AUSTRALIAN CAPITAL TERRITORY

SKIN PENETRATION PROCEDURES ACT 1994

NO. 94 OF 1995

APPROVAL OF A CODE OF PRACTICE
SKIN PENETRATION PROCEDURES CODE

UNDER Section 7 of the Skin Penetration Procedures Act 1994 I APPROVE as a Code of Practice the "The Skin Penetration Procedures Code".

Dated this Twenty-second day of June 1995

Kate Carnell
Minister for Health and Community Care

CODE OF PRACTICE

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Skin Penetration Procedures Act 1994

This Code of Practice for skin penetration procedures has been developed by the ACT Department for Health and Community Care in conjunction with representatives from health professional and industry groups who undertake skin penetration. This is a mandatory Code, approved by the Minister of Health and Community Care, under Section 7 of the *Skin Penetration Procedures Act 1994*.

The Code specifies **minimum standards** of infection control that apply to businesses and operators performing skin penetration. Examples of operators performing skin penetration procedures include doctors, dentists, nurses, beauty therapists, acupuncturists, and tattooists.

For further information contact the Public and Environmental Health Service on 205 1700 or the Communicable Disease Control Section on 205 1376.

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PART I

INTRODUCTION

1. Background

The *Skin Penetration Procedures Act 1994* has been prepared in response to the risks associated with the transmission of blood borne infections, eg. Hepatitis B, Hepatitis C and HIV. This Code has been developed to set minimum standards of infection control for people performing skin penetration procedures.

2. Objectives

The objectives of the Skin Penetration Code of Practice are to:

(a) provide a written record of standards adopted by reference in the *Skin Penetration Procedures Act 1994;*

(b) minimise the risk of transmission of blood borne infections by the adoption of universal precautions during skin penetration procedures,

(c) ensure appliances are clean and sterile before being introduced into normally sterile human tissue,

(d) establish guidelines to minimise the risk of transmission of microorganisms between the operator, the appliances used, and other clients, and

(e) promote a safe work environment for workers performing skin penetration procedures

3. Interpretation

In this Code, unless the contrary intention appears:

Appliance means the whole or part of any utensil, machinery, instrument, device, apparatus or article used or intended to be used in or in connection with the performance of a skin penetration procedure, or the cleaning or sterilisation of another appliance

Cleaning means the removal of bioburden (soil) and the reduction in the number of microorganisms from a surface, by a process such as washing in detergent and water without prior processing

Clinical waste means waste defined as clinical under the *Clinical Waste Act 1990*, and includes

(a) waste consisting of any catheter, hypodermic needle, intravenous set, pipette or scalpel;

(b) waste consisting of any other instrument or object that has been used in the taking of blood, the testing, processing or handling of blood or blood products, the investigation of human or animal diseases or in analysis or research that involves the use of tissue or fluid specimens, whether human or animal,

(c) sanitary waste that originates from or has been in contact with a person suffering from tuberculosis or an infectious or notifiable disease within the meaning of the Public Health (Infectious and Notifiable Diseases) Regulations,

(d) sanitary waste that originates from or has been in contact with a person suffering from venereal disease within the meaning of the *Sexual Transmitted Disease Act 1956*,

(e) waste resulting from the investigation or analysis of tissue or fluid specimens, whether human or animal,

(f) biological or chemical waste resulting from the investigation of human or animal diseases,

(g) waste derived from a prescribed activity, being waste that includes or included human blood, or animal blood in any form other than food waste,

(h) human or animal tissue or body fluids, removed during surgery or an autopsy;

(i) waste consisting of a cytotoxic substance or waste that is, or is likely to be, contaminated by a cytotoxic substance,

(j) waste consisting of anything that has been in contact with waste referred to in a previous paragraph,

(k) waste derived from the preparation of a human body for burial or cremation, or

(l) waste declared by the Minister by instrument to be clinical waste for the purposes of the *Clinical Waste Act.*

Code means the Skin Penetration Procedures Code of Practice

Cytotoxic waste means waste containing substances which are carcinogenic, cytostatic, mutagenic or teratogenic

Detergent means a cleaning agent composed of a 'surface wetting agent' which reduces surface tension, a 'builder' which is the principle cleaning agent, and a 'sequestering' or 'chelating' agent to suspend the soil

Disinfectant means an agent intended to destroy or remove pathogenic microorganisms but cannot usually destroy bacterial spores

Disinfection means the inactivation of non-spore forming organisms using either thermal (heat and water) or chemical means

Industry refers to occupation groups not registered as health professionals

Occlusive dressing means a waterproof wound covering

Operator means a person who undertakes skin penetration procedures for fee, reward or public service

Pathogen means any microorganism that is capable of causing infection and disease.

Registered person means a health care worker registered under an ACT health professional registration Act.

Sharps means any item designed to pierce, cut, puncture or tear the skin or any other part of the human body, or be used to administer a dye or other substance for the purpose of colouring the skin of a human body

Skin penetration procedure means any process involving the piercing, cutting, puncturing or tearing of the skin or any other part of the human body, or the administration of a dye or other substance for the purpose of colouring part of the skin of the human body

Sterilisation means the complete destruction of all microorganisms

Universal blood and body substance precautions (universal precautions) means the use of safe work practices and protective barriers to minimise the spread of communicable diseases It is assumed that all human blood or body substances are potential sources of infection, irrespective of perceived risk

4. Application of Code

4.1 This Code applies to

(a) all persons who perform skin penetration procedures for fee, reward or public service,

(b) the premises in which skin penetration procedures are performed, and

(c) the business of cleaning and/or sterilising appliances for the purpose of skin penetration

4.2 Operators performing skin penetration from a setting away from fixed premises should comply with this Code as far as possible following consultation with the Department These operators will need to take extra precautions to ensure that appliances are stored safely before and after use

PART II

STANDARDS FOR INFECTION CONTROL

5. Universal Precautions

Universal precautions should be adhered to during skin penetration procedures. The principle underlying universal precautions is that it is assumed that all clients and operators are potentially infected with a blood borne disease. Blood and body substances include blood, blood components, all body secretions and exudates.

5.1 Handwashing is the first step in infection control.

(a) Hands should be washed with soap and water and dried before and after direct client contact An antiseptic handwash is recommended before carrying out procedures involving surgical entry into normally sterile tissue

(b) Hands or skin surfaces contaminated with blood or body substances should be washed immediately or as soon as possible

(c) Hands should be washed before and after using gloves

(d) Nail brushes are not recommended for scrubbing hands as they may cause damage to hands

(e) Cuts and abrasions on hands should be covered with an occlusive dressing which should be changed at least four hourly or as necessary when the dressing becomes soiled

(f) Hands should be dried thoroughly using disposable paper towels or clean cloth towels Dry hands thoroughly to guard against damage and breakdown of the skin Any breaks or lesions are possible sources of entry for pathogens

5.2 Personal protective attire.

(a) Gowns and/or disposable plastic aprons should be worn when there is a reasonable likelihood of splashing or contamination of clothing

(b) Sterile gloves are to be worn during procedures that involve surgical entry into normally sterile tissues

(c) Gloves should be worn when contact with blood and body substances is anticipated

(d) Gloves should be worn when performing venepuncture

(e) General purpose utility gloves should be worn when performing duties, such as cleaning.

(f) Utility gloves may be reused unless there is peeling, cracking, punctures, tears or any other evidence of deterioration.

(g) Gloves should be discarded and replaced with new gloves if there is any evidence of tearing or deterioration.

(h) Gloves should be changed when performing separate and distinct procedures on the same client.

(i) Face protection (eye protection and masks) should be worn when performing procedures that are associated with splash or spray of blood or body substances.

5.3 Handling and disposal of sharps.

(a) Operators using sharps are responsible for their management and disposal.

(b) Contaminated sharps should not be passed from the hand of one operator to another operator except when using a recognised method such as that used in 'four-handed' dentistry.

(c) Needles should not be removed from disposable syringes for disposal, purposely broken, or otherwise manipulated by hand, except:

(i) when removal of the needle is technically necessary; or
(ii) when performing procedures where needles should be bent, those needles should be bent prior to contamination with blood or body substances.

(d) Where resheathing is required:

(i) the operator is responsible for ensuring the needle is properly recapped;
(ii) the sheath should not be held in the fingers; and
(iii) either a single handed technique using forceps or a specially designed protective guard should be used.

(e) Disposable sharps should be placed in a designated puncture-resistant container that meets Australian Standard AS 4031.

(f) Sharps should be discarded immediately the skin penetration procedure is completed.

(g) Reusable sharps should be handled carefully during reprocessing.

(h) The Department of Urban Services can be contacted to discuss the disposal of sharps containers.

5.4 Management of waste should comply with the *Clinical Waste Act 1990,* the Clinical Waste Manual 1991, the Public Health (General Sanitation) Regulations, and the Garbage Regulations.

(a) Clinical waste should be segregated and contained at the source of generation.

(b) Cytotoxic waste should be segregated and contained at the source of generation.

(c) Non-reusable sharps should be discarded into a designated puncture-resistant container that meets Australian Standard AS 4031.

(d) Operators should minimise splashing to mucosa and non-intact skin during disposal of blood or body substances.

(e) Solid waste (refuse not containing sharps and clinical waste) should be stored and disposed of in a manner consistent with the Public Health (General Sanitation) Regulations and Garbage Regulations.

5.5 Blood and/or body substance spills. If a spillage of blood or body substances occurs:

(a) wear disposable gloves and protective clothing;

(b) pick up broken glass or any other sharp included in the spill with forceps and dispose of in an approved sharps container;

(c) clean surface with detergent and water using disposable wipes or paper towels;

(d) rinse and dry surface (carpeted areas should be shampooed); and

(e) place all soiled materials in a yellow plastic bag which bears the bio hazard symbol.

5.6 Needlestick and blood accidents Workplaces where skin penetration occurs should have a policy concerning needlestick and blood accident exposure. Staff should be aware of the policy. Needlestick and blood accident policies should follow ANCA recommendations.

5.7 Animals, except trained dogs for the visually or hearing impaired, should not be allowed to enter an area where skin penetration procedures are undertaken.

5.8 Linen used in premises where skin penetration procedures are undertaken should be stored to prevent contamination. Only clean linen should be used on clients. Routine laundry procedures are adequate for processing all linen.

5.9 Sterile materials and solutions.

(a) Single dose vials and single use sterile injecting equipment should be used wherever possible

(b) If a material or solution is only available in a multi-dose vial or ampoule, a sterile needle and a sterile syringe should be used to withdraw contents from the vial or ampoule Both the needle and the syringe should be discarded after each use Injection of contaminated material or fluid into a multi-dose vial or ampoule **must not** occur

(c) Fluids applied to normally sterile tissue should be sterile

6. Selection and management of appliances

Appliances should be clean and sterile before being introduced into normally sterile tissues. Sterile tissue is accessed by piercing, cutting, puncturing, or tearing of skin or mucous membrane. The potential for microorganisms to contaminate appliances exists. Microorganisms are present on skin and can be carried by dust particles. Any microorganisms introduced into sterile body sites may establish infection. This section primarily deals with appliances involved in actual skin penetration. Larger electronic equipment and machines providing power sources to the appliances penetrating skin should be cleaned and maintained according to manufacturer's recommendations.

Levels of disinfection and the sterilisation process are based on the degree of risk of infection involved in the use of the appliance. The category (A, B or C) depends on the appliance's intended use.

A.	**Critical:**	Appliances which enter normally sterile tissue, cavity or blood stream require sterilisation
B.	**Semi-critical**	Appliances which will come into contact with intact mucous membrane require thermal or chemical disinfection
C.	**Non-critical**	Appliances which come into contact with intact skin require cleaning

6.1 Cleaning appliances.

(a) Cleaning is adequate for non critical appliances that come into contact with intact skin

(b) Cleaning is essential for all appliances before disinfection or sterilisation to remove all organic matter and other residue

(c) Agents for cleaning include (but are not limited to) detergents, proteolytic enzyme cleaning agents and ultrasonic cleaners

(d) Ultrasonic cleaners used to assist with the cleaning of jointed and serrated stainless steel appliances should comply with AS 2773 Ultrasonic cleaners are not suitable for cannulated appliances or plastics Appliances of dissimilar metals should not be cleaned together Ultrasonic cleaners should be used according to the manufacturer's recommendations.

6.2 Disinfection of appliances.

Disinfection is suitable for appliances which come into contact with intact skin or mucous membranes Disinfection is the destruction of all non-spore forming microorganisms in their vegetative state

(a) Clean and dry appliances

(b) If appliances can withstand heat and moisture and do not require sterilisation, thermal disinfection is the simplest and most efficient method of disinfection The minimum surface temperature/time relationship for disinfection is

°C	Minimum time minutes
≥80	2
75	10
70	15

(c) Chemical disinfection should **only** be used when

(i) steam under pressure is unsuitable,
(ii) low temperature chemical sterilisation is unavailable or not recommended, or
(iii) disinfection is required but thermal disinfection is unsuitable,

(d) Currently 2% glutaraldehyde is the only chemical recommended by AS 4187 for disinfection of reusable appliances that cannot be heat sterilised and when using it

(i) follow the manufacturer's recommendations for length of immersion time, and
(ii) operators, using glutaraldehyde, should wear protective attire to minimise skin sensitisation and prevent splashing of the eyes. Use should be restricted to a well ventilated room with a mechanical exhaust system in a controlled area

(e) Re-useable thermometers should be cleaned, then wiped with an alcohol preparation (80% ethyl alcohol or 60-70% isopropyl alcohol) and stored dry

6.3 Sterilisation and storage of appliances

Sterilisation means the complete destruction of all organisms including bacterial spores All reusable appliances used in procedures involving contact with normally sterile areas of the body or contaminated with blood or body substances should be cleaned and sterilised before being reused on another client Appliances should be sterilised by one of the following methods

(a) Steam under pressure (moist heat) sterilisation.

(i) Ensure that the recommended temperature-pressure-holding time is reached when processing appliances

Temp	**Pressure**		**Holding time (mins)**
(°C)	**kPa**	**psi**	**plus safety factor**
121	103	15	15
126	138	20	10
132	186	27	4
134	206	30	3

(Adapted from Australian Standard AS 4187)

(ii) Follow the manufacturer's recommendations and accepted protocols for effective and safe use of steam sterilisation

(iii) All packaged and wrapped sterile items should be stored to ensure that sterility is maintained for the acceptable shelf life

(b) Dry heat sterilisation

(i) Maintain appliances in a dry air oven (dry heat steriliser – hot air type) at 160°C for a minimum 1 hour holding time

(ii) Follow manufacturer's recommendations and accepted protocols for effective and safe use of dry heat sterilisation

(iii) All packaged and wrapped items should be stored to ensure that sterility is maintained for the acceptable shelf life

(c) Low temperature sterilisation Ensure that guidelines for organic load, contact time, temperature and pH are met when using

(i) Low Temperature Glow Plasma Sterilisers,

(ii) Ethylene Oxide, or

(iii) Peracetic Acid

(d) Documented evidence of the sterilising process should include cleaning, packaging, storage, loading and cycle parameters using physical, chemical and biological indicators in accordance with accepted protocols

7. Skin preparation

7.1 Skin disinfectant should be decanted from its container on a client-by-client basis. Fluid remaining at the end of each procedure should be discarded and the container cleaned and resterilised before re-use Allow skin to dry for 30-60 seconds

7.2 Skin can be disinfected with any of the following preparations

(a) 70% w/w ethyl alcohol,

(b) 80% v/v ethyl alcohol,

(c) 60% v/v isopropyl alcohol,

(d) alcoholic (isopropyl and ethyl) formulations of 0 5 to 4% w/v chlorhexidine, or

(e) aqueous or alcoholic povidine-iodine (1% w/v available iodine)

7.3 Use by dates on disinfectants should be strictly observed and disinfectants should not be used after the date has expired

8. Safe work environment

Employers have a responsibility to provide a safe work environment. This safety involves the provision of adequate staff training, proper facilities and equipment. Workplace conditions and structures should be arranged to minimise potential hazards. Workers should be offered immunisation (eg Hepatitis B vaccine) against infections which are a potential risk in the skin penetration setting.

It is recommended that workplaces adopt the principles and policies outlined in the National Occupational Health and Safety Commission's document on "Human Immunodeficiency Virus and Hepatitis B and the Workplace" 1993.

PART IV

ADMINISTRATION

9. Employee knowledge of Code

As all operators performing skin penetration will need to hold either health professional registration or have an operator's licence it is essential that employers inform staff of the requirements of the *Skin Penetration Act 1994* and the Code

10. Monitoring

The Code will be monitored by authorised officers from the Public Health Division of the ACT Department of Health and Community Care The monitoring program will include the establishment and operation of the Code and the development of performance measurements

11. Review and evaluation of the Code

The effectiveness of the Code will be reviewed after the first six months of its operation, and then at intervals of not more than three years

If necessary, amendments to the Code will be made following consultation with industry and health professional groups and other relevant organisations such as the NHMRC and Standards Australia

12. Disclaimer of Liability

This document has been prepared with input from a working party consisting of people performing skin penetration procedures and after consultation with a wide range of experts.

This Code reflects the current state of infection control knowledge and while every effort has been made to ensure its accuracy, operators should be aware that it could be altered in the future to reflect changes in knowledge concerning transmission of blood borne diseases

Neither the ACT Department of Health and Community Care nor any person involved in the working party accepts any contractual, tortious or other liability whatsoever in respect of the Code's contents or any consequence arising from its use or representations made in relation to it

Reference List

Australian National Council on AIDS, Infection control in office practice Medical, dental and allied health, AGPS, Canberra, 1994

Hunter Area Health Service, Practical sterilisation and disinfection in a medical practice, 1994

National Occupational Health and Safety Commission, Human Immunodeficiency Virus Infection/Acquired Immune Deficiency Syndrome and the Workplace, AGPS, Canberra, 1993

Standards Australia, Code of practice for cleaning, disinfecting and sterilising reusable medical and surgical instruments and equipment, and maintenance of associated environments in health care facilities, AS 4187—1994

APPENDIX 1

STANDARDS FOR PREMISES

The constructional requirements for premises cover a range of situations in which skin penetration is performed In specific premises, such as health care facilities, the Code should be read in conjunction with the relevant Australian Council on Healthcare Standards Accreditation "Guide for Australian Health Care Facilities" and "Standards for Day Procedures Facilities", the "Building Code of Australia" and other relevant Australian standards

Applicants for licences and persons involved in the construction of premises are encouraged to contact the Department to discuss the various construction options available The specific construction requirements are contained in the "Skin Penetration Premises – Construction Guidelines" which can be obtained from the Public and Environmental Health Service

1. Skin Penetration Procedures Areas

All floors, floor coverings, walls, ceilings, shelves, fittings and other furniture should be constructed of materials suitable for the procedures undertaken and should be kept clean and in good repair. For new premises or premises undergoing refurbishment, it is recommended that an approved hands-off type handbasin supplied with hot and cold water through a single outlet be installed in the immediate area where procedures are undertaken. The basin should be supplied with soap or detergent and either clean towels or disposable paper towels.

2. Cleaning Areas

It is recommended that appliances should be processed in a designated area. Facilities in the cleaning area should include:

(a) handwashing facilities,

(b) adequate bench space,

(c) smooth surfaces without cracks,

(d) good lighting,

(e) efficient ventilation,

(f) adequate storage space for materials and equipment,

(g) waste disposal containers,

(h) non-slip flooring,

(i) cleaning sinks,

(j) drying equipment,

(k) work surfaces made of non-porous materials, and

(l) plumbing fixtures designed to meet the needs of any proposed systems and ease of maintenance

APPENDIX 2

SPECIAL REQUIREMENTS

1. Special requirements for acupuncture

(a) Before inserting needles prepare skin.

(b) A new swab should be used for each separate area of the body eg if needles are to be inserted into both the back and leg areas separate swabs should be used for the back and the leg

(c) Skin should be allowed to dry for 30 to 60 seconds

(d) Sterile disposable single use needles should be used wherever possible

(e) If re-useable needles are used they should be processed in accordance with Section 6

(f) Dry heat sterilisation is not recommended for acupuncture needles as it causes loss of elasticity and brittleness

(g) When ear press needles are to be used they should be sterile

(h) When a dermal hammer is to be used it is recommended that it should be sterile

(i) When bleeding is to be used as a treatment technique disposable sterile single use lancets should be used

(j) When needles requiring guide tubes are used, a sterile guide tube should be used

(k) If the shaft of the needle is to be touched when long needles are inserted a sterile barrier should be placed between the shaft of the needle and the hand

2. Special requirements for beauty therapy

(a) Beauty therapists wishing to reuse wax should contact the Department for guidelines

(b) Single use disposable electrolysis needles should be used whenever possible

(c) Electrolysis needles which are to be reused should be cleaned and sterilised in accordance with Section 6

(d) All non-invasive appliances, such as tweezers and nozzles, used for beauty treatments should be rinsed in tepid water, immersed in detergent and water, and scrubbed under water with a clean scrubbing brush.

(e) Following cleaning, appliances should be dried and then stored dry, they should not be stored by soaking in disinfectants.

(f) Dyes, pigments and solutions used in skin penetration procedures should be poured or removed from stock container using a clean spatula and placed into sterile containers prior to each client treatment. If more dye, pigment or solution is required a new spatula should be used. Disposable spatulas and containers should be discarded into an appropriate container after use. Reusable containers should be cleaned and resterilised.

(g) Reusable appliances used in tattooing should be cleaned and sterilised before reuse.

3. Special requirements for body piercing

3.1 Only appropriate jewellery should be used in piercings. Suggested materials include but are not exclusive to:

(a) implant grade high quality stainless steel;

(b) solid 14 or 18ct gold;

(c) niobium;

(d) titanium;

(e) platinum; or

(f) a dense, low-porosity plastic such as monofilament nylon, acrylic, or lucite.

3.2 Jewellery should be capable of being sterilised.

3.3 Only sterile jewellery should be inserted.

3.4 Dyes, pigments and solutions used in skin penetration procedures should be poured or removed from stock container using a clean spatula and placed into sterile containers prior to each client treatment. If more dye, pigment or solution is required a clean spatula should be used. Disposable spatulas and containers should be discarded into an appropriate container after use. Reusable containers should be cleaned and resterilised.

4. Special requirements for tattooing

(a) If the area to be tattooed needs to be shaved a new disposable safety razor should be used and then discarded into an approved sharps container.

(b) If petroleum or lubricating jelly is to be used to cover the client's skin the jelly should be removed from the container using a new wooden or plastic spatula. A new spatula should be used every time more jelly is required from the container.

(c) Dyes, pigments and solutions used in skin penetration procedures should be poured or removed from stock container using a clean spatula and placed into sterile containers prior to each client treatment. If more dye, pigment or solution is required a clean spatula should be used. Disposable spatulas and containers should be discarded into an appropriate container after use. Reusable containers should be cleaned and resterilised.

(d) Sterile disposable single use needles should be used wherever possible.

(e) Re-useable needles, tubes and bars should be cleaned and sterilised in accordance with Section 6.