 - Bleeding that is not controlled by light pressure
 - Pain [rather than discomfort]

- Swelling
- Heat
- Immobility of, or reluctance to move, a limb/digit/part of the body.

112. The procedure site should be kept clean and dry to promote healing. It is usual for there to be some oozing from the site, which should be kept covered by a sterile, waterproof dressing to prevent potentially harmful micro-organisms getting into the body [Chartered Institute of Environmental Health 2001].
113. For body piercing, it is difficult to estimate the expected healing times since individuals heal at different times.

Clients should be advised about healing times, which may be prolonged because of the time it takes for the jewellery “tunnel” to become dry and healed after the initial tissue damage [HSE 2001].

The US Association of Professional Piercers stipulate the following possible healing times:

Part of body	Healing time
Ear lobe, eyebrow, nasal septum	6 – 8 weeks
Ear [cartilaginous region], nostril	2 months – 1 year
Tongue	4 – 6 weeks
Lips, cheeks	6 – 12 weeks
Genitalia including inner labia, clitoral hood	4 – 12 weeks
Nipple, scrotum, outer labia	2 – 6 months
Navel, ampallang [transverse penile piercing]	4 months – 1 year

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APPENDIX A

List of contact details

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Canterbury City Council	01227 862000
Dartford Borough Council	01322 343434
Dover District Council	01304 821199
Gravesham Borough Council	01474 337598
Maidstone Borough Council	01622 602000
Medway Council	01634 333549
Sevenoaks District Council	01732 227000
Shepway District Council	01303 850388
Swale Borough Council	01795 424341
Thanet District Council	01843 577000
Tonbridge & Malling Borough Council	01732 876190
Tunbridge Wells Borough Council	01892 526121