

ENVIRONMENTAL HEALTH

STANDARDS FOR COMMERCIAL SKIN PENETRATION HAIRDRESSING, AND BEAUTY AND NATURAL THERAPY

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Introduction

Skin Penetration, hairdressing and beauty and natural therapy procedures pose particular public health risks if they are not conducted in a safe and hygienic manner. These risks may be to the operator, as well as the client, and can include the transmission of infectious diseases such as HIV and Hepatitis B.

To reduce these risks, operators are required to maintain premises and equipment in a hygienic condition, and to undertake procedures in a safe and appropriate manner.

These standards provide operators with information that enables them to take all reasonable precautions towards infection control. By following these provisions, operators can be reassured that they are minimising the risk of transmitting infectious diseases.

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Users of this document should satisfy themselves concerning its application to Commercial Skin Penetration and where necessary seek expert advice about their situation. The Northern Territory of Australia shall not be liable to any person for any loss or damage caused or alleged to have been caused directly or indirectly as a result of reliance upon this publication.

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Scope

These standards apply to commercial operators involved in:

- skin penetration including tattooing, acupuncture, ear piercing and electrolysis;
- beauty treatments including facials, waxing, massage, skin peels, manicures and pedicures, and
- hairdressing services including cutting, shaving, colouring, perming and transplanting.

Some of the standards within this document are mandatory, while others indicate 'best practice'. The word "**shall**" has been used to indicate the mandatory requirements and the word "**should**" describes the best practices to be undertaken.

The standards have been divided into five main sections:

- 1. Standard precautions for all operators**
 - 1.1. Operator Hygiene
 - 1.2. Communicable Diseases
 - 1.3. Additional Hygiene Measures
- 2. Infection Control Requirements for *all* operators**
 - 2.1. Cleaning Equipment
 - 2.2. Disinfecting Equipment
- 3. Additional Precautions for *skin penetration***
 - 3.1. Cleaning and Sterilising Skin Penetration Instruments
 - 3.2. Disinfecting Non-Penetrating Equipment
 - 3.3. Skin Preparation
 - 3.4. Handling Skin Penetration Instruments
 - 3.5. Needle-stick Injuries
 - 3.6. Ear and Body Piercing
- 4. Premises Structure**
- 5. Additional Requirements for Hairdressing**

Home based and mobile operators who are not involved in skin penetration procedures are required to comply with the hygiene and safety provisions within these standards, although the specific structural requirements are not applicable. However, operators involved in skin penetration procedures must comply with all of the compulsory requirements in these standards, regardless of the nature or location of their business.

Definitions

Antiseptics are substances capable of destroying or preventing the growth of most micro-organisms under prescribed conditions of use and **are used specifically for application to living tissue, such as skin.**

Cleaning is the removal of "dirt" and the reduction in the number of micro-organisms on a surface, by washing with soap or a suitable detergent.

Disinfectants are chemical agents used for disinfection.

Disinfecting is the process of reducing the numbers of active micro-organisms to a level where infection is unlikely to occur, by the application of chemical disinfectants. However, unlike the process of sterilisation, disinfecting articles does not always produce a complete destruction of micro-organisms.

Home Based Operations are business operations that are conducted at the home or residence of the operator.

Infection Control Procedures are methods that must be followed to eliminate or minimise the risk of transmission of infectious diseases.

Mobile operations are those businesses that travel to the client's residence such as home, business, nursing home or hospital and include businesses that operate from a caravan or other vehicle.

Operator is defined as any person who cuts, shaves, removes, colours, dresses, curls and or treats hair; performs facial / skin treatments, massage, manicure, pedicure, or deals with skin, hair and nails; pierces, tattoos, or penetrates the skin for in any way for fee or reward.

The term "operator" does not include a medical practitioner, physiotherapist, podiatrist, registered nurses, dentists, cholesterol and blood sugar testers in the course of their profession. However, if a medical person operates a business that is not in the "normal" course of their profession, then this code of practice will apply to that operation.

Premises is defined as any commercial premises upon which a business is conducted and includes purpose designed premises or premises fitted out specifically for the type(s) of operation carried out, however the definition **does not** include home-based operations or mobile operations where the operator visits the client's residence.

Skin Penetration includes practices such a ear piercing, hair removal electrolysis, tattooing, acupuncture, body piercing, semi-permanent make-up and any other procedures whereby the skin is cut or pierced.

Sterilising is the process which kills all living micro-organisms. The most effective method of sterilisation is the application of moist heat under pressure for a specific time and pressure, as occurs in an autoclave.

Universal Precautions are work practices which assume that all blood and body substances are potential sources of infection. Such practices involve the use of safe procedures and protective barriers to ensure that operators will have maximum protection from infections.

1. Standard precautions for all operators

Operators involved in any procedure, ranging from hairdressing to skin penetration, should protect their customers and themselves by developing safe and hygienic work practices.

1.1. Operator Hygiene

Hands must be washed thoroughly with water and soap or an antibacterial cleanser and dried with disposable paper towels before treating every client and after any activity which may contaminate the hands.

Operators should always wear clean outer clothing or a clean over-garment when attending a client.

Other protective attire that should be worn includes:

- Disposable gloves when conducting skin penetration practices.
- Aprons and gloves when mixing chemicals.
- Protective footwear when using sharps such as razors, scissors, clippers and needles and chemicals.
- Protective eye wear when conducting any skin penetration practice.

Operators **should not** smoke when attending a client.

1.2. Communicable Diseases

An operator or client who knows or suspects that he/she is suffering from a communicable disease or infectious skin disease should not perform, or have performed on themselves, any of the operations defined in these standards.

Broken skin or minor skin infections on exposed parts of the operator's body should be covered with a bright coloured water proof dressing.

Head Lice and Scabies

Should a client be treated who is found to have head lice or scabies, all instruments and linen used on the client shall be immediately isolated at the conclusion of the treatment. Linen should be washed in hot water and dried in sunlight (if possible) and equipment should be cleaned and treated using a specific insecticidal treatment that can be obtained from a pharmacy. Any hair that has been cut should be immediately disposed of in a sealed bag.

Record Keeping

Operators should keep records of clients' appointments (time, date and name) and treatments, to assist in disease investigation and control if an outbreak of an infectious disease occurs. This is particularly important for procedures involving skin penetration.

1.3. Additional Hygiene Measures

Laundry

Only clean linen, towels and other clothing or cloths should be placed on clients. Clean items should be stored in an area that protects them from being soiled through hair, dust etc. Dirty linen should be placed into a suitable receptacle after use. All linen should be washed in hot water (> 70°C) with an appropriate detergent. Operators should immediately dispose of any blood-stained linen.

Waste Disposal

General waste, such as paper, hair and food scraps, should be disposed of in a refuse receptacle with plastic lining and a close-fitting lid. All sharps, including razors, old scissors, glass, cosmetic lancets and needles, should be placed in a sharps container and disposed of in accordance with the direction of an Environmental Health Officer.

First Aid

A first aid kit should be held in every premises, and should be stocked in accordance with Work Health specifications.

2. Infection Control Requirements

There is a significant risk of transmitting infectious diseases through skin penetration, hairdressing, and beauty and natural therapy operations. Operators therefore need to adopt appropriate procedures to minimise these risks.

All items such as combs, brushes, scissors, clippers, manicuring and pedicuring instruments and make-up equipment should be cleaned and disinfected between clients, and operators should have enough cleaned and disinfected equipment to allow for the busier times. If the client's skin is accidentally cut, the cutting instrument should be immediately disposed of, or cleaned and sterilised before being re-used.

New single-use disposable razor blades should be used for each person, and used blades should be placed in a sharps container. Reusable cut-throat razors should not be used.

Treatments such as depilatory waxes and lotions, as well as make-up and other lotions and gels can also act as sources for disease transmission if they are incorrectly handled. Depilatory waxes and lotions should therefore be made from a new batch for each client, as used treatments may contain infected skin or hair follicles. Make-up, lotions, waxes and gels should be administered with a clean and disinfected applicator.

2.1. Cleaning Of Equipment

By implementing appropriate infection control procedures infectious disease transmission can be eliminated or minimised. To achieve this, operators need to understand the differences between cleaning, disinfecting and sterilising, and also know when an item must be sterilised before use or simply disinfected.

Cleaning prior to Disinfecting

Cleaning is vital prior to disinfecting utensils, as any build-up of organic material (hair, grease etc) will prevent the disinfectant from working effectively.

Instruments that are able to be immersed in water should be cleaned in the following manner:

1. **WASHING** in cold water with soap or a suitable detergent
2. **RINSING** in clean water
3. **DRYING** with a clean cloth

2.2. Disinfecting Of Equipment

Disinfection is a process that reduces the number of micro-organisms to a level where infection is unlikely to occur. All equipment used for hairdressing, skin penetration and beauty and natural therapy should be cleaned and disinfected. **(Items used to penetrate the skin should be sterilised between clients - see Section 2.)**

The procedure used for disinfecting depends on the type of disinfectant and instrument. It is therefore important that the manufacturer's instructions are followed in relation to the dilution of the disinfectant and the contact or immersion time required. Chemicals that are appropriate for disinfecting utensils include:

- Alcohol, ethyl 70%
- Alcohol, isopropyl 70%
- Hospital Grade Disinfectant
- Sodium Hypochlorite 1%

All disinfecting immersion containers should be changed daily and scrubbed out to remove any build up of organic matter that will reduce the effectiveness of the disinfectant.

Electric Clippers and other metal or electrical items should not be immersed in water. Cleaning and disinfection should instead occur **by wiping them with a alcohol impregnated cotton pad to remove all "dirt", then spraying or wiping them with an appropriate alcohol based disinfectant.**

Glutaraldehyde is not a recommended disinfectant, due to its hazardous and corrosive nature.

Ultraviolet cabinets do not disinfect or sterilise items as the radiation does not penetrate to all surfaces of the articles exposed. They should only be used for storage of clean and disinfected items.

3. Additional Precautions for Skin Penetration

There is a potential for serious infection to occur during skin penetration procedures. Instruments may become contaminated by infected blood or serum, and the transmission of viruses such as HIV and Hepatitis B is possible.

The person at risk may be the client or the operator.

To minimise the risks associated with these procedures, operators are required to take additional infection control precautions. These precautions include sterilising penetrating equipment (as opposed to disinfecting as discussed in Section 1), and handling instruments in a manner that reduces the risk of contamination.

Items that are required to be **sterile** are those in which the skin will be pierced or penetrated such as tattoo needles, ear piercing studs, electrolysis needles or acupuncture needles and their associated devices.

An additional precaution that is strongly recommended is the use of sterile disposable **single-use** needles or penetrating items (sharps). These sharps should be disposed of in a sharps container after a single use, as they are usually not designed to be re-sterilised.

3.1. Cleaning and Sterilising Skin Penetration Instruments

All needles or sharps that penetrate the skin, as well as any items that hold the needle (such as the tattooing gun needle bar or nozzle) should be in a sterile condition immediately prior to use.

Cleaning Prior to Sterilisation

Reusable skin penetration equipment, including needles, should be cleaned in the following manner:

1. **RINSE** the equipment in **cold** water to remove any blood or serum. (Hot water at this stage will cause coagulation and adherence of matter to the instrument and prevent complete sterilisation)
2. **WASH** the equipment using hot water and soap or detergent. (Using hot water with detergent at this stage will help remove any grease and oils)
3. **RINSE** the equipment thoroughly in **hot** water (greater than 70°C) and allow to dry.
4. **STERILISE** the equipment using an autoclave or other approved steriliser in accordance with the times and temperatures indicated in the next section on Autoclave.

For the operator's safety when cleaning items, disposable (and durable) gloves and protective clothing should be worn. Splashing and handling needles other than with forceps should be avoided.

Needles should be visually inspected for damage prior to cleaning. Use of a clean nylon brush or pad in the cleaning stage will help to remove material.

Cleaning Penetration Equipment Prior To Sterilisation				
RINSE in <i>cold</i> water	WASH with <i>hot</i> water & soap / detergent	RINSE in <i>hot</i> water	DRY	STERILISE & STORE

Table 1: Steps for cleaning penetration equipment prior to sterilisation.

Sterilisation using moist heat – Autoclave

If an autoclave is to be used for sterilisation, cleaned needles and sharps should be subjected to saturated steam under pressure at the following appropriate time and temperature ratios:

Autoclave Sterilisation Ratios		
Temperature (°C)	Holding Time (mins)	Pressure
121	15	103 kPa (15 psi)
126	10	138 kPa (20 psi)
134	3	206 kPa (30 psi)

Table 2: Ratios for Autoclave Sterilisation

Needles should always be removed with sterile forceps to avoid any contamination. It is important that autoclaves are checked and serviced regularly to ensure that their operating times and pressures are appropriate.

The Problems associated with Using Other Equipment for Sterilisation

Dry Heat Sterilisers should not be used for sterilising equipment as their application is limited due to the relatively long sterilisation times and the likelihood of materials being damaged by the 160oC-180oC temperatures usually used. There is also a long warm up period and limited control over temperature within the chamber space.

Pressure Cookers **are not sterilisers** and **should not** be used.

Ultra-sonic cleansers can be used during tattooing to clean ink off needles; however they **are not sterilisers**, and needles are still required to be cleaned and sterilised between clients. The use of ultra-sonic cleansers **shall** be in accordance with Australian Standard 1487-1994.

Broken or Damaged Needles / Studs

Any broken, brittle or damaged needles, razors or studs **should not** be used and **should** be disposed in a sharps container.

Needle and Actuating Device Holders and Trays

All holding trays for needles and tattoo gun / actuating devices should be sterilised before use. Wooden holders **should not** be used to hold tattoo guns or other actuating devices.

3.2. Disinfecting Non-Penetrating Equipment

Items that do not penetrate the skin and are not involved in the direct process of penetration should be cleaned and disinfected as per Sections 1.1 and 1.2.

3.3. Skin Preparation

The client's skin should be clean and free from infection. Before any skin penetration procedure is carried out, the penetration site should be wiped with sterile disposable swabs containing 80% ethyl alcohol or 60 - 70% isopropyl alcohol. Skin should be just dry before it is penetrated and should not be touched by the operator's hands.

3.4. Handling Skin Penetration Instruments

Needles and other penetrating devices should not be handled in a manner that can lead to their contamination. Single-use disposable gloves should be worn when conducting skin penetration operations.

Dyes for Tattooing / Semi-permanent Make up

It is possible for pigment dyes to be contaminated from viruses (such as Hepatitis B and C) in blood and serum. To avoid these contaminated dyes from being the source of transmission to other clients, pigments in new or sterile containers or "caps" should be used for each client. Dyes should be administered from "collapsible" tubes, or by another appropriate manner, so as to reduce the chance of contamination.

Pads, Swabs, Cloths, Tissues, Cotton Wool

Some skin penetration procedures require the skin to be wiped down during the process to remove ink, sweat, plasma and blood. Any swabs, cloths, paper or cotton gauze used during skin penetration should be single-use and should be disposed of immediately after use in a water-proof bag. These bags should then be sealed and disposed of in a bin with a close fitting lid after each client.

3.5. Needle-Stick Injuries

Any operator or client who receives a needle-stick injury (i.e. penetration of their skin with an object that has penetrated another person's skin) **should seek immediate medical attention** through the hospital Accident and Emergency or their local general practitioner.

Further advice on the prevention or treatment of needle-stick injuries can be obtained from the Centre for Disease Control Program (telephone numbers are listed in the 'Further Advice' section at the end of this document).

3.6. Ear and Body Piercing

Closed Ear Piercing

Closed ear piercing studs should be in a sterile condition immediately prior to use.

Thorough cleansing and disinfection of the gun, and particularly the stud holder, is necessary before being used on any person.

Body Piercing

Body piercing should not be performed with an ear piercing gun. Appropriate sterile body piercing needles and equipment should always be used.

4. Premises Structure

Hairdressing premises, beauty salons, natural health clinics and skin penetration premises should be constructed and fitted-out with materials that can be easily cleaned and disinfected. This may include:

- All surfaces and fittings should be constructed of smooth, impervious, durable and preferably light coloured material
- Separate hand washing facilities, dispensing hot and cold water from a single outlet, should be provided in the room of operation or in a central location.
- Soap or a suitable anti-bacterial lotion, and disposable paper towels or a hot air drier, should be provided at the hand washing facilities
- A separate staff sink and laundry facilities should be considered in the design of the premises

The following requirements are mandatory in some premises:

- The Building Code of Australia (NT Standard H102) requires the provision of a toilet and washbasin for customers in new skin penetration premises. These, and any other sanitary facilities, shall be separated from the work-room by an air lock or a self-closing door.
- The Building Code of Australia (NT Standard H102) requires the provision of a hands-free wash hand basin such as arm or foot operated taps in new skin penetration premises.
- Where Autoclaves are used for sterilising instruments they must be installed in accordance with the National Plumbing and Drainage Code (Australian Standard 3500).
- The incoming water supply to hand-held hose outlets must be protected from back-flow contamination, by a correct anti-siphon valve in accordance with the requirements of the National Plumbing and Drainage Code (Australian Standard 3500).

5. Additional Requirements for Hairdressing

All hairdressers and hairdressing premises shall comply with the provisions of the Public Health (Barbers Shops) Regulations. These regulations require any hairdressing premises to be registered on an annual basis.

Further Advice

Advice on matters raised in these guidelines can be obtained from environmental health officers at the following locations:

Contacts for Further Advice	
Environmental Health Program Directorate Department of Health and Families 2nd Floor Casuarina Plaza PO Box 40596 CASUARINA NT 0811	Tel (08) 8922 7152 Fax (08) 8922 7334 Email envirohealth@nt.gov.au Web http://www.health.nt.gov.au/envirohealth

Specific Advice

Specific advice relating to the prevention or treatment of needle-stick injuries can be obtained from:

Contacts for Further Advice	
Centre for Disease Control (CDC) Ground Floor Building 4 Royal Darwin Hospital Rocklands Drive, Tiwi, NT 0810	Tel (08) 8922 8044 Fax (08) 8922 8310 Web http://www.health.nt.gov.au/centre_for_disease_control/

References

- Australian Standards AS 4187 - 1994 Code of Practice for cleaning disinfecting and sterilising reusable medical and surgical instruments and equipment, and maintenance of associated environments in health care facilities. Standards Australia. Other Relevant Australian standard AS 2182 Sterilisers - Steam - Portable; NH&MRC - Clinical Waste Guidelines; AS 2487 Dry Heat Sterilisers (hot air type).
- ANCA Bulletin No.10 (August 1991) Disinfection in Hairdressing Salons / Barber's Shops to Prevent the Transmission of HIV and other Blood-Borne Agents
- ANCA Bulletin No. 9 (August 1991) Infection Control Recommendations for Skin Piercing Procedures such as Acupuncture, Hair Electrolysis, Ear Piercing and Tattooing.
- ANCA / NH&MRC (July 1994) Infection Control in Office Practice: Medical, Dental and Allied Health.
- Work Safe Australia Code (November 1993) Human Immuno deficiency Virus and Hepatitis B and the Work Place.

- ANCA / NH&MRC (August 1994) Management Guidelines for the Control of Infectious Disease Hazards in Health Care Establishments.
- Macaitis M (May 1992) 'You've got what ?!' Control of Infectious Diseases in Children and Adults South Australian Health Commission
- ANCA Bulletin No 7 (June 1990) Infection Control Guidelines - AIDS and Related Conditions
- Gardner F & Peel M M (1991) Introduction to Sterilisation , Disinfection and Infection Control second edition Churchill Livingstone.
- Maurer M (1985) Hospital Hygiene Hodder & Stoughton Publishers
- UK Public Health Laboratory Service - Communicable Disease Surveillance Centre (1983) A Guide to Hygienic Skin Piercing

Australian State's Health Legislation and Standards of Practice

- Queensland Health Hairdressing Regulations 1989 and Skin Penetration Regulations 1987
- Western Australia Health Support Services (1991) A Guide to Sterilising Principles and Practices
- Health Department Victoria Health (Infectious Diseases) Regulations 1990 and EHS Standards of Practices for Tattooing; Hairdressing; Beauty Treatment; Ear piercing; Hair Removal by Electrolysis and Acupuncture.
- South Australia Health Commission Draft Guidelines for the Standards of Practice for Hairdressing (May 1991) and Skin Penetration Health Risk for Tattooists (Sept 1990) and Guidelines on the Safe and Hygienic Practice of Skin Penetration (Feb 1995).
- NSW Health Department (1991) Skin Penetration Guidelines