

# Infection prevention and control guidelines for hair, beauty, tattooing and skin penetration industries

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# Foreword

These guidelines help people in the hair, beauty and skin penetration industries to comply with the *Public Health and Wellbeing Act 2008* (the Act) and the Public Health and Wellbeing Regulations 2019.

Some industry practices are not specifically covered by these guidelines, and new treatments and practices continue to be developed. However, you should still use the general principles of infection control described in these guidelines for these practices.

These guidelines do not replace industry-specific guidelines or codes of practice, which must also comply with the Act and Regulations. You should also talk to the industry association relevant to your business. These guidelines are a guide to best practice and a reference tool for people associated with the industry, including environmental health officers.

The guidelines are divided into five parts:

**Part A:** Information about registration requirements for premises and relevant legislation.

**Part B:** General information on how infections are spread and the principles of infection prevention and control that are used to prevent transmission of infection. This includes how to clean, disinfect and sterilise instruments and equipment used to perform personal care and body art procedures.

**Part C:** Procedure-specific information for:

- hairdressing and barbering
- facials
- cosmetic application (including spray tanning)
- eyelash extensions and tinting
- hair removal
- laser and intense pulsed light
- manicure, pedicure and nail treatments
- tattooing (including cosmetic tattooing)
- body piercing and other forms of body modification
- colonic irrigation.

**Part D:** Occupational health and safety requirements for hair, beauty and skin penetration industries.

**Part E:** Glossary

**Part F:** Appendices

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## Acronyms and abbreviations

|                |  |
|----------------|--|
| AHPRA          | Australian Health Practitioner Regulation Agency |
| ARTG           | Australian Register of Therapeutic Goods         |
| AS             | Australian Standard                              |
| AS/NZS         | Australian Standard / New Zealand Standard       |
| EHO            | environmental health officer                     |
| EPA            | Environmental Protection Authority               |
| HIV            | human immunodeficiency virus                     |
| IPL            | intense pulsed light                             |
| NHHI           | National Hand Hygiene Initiative                 |
| the Act        | <i>Public Health and Wellbeing Act 2008</i>      |
| the department | Department of Health and Human Services          |
| TGA            | Therapeutic Goods Administration                 |

# Part A: Registering your premises

## Quick guide for business proprietors

The quick guide provides an overview of the main points of registering your business.

The quick guide may not tell you everything you need to know to meet your legal obligations.

Use the page references to find out more about each topic.

### Registering your business (p. 11)

You must register your place of business (premises) with your local council if you will be doing:

- beauty therapy
- applying cosmetics
- colonic irrigation
- hairdressing
- skin penetration (piercing)
- tattooing.

If you take over a business in **existing premises**, you need to transfer the registration to your name before you can start trading.

If you plan to start your business in **new premises**, you should talk to your local council before you choose a site.

### Regulations (p. 12)

There are **rules** you need to follow when you run your business.

You must:

- keep your business **clean, sanitary and hygienic**
- use only **sterile equipment** when you do tattooing or skin penetration procedures
- **sterilise** or **safely dispose of** any equipment that penetrates skin or has blood on it
- make sure you and your staff are **clean** and have no exposed wounds before doing a procedure
- use only drinking water when carrying out personal services
- provide accessible **hand washing facilities**
- give each client the department approved **information sheet** about risks of tattooing, ear piercing, body piercing or any other skin penetration procedures before carrying out a procedure – these are available on the [Department of Health and Human Services \(the department\) website](https://www2.health.vic.gov.au/public-health/infectious-diseases/personal-care-body-art-industries) <<https://www2.health.vic.gov.au/public-health/infectious-diseases/personal-care-body-art-industries>>
- if you do tattooing, body piercing or other skin penetration procedures (except ear piercing or dry needling), keep **records** of each client, including their name, address and telephone number for a period of 12 months
- display in a prominent position the department approved notice about the scope of registration for the class of business registered for your premises – these are available on the [department's website](https://www2.health.vic.gov.au/public-health/infectious-diseases/personal-care-body-art-industries) <<https://www2.health.vic.gov.au/public-health/infectious-diseases/personal-care-body-art-industries>>.



There are **age limits** for tattooing and body piercing:

- You must not do tattooing, scarification, tongue splitting, branding, beading or intimate body piercing on a person under the age of 18 years. Intimate body piercing means piercing genitals, anal region, perineum (between anus and genitals) or nipples.
- You must not do non-intimate body piercing on someone under the age of 16 years without the consent of their parent or guardian and the person to be body pierced if the person is over the age of 10 years and has the capacity to consent.
- You must not allow a staff member under the age of 16 years to do intimate body piercing.

### **Your premises (p. 14)**

Your premises should be **suitable** for the procedures you will be doing.

Surfaces that need to be cleaned and/or disinfected need to be made of **strong material** that you can easily clean and disinfect.

Your premises should have **good lighting and ventilation**.

Your premises should have **separate areas** for staff, clients and cleaning/sterilisation.

The cleaning/sterilising area should be big enough for **good working practices** (see p. 38)

Talk to your **local council** to make sure your premises has everything it needs.

### **Hand hygiene (p. 14)**

You should have a hand washing sink that is used **only** for washing hands.

You should also use **alcohol-based hand rubs**, but you still need to have hand washing sinks.

You should provide **liquid soap** (not bars of soap) for hand washing and disposable **paper towels**.

The sink should be easy to clean, and made of hard, non-scratch material.

The sink should be big enough to stop water from splashing into nearby areas.

You should provide a hand washing sink:

- where staff work and where you do procedures
- where staff clean equipment and instruments
- in or close to toilets.

### **Equipment cleaning (p. 15)**

You should have a sink that is used **only** for cleaning equipment.

You should **not** use the equipment cleaning sink for anything else, like making tea or coffee.

The sink should have hot and cold running water.

### **Keeping records (p. 15)**

If you are doing tattooing, body piercing or any other skin penetration procedure, you need to **write down** the name, address and telephone number of each client. You do not need to do this for ear piercing or dry needling.

You should also include:

- the date of the procedure
- the type of procedure, including what jewellery was provided and where on the body it was used

- the completed consent form
- sterilisation records of the equipment you used.

You should keep records at your business for at least **12 months** following the date of the procedure.

### **Animals (p. 16)**

You should not allow any animals other than guide dogs or service dogs in the procedure area.

If you do tattooing or skin penetration procedures, it is best not to allow animals in your business at all.

## Registration

Under the *Public Health and Wellbeing Act 2008* (the Act), if you conduct a business involving:

- beauty therapy
- application of cosmetics that does not involve skin penetration or tattooing
- colonic irrigation
- hairdressing
- skin penetration (including piercing)
- tattooing

you must, unless exempt, register the business premises with the local council in which it is located.

If your business involves beauty therapy (that does not involve skin penetration or tattooing), applying cosmetics or hairdressing only, you may conduct a 'mobile' business, but you must register your principle place of business.

If you are starting a new business in **existing premises**, you must:

- ensure the premises has current registration with the local council
- apply to transfer the registration of the premises to your name before you take over its operation.

If you are starting a new business in **new premises**, before you apply for registration you should:

- consult with the local council planning department and environmental health officer to discuss the proposal, preferably before selecting a site
- submit detailed plans of the interior layout of the proposed premises to the local council, in accordance with these guidelines
- obtain local council approval for the plans before commencing work on the premises
- contact Business Victoria for business advice and information
- contact the appropriate industry association for industry-specific advice.

Most councils require annual renewal of registrations and conduct annual inspections.

If your business only provides hairdressing and/or temporary make-up services (applying cosmetics) at your premises that do not involve tattooing or skin penetration, you can apply for an ongoing or 'once-off' registration. If your business also offers other services (for example body piercing or cosmetic tattooing) at the same premises, or you change your services in the future to include other services, you will need the usual annual registration.

If your business is operated by and within the scope of practice of a registered health practitioner under the Health Practitioner Regulation National Law, you do not need to register with the local council. Registered health practitioners listed in Figure 1 below do not need to register their business. All other registered health practitioners not listed below **must** register their business if undertaking skin penetration procedures.

### Figure 1: Exempt health professionals

- Acupuncturists registered with the Chinese Medicine Board or other registered health practitioner endorsed by their National Board to practice as an acupuncturist
- Chiropractors
- Dentists and persons registered in the dentists' division
- Medical practitioners
- Nurses and midwives
- Osteopaths
- Podiatrists

- Pharmacists
- Physiotherapists

To check if a health practitioner is registered, visit the Australian Health Practitioner Regulation Agency ([AHPRA](https://www.ahpra.gov.au/)) [website](https://www.ahpra.gov.au/) <<https://www.ahpra.gov.au/>>.

Business Victoria has information on its website about starting and operating a small business. The Australian Business License and Information Service includes information specific to hair, beauty and skin penetration industries:

- [Business Victoria](http://www.business.vic.gov.au/industries/retail/operating-a-small-business) <<http://www.business.vic.gov.au/industries/retail/operating-a-small-business>>
- [Australian Business License and Information Service](https://ablis.business.gov.au/vic/pages/e69c1c9e-11f6-4d67-9808-643c9b9f25f0.aspx) <<https://ablis.business.gov.au/vic/pages/e69c1c9e-11f6-4d67-9808-643c9b9f25f0.aspx>>

## Legislation

The Public Health and Wellbeing Regulations 2019 set out the requirements for premises registered under the Act.

- You must keep the premises in a clean, sanitary and hygienic condition.
- Any piece of equipment or instrument used for penetrating the skin must be sterile at the time of use.
- Any piece of equipment or instrument that has penetrated the skin or is contaminated with blood must be either safely disposed of immediately after use or cleaned and sterilised before being used on another person.
- Any other used piece of equipment or instrument must be clean before being used on a person.
- You must ensure that each person in the business who carries out any procedures on any client keeps themselves clean, and has no exposed cuts, abrasions or wounds, before carrying out a procedure.
- You must ensure that any water used for personal services is drinking water.
- You must ensure that there are accessible hand washing facilities available for use by staff.
- You must provide particular written information to each client about the potential risks associated with tattooing, ear piercing, body piercing and other skin penetration procedures. The information sheets that are to be used have been written by the department and can be found on the [department's website](https://www2.health.vic.gov.au/public-health/infectious-diseases/personal-care-body-art-industries/client-information-sheets) <<https://www2.health.vic.gov.au/public-health/infectious-diseases/personal-care-body-art-industries/client-information-sheets>>.
- If you do tattooing, body piercing or any other process involving skin penetration (except for ear piercing and dry needling), you must keep client records, such as name, address and telephone number of each client. Records must be kept for 12 months after the procedure, they must be stored at the premises where the business is conducted, and you must take reasonable steps to protect the information.
- You must display a notice about the scope of registration for the class of business your premises are registered for. The notice that is to be displayed can be found on the [department's website](https://www2.health.vic.gov.au/public-health/infectious-diseases/personal-care-body-art-industries/client-information-sheets) <<https://www2.health.vic.gov.au/public-health/infectious-diseases/personal-care-body-art-industries/client-information-sheets>>. The notice must be placed in a prominent position in the entry to the premises.

The *Summary Offences Act 1966* sets out the following requirements designed to protect young people in relation to tattooing, scarification, tongue splitting, branding, beading and body piercing.

- A person must not perform tattooing, scarification, tongue splitting, branding or beading on any person under the age of 18 years. Tattooing includes semi-permanent or cosmetic tattooing.
- A body piercer must not perform intimate body piercing\* on a person under the age of 18 years.
- A body piercer must not perform non-intimate body piercing on someone under the age of 16 years without the consent\*\* of a parent or guardian.
- A body piercer must not allow a person under the age of 16 years to perform intimate body piercings\*.

\* Intimate body piercing includes piercing on the genitalia (including surgically constructed genitalia), anal region, perineum or nipples of a person.

\*\* Consent is considered to be written (including in digital form) consent given in person to the body piercer by a parent or guardian of the person to be pierced; and if the person to be pierced is aged between 10 years and under 16 years the person to be pierced must give their consent also.

## Cosmetic injectables

The *Drugs, Poisons and Controlled Substances Act 1981* regulates the possession, supply and administration of Schedule 4 (prescription only) drugs. Cosmetic injectable products, such as botulinum toxin type A (Botox® and Dysport®) and dermal fillers (for example, Zyderm®, Zylplast®), are Schedule 4 drugs and, as such, the possession, supply and administration of these drugs must be in accordance with this Act.

Schedule 4 cosmetic injections can only be prescribed by a registered medical practitioner and be administered by a registered medical practitioner or a registered health practitioner (such as a nurse or midwife) under the instruction of a registered medical practitioner.

The extent to which nurses may lawfully possess Schedule 4 drugs is also strictly limited to circumstances described in the *Drugs, Poisons and Controlled Substances Regulations 2017*. Further information about the use of injectables during cosmetic procedures can be found on the [department's website](https://www2.health.vic.gov.au/public-health/drugs-and-poisons) <<https://www2.health.vic.gov.au/public-health/drugs-and-poisons>>.

The Medical Board of Australia also has a guideline for registered medical practitioners who perform cosmetic medical and surgical procedures. The guideline outlines the prescribing and administration requirements for Schedule 4 cosmetic injectables. These include the requirement for a consultation with the patient either in person or by video – not by phone or email. This document can be found on the [AHPRA website](http://www.medicalboard.gov.au/Codes-Guidelines-Policies/Cosmetic-medical-and-surgical-procedures-guidelines.aspx) <<http://www.medicalboard.gov.au/Codes-Guidelines-Policies/Cosmetic-medical-and-surgical-procedures-guidelines.aspx>>.

All legislation and regulations referenced above can be accessed on the [Victorian Legislation and Parliamentary Documents website](http://www.legislation.vic.gov.au/) <<http://www.legislation.vic.gov.au/>>.

## Australian Standards

Proprietors and staff should be familiar with the Australian Standards as they relate to their premises and businesses. The Department of Health and Human Services (the department) recommends compliance with the standards cited throughout the guidelines as established best practice.

Australian Standards can be purchased from [SAI Global](https://infostore.saiglobal.com/) <<https://infostore.saiglobal.com/>>.

## Premises requirements

### General requirements

The following general requirements apply to premises registered under the Act.

- All equipment, furniture, fittings, floors, walls and ceilings should be constructed of materials suitable for the procedures to be undertaken in the area.
- Surfaces that require regular cleaning and/or disinfection should be constructed of a durable, sealed and non-porous material that can be effectively cleaned and disinfected.
- There should be adequate lighting and ventilation throughout the premises.
- The premises should be designed to provide separate function-specific client, staff and cleaning/sterilising areas.

The cleaning/sterilising area should be designed to ensure movement of instruments/equipment in a one-way direction from dirty to clean to sterile areas (see [Figure 3: Suggested layout for a reprocessing area](#) p. 39). It should have sufficient bench space for good working practices and must have separate hand-washing facilities in addition to equipment cleaning sinks.

Plumbing must conform with Victorian Building Authority requirements and Standards Australia. These include:

- 'AS/NZS 3500.1:2015 Water Services'
- 'AS/NZS 3500.2:2015 Sanitary and Drainage'
- 'AS/NZS 3500.4:2015 Heated Water Services'

Premises must have an adequate supply of drinking water for all activities conducted at the premises that require the use of water.

Premises should be able to effectively dispose of all waste water. For premises not connected to centralised sewerage systems, disposal of waste water must occur into an approved on-site waste water treatment system.

You must talk to your local council planning departments and environmental health officer for specific advice relating to your premises.

### Hand-washing facilities

You must ensure that accessible hand washing facilities are available for use by staff.

Hand washing facilities should be:

- clearly designated for the sole purpose of washing hands
- supplied with liquid soap and single-use paper towel (bars of soap should not be used)
- permanent fixtures
- hands-free where tattooing and skin penetration procedures are performed (for example, foot, knee or elbow operated or electronically controlled)
- made of a hard, durable, non-scratch material and be easy to clean
- connected to, or otherwise provided with, a supply of warm running drinking water through a single outlet
- of a size that allows easy and effective hand washing and will prevent splashing into the adjacent environment.

Hand washing facilities should be located:

- within areas where staff work and where procedures are being undertaken
- within areas where staff are cleaning and reprocessing instruments and equipment
- within or close to staff and client toilet facilities.

The number and location of hand-washing facilities will depend on the layout and use of areas within the premises. You should talk to your local council environmental health officer to find out where to locate hand-washing facilities.

Portable sinks (i.e. non-permanent fixtures) should only be considered when connecting to the mains plumbing is either very difficult or impracticable, such as for a small make-up kiosk in a shopping centre. You must discuss this option with your local council, and they must approve it before you can install portable sinks.

You should also provide alcohol-based hand rubs in procedure rooms/cubicles for use when hands are not visibly dirty (see [Hand hygiene](#) p. 22). Even if you provide alcohol-based hand rubs, you still need appropriately placed hand-washing facilities supplied with liquid soap and paper towels.

## Equipment cleaning sinks

Dedicated equipment cleaning sinks with hot and cold running water supplied through a single outlet must be located in the cleaning area for instrument and equipment cleaning (see [Figure 3: Suggested layout for a reprocessing area](#) p. 39).

Equipment cleaning sinks should not be used for purposes other than cleaning reusable instruments and items, for example, tea and coffee making.

## Record keeping

If your business does tattooing or body piercing, the Public Health and Wellbeing Regulations 2019 require you to record the name, address and telephone number of each client.

Records must be stored at the premises for 12 months following the date of the last body piercing or tattooing procedure undertaken by the client at the premises.

In addition to the name, address and telephone number of each client, you should also include:

- the date of procedure
- a description of the procedure(s) and, where applicable, jewellery used and at which site(s)
- completed consent form
- sterilisation information relevant to the instruments used, such as
  - sterilisation cycle records, including process-recorder printouts with cycle and chemical indicator pass/fail recorded
  - records of validation procedures
  - steriliser servicing records
  - instrument-tracking records to enable tracing of sets of instruments to individual clients by either manually recording this information on the client record or having a tracking system that enables this to occur.

Accurate and detailed records are important for both the business and the client if there is any possibility of an infection or blood-borne virus transmission.

## **Animals**

Animals, other than guide or service dogs, should not be permitted in procedure areas.

In general, we do **not** recommend allowing animals in your premises, particularly if your business undertakes tattooing or skin penetration procedures.



# Part B: Principles of infection prevention and control

## Quick guide for business proprietors

This quick guide provides an overview of the main points of infection prevention and control.

The quick guide may not contain everything you need to know to meet your legal obligations.

Use the page references to find out more about each topic.

### Preventing and controlling infection (p. 20)

Skin is a natural **protection** against infection.

However, if skin is **damaged**, infections can enter the body. Skin can be damaged by cuts or wounds. It is also damaged when it is penetrated by sharp objects, such as in tattooing or body piercing.

If you do hairdressing, beauty therapy, tattooing or skin penetration, you may spread **infections**.

Infections can be **blood-borne viruses**, like hepatitis B, hepatitis C and HIV.

Infections can also be **bacterial, viral or fungal**.

Infections can be spread by procedures that do **not** involve penetrating the skin, such as waxing, manicures and pedicures.

You must understand how to **prevent infection** so that your business does not spread diseases.

You should assume that **all** blood and body fluids are infectious.

You can use the following **precautions** to prevent infection.

### Hand hygiene (p. 22)

Hand hygiene means **washing your hands** or using **alcohol-based hand rubs**.

Hand hygiene is the best way to prevent infection.

You should **not** wear rings, watches or other jewellery when performing procedures, particularly tattooing and body piercing.

If your nails are infected or have a fungal disease, you should **not** perform procedures until the infection has cleared.

**Alcohol-based hand rubs** are better than soap and water at reducing bacteria and viruses on your hands. You still need to provide hand-washing basins even if you use alcohol-based hand rubs.

Use **liquid soaps**. Soap does not need to be antiseptic.

You should always **perform hand hygiene**:

- before touching a client
- before performing a procedure
- after a procedure or exposure to blood or body fluids
- after touching a client
- after touching something around the client.

You should also **perform hand hygiene**:

- before and after eating
- after going to the toilet
- before setting up clean/sterile instruments for a procedure
- after handling used instruments.

If you use gloves, you should perform hand hygiene **before** putting them on.

You should also perform hand hygiene **after** you take the gloves off.

### **Use disposable gloves, plastic aprons, eye protection and face masks (p. 25)**

Disposable gloves, plastic aprons, eye protection and face masks are also called **personal protective equipment** (PPE).

You should use PPE if you could be exposed to blood or body fluids.

### **Be careful handling sharps (p. 28)**

Sharps are anything that can **penetrate** skin. Types of sharps include:

- needles
- scalpels
- razors
- needle bars with needles attached
- cannulae (sometimes used for piercing)
- glass ampoules
- other sharp instruments.

Sharps can be **contaminated** with blood or body fluids.

You should treat **all** sharps as contaminated unless you know they are sterile.

Always **handle sharps carefully** to avoid needle-stick injuries.

Always **dispose of sharps immediately** after use into a sharps container.

### **Use an aseptic non-touch technique (p. 29)**

An aseptic non-touch technique helps prevent infection during tattooing or skin penetration.

To use this technique:

- Perform hand hygiene before and after the procedure.
- Use gloves and PPE.
- Create an aseptic area, and only put sterile items in it.
- Clean the client's skin with antiseptic.
- Do not touch sterile items or disinfected skin directly, and make sure they remain uncontaminated — this is why the technique is called 'non-touch'
- If you think an instrument or piece of equipment has been contaminated, replace it immediately.

## **Be careful handling and dispensing products (p. 31)**

Products such as wax, ointments, make-up or creams can easily become **contaminated**.

If a product has a use by date, ensure that it is not used after this date.

You should handle these products carefully.

Put a small amount of the product into a **separate, clean container**. Use **only** the product from this container on the client.

Use a **disposable applicator** to apply the product. Only re-dip the applicator into the product you have put in the separate container.

**Throw out** left-over product. Do **not** put it back into the original container or use it on another client.

For hot wax and other products that cannot be put into a separate container, use a **new disposable applicator** each time you dip it into the product.

## **Linen (p. 31)**

Replace linen, paper towels and strips between clients.

Wash linen, towels and protective clothing in **hot water** (70–80 degrees Celsius) and detergent.

Dry linen on the hottest dryer setting.

## **Waste management (p. 31)**

You need to **separate** waste into clinical waste and general waste.

Use a **different bin** for each type of waste.

Clinical waste includes:

- human blood, body fluid and tissue, and material contaminated with these things
- sharps.

You must use a waste contractor authorised by the EPA to remove clinical waste.

## **Cleaning (p. 33)**

Keep your business **clean** to prevent and control infections.

Different types of businesses have different cleaning requirements.

All businesses should have a cleaning schedule for surfaces and equipment.

## **Reprocessing reusable instruments and equipment (p. 37)**

**Reprocessing** means cleaning, disinfecting and/or sterilising items.

Different items have different reprocessing requirements.

You must make sure staff who reprocess items are properly **trained**.

You must have a **dedicated area** for reprocessing reusable instruments and equipment.

## Preventing and controlling infection

Skin is a natural defence against infection. However, infections can enter the body if skin is damaged by cuts or wounds, or from penetration by sharp objects, such as tattooing or skin penetration equipment.

When you perform hair, beauty, tattooing or skin penetration services, you can spread blood-borne viruses such as hepatitis B, hepatitis C and HIV.

You can also spread other infections such as bacterial, viral or fungal infections.

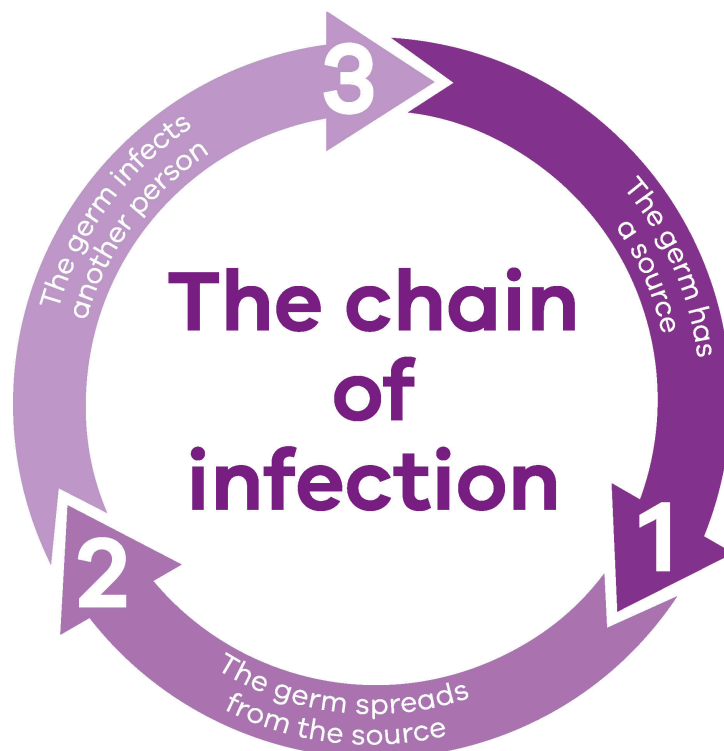
Unsafe or unhygienic practices can affect the health of your staff and clients.

Even procedures that do not involve skin penetration, such as waxing, manicures and pedicures, can spread infections. These infections include staphylococcal infections such as cellulitis or impetigo, the wart and herpes viruses, and fungal infections such as tinea.

Businesses that provide hair, beauty, tattooing or skin penetration services need to understand about infection prevention and control so that they do not spread diseases.

## How infections occur

**Figure 2: The chain of infection**



Source: *Staying healthy. Preventing infectious diseases in early childhood education and care services*, 5<sup>th</sup> edition, National Health and Medical Research Council (NHMRC), 2013

Infectious microorganisms (germs), include bacteria, viruses, fungi and parasites.

The spread of disease involves the following:

1. the germ has a source
2. the germ spreads from the source
3. the germ infects another person.

All three things must happen for an infection to occur. This is called the 'chain of infection' or 'chain of transmission'.

The **source** of an infectious microorganism may be an unclean environment or contaminated equipment that has not been appropriately cleaned, disinfected or sterilised between clients.

Infections can also be caused by a person's own normal bacteria or microorganisms. For example, if equipment pierces the skin, bacteria on the skin can enter the body, allowing them to cause an infection.

There are several ways microorganisms are transferred or **spread from their source** to infect another person. This can be via droplet, airborne or contact transmission.

The most common way microorganisms are spread in the hair, beauty, tattooing and skin penetration industries is through contact transmission.

There are two types of contact transmission.

1. direct contact (person to person), when there is physical contact between an infected person and another person
2. indirect contact, when a carrier or object such as contaminated equipment spreads the infection.

An infection occurs when a person's body cannot resist an infectious microorganism that enters their body and grows. Whether or not the microorganism infects a person depends on the ability of the microorganism to cause disease, and the ability of the person's body to resist it. Immunisation is one way to improve a person's ability to resist certain infections.

Infection prevention and control interventions are designed to break the chain of infection at any of its links.

If any one of the above components is missing, the chain is broken and the potential for infection is eliminated.

## Standard precautions

All people potentially harbour infectious microorganisms.

People often do not show signs of disease or infection. They may not know they are carrying an infectious illness such as hepatitis B or C.

Because of this, you must assume that all blood and body fluids/substances are potentially infectious.

Standard precautions are work practices that achieve a basic level of infection prevention and control. Using standard precautions aims to minimise and, where possible, eliminate the risk of transmission of infection, particularly those caused by blood-borne viruses.

To prevent the spread of infection, you and your staff should always use standard precautions for all clients.

Clients do not need to tell you if they have a blood-borne virus – you should treat all clients as if they are potentially infectious.

Standard precautions include:

- hand hygiene
- the use of personal protective equipment (PPE)
- the safe use and disposal of sharps
- aseptic 'non-touch' technique
- appropriate handling and dispensing of products
- appropriate handling of linen
- waste management
- routine environmental cleaning
- reprocessing of reusable instruments and equipment.

## Hand hygiene

Hand hygiene is a general term that refers to any action of hand cleansing, and includes:

- applying an alcohol-based hand rub to the surface of hands
- washing hands with soap and water.

Hand hygiene is considered one of the most important and effective ways to reduce the spread of infection.

Microorganisms are either present on hands most of the time (resident flora) or acquired during contact with clients, contaminated equipment or environment (transient flora).

The aim of hand hygiene is to reduce the number of microorganisms on your hands, particularly transient flora that may present the greatest risk for infection transmission.

Hand hygiene, when performed correctly, reduces the number of microorganisms on your hands.

Generally, you should remove finger and wrist jewellery such as rings and watches when you perform procedures, particularly skin penetration procedures. This helps to maintain clean hands and decreases the risk of your hands harbouring infectious microorganisms.

We know that artificial nails can spread infections in healthcare settings like hospital. The use of artificial nails in tattooing and skin penetration industries should be avoided as they may interfere with hand hygiene. We recommend that you keep your nails neat, short and clean. Nail polish should be not be chipped.

If you or your staff have an infection of the nail bed or cuticle (called paronychia), or other nail disease such as a fungal infection, they must not perform procedures until the infection has cleared.

You can find more information about hand hygiene on the [National Hand Hygiene Initiative \(NHHI\) website](https://www.safetyandquality.gov.au/our-work/infection-prevention-and-control/national-hand-hygiene-initiative) <https://www.safetyandquality.gov.au/our-work/infection-prevention-and-control/national-hand-hygiene-initiative>.

You can download hand hygiene posters from [NHHI](https://www.safetyandquality.gov.au/our-work/infection-prevention-and-control/national-hand-hygiene-initiative-nhhi/promotional-materials) <https://www.safetyandquality.gov.au/our-work/infection-prevention-and-control/national-hand-hygiene-initiative-nhhi/promotional-materials>.

### What product should you use?

- Use an alcohol-based hand rub when hands are visibly clean.
- Wash hands with soap and water when hands are visibly dirty and after using the toilet.

Alcohol-based hand rubs:

- are more effective than washing hands with soap and water when not visibly soiled
- require less time than hand washing
- are more accessible
- are self-drying
- cause less skin irritation and dryness than frequent washing with soap and water.

Alcohol-based hand rubs perform better than soap and water at reducing bacterial counts on hands. They have excellent antimicrobial activity against most bacteria and good antimicrobial activity against a range of viruses (for example, COVID-19, hepatitis B or C).

We encourage you to use alcohol-based hand rubs in preference to hand washing in most situations. However, accessible hand-washing facilities (hand basin with liquid soap and disposable paper towels) are also essential and must be provided.

The use of **non-alcohol**-based hand rubs is not recommended.

## Soaps

Plain soaps remove microorganisms by mechanical action and have no antimicrobial activity. They are sufficient for an ordinary hygienic hand wash and for cleansing visibly dirty hands.

You do not need to use antimicrobial soaps (for example, soaps containing chlorhexidine or iodine) in the hair, beauty, tattooing and skin penetration industries. Plain liquid soap is sufficient.

Bar soaps are not recommended as they can become contaminated and spread germs between those using the soap. Liquid soaps are preferred.

We recommend using wall-mounted liquid soap dispensers with single-use liquid soap cartridges/bottles, as these are not able to be topped-up. Free-standing dispensers are also suitable.

If you use refillable soap dispensers, you must wash and dry them before refilling. Do not top them up before they are completely empty.

## Alcohol-based hand rubs

When choosing an alcohol-based hand rub, you should consider things like fragrance, colour, texture, skin tolerance and ease of use to make sure your staff will be happy to use the product.

Alcohol solutions containing 70–90 per cent alcohol are the most effective. You should also check to make sure the product has Therapeutic Goods Administration (TGA) approval as a hand hygiene product.

Check to see if a product is registered with the TGA on the [Australian Register of Therapeutic Goods \(ARTG\)](https://tga-search.clients.funnelback.com/s/search.html?query=&collection=tga-artg) <<https://tga-search.clients.funnelback.com/s/search.html?query=&collection=tga-artg>>.

Alcohol-based hand rubs must only be applied to dry hands.

Do not top up alcohol-based hand rub dispensers. Discard the container when empty.

## When to perform hand hygiene

Hands can become contaminated with infectious microorganisms through contact with clients, equipment and the environment. Cross-contamination can occur from one site to another on the same client; between clients and staff; and from the environment to staff and clients.

To reduce the risk of cross-contamination, perform hand hygiene before and after all contact with clients, and after any activity or contact that could result in hands becoming contaminated.

The World Health Organization's '5 moments for hand hygiene' can also be applied in the hair, beauty, tattooing and skin penetration industries.

The '5 moments' are:

- before touching a client
- before performing a procedure
- after a procedure or exposure to body fluids/substances
- after touching a client
- after touching the environment around the client.

There are other times you should perform hand hygiene. These include, but are not limited to:

- before and after eating
- after going to the toilet
- before setting up clean/sterile instruments to use for a procedure
- after handling used instruments and equipment.

Using gloves is not an alternative to performing hand hygiene. You should perform hand hygiene before putting on gloves and immediately after taking them off.

Use only single-use gloves. Do not use alcohol-based hand rub or soap and water on gloves to decontaminate them. Take off gloves immediately after a procedure and perform hand hygiene.

If a person performing a procedure needs to leave the procedure area, they must first perform hand hygiene (removing and disposing gloves first) when they leave the area and again when they return to resume the procedure.

## **How to perform hand hygiene**

Refer to the WHO hand hygiene posters for further details of how to wash hands or to use alcohol-based hand rubs.

These can be downloaded from the [WHO website](http://www.who.int/gpsc/5may/resources/posters/en/)  
<<http://www.who.int/gpsc/5may/resources/posters/en/>>.

### **Method for using alcohol-based hand rub**

1. Remove hand and wrist jewellery.
2. Dispense the recommended amount of alcohol-based hand rub to the palm of one hand.
3. Rub the alcohol-based hand rub over all surfaces of the hands including palms, fingertips, back of hands, thumbs, wrists and between fingers until dry, approximately 20–30 seconds. Do not use a towel to wipe hands.

### **Method for washing hands**

1. Remove hand and wrist jewellery.
2. Wet hands.
3. Apply liquid soap and rub over all surfaces of hands.
4. Wash hands thoroughly, including palms, fingertips, back of hands, thumbs, wrists and between fingers for a minimum of 20 seconds.
5. Rinse hands well with running water.
6. Pat hands dry with a single-use towel.
7. Do not turn off taps directly with hands as this may re-contaminate them. If tap handles are not hands free, use paper towel to turn them off.

## **Hand care**

Skin that is intact (that is, has no cuts, scratches, abrasions, cracks or dryness) provides a barrier against microorganisms. Damaged skin can lead to infection in the person. It may also harbour more microorganisms than intact skin, which increases the risk of transmission of infection to others. As such, hand care is an important component to prevent the transmission of infection.

Frequent hand hygiene can cause some people's skin to become damaged (known as dermatitis). This may allow microorganisms to enter the body. Frequent and repeated use of hand hygiene products such as soaps, detergents and paper towels can cause the skin to dry out.



Factors that may contribute to dermatitis include:

- using products containing fragrances and preservatives – do not use this type of product, or only use small amounts
- not wetting hands before applying soap
- washing hands with soap and water immediately before or after using an alcohol-based hand rub
- putting gloves on while hands are still wet
- using hot water for hand washing
- allowing skin to dry out
- using rough paper towels or not drying hands properly.

### Broken or non-intact skin

If you have a small area of broken or non-intact skin (a cut or abrasion) on exposed parts of your body, you should cover this with a waterproof dressing.

If the cut or abrasion is on your hands, then you should wear single-use gloves during all procedures.

### Use of hand creams and lotions

Use water-based hand creams or lotions without preservatives and fragrances regularly during the day to help prevent chapped and cracked skin.

## Personal protective equipment (PPE)

### Assessment of risk

You should provide personal protective equipment for all staff who may be at risk of exposure to blood or body fluids at work.

The type of PPE you choose should be based on a risk assessment of transmission of infection between staff and client, and vice versa.

**Table 1: Blood and body fluid exposure risk assessment matrix**

| Anticipated level of exposure   | Wear disposable gloves | Wear plastic or fluid repellent apron | Wear eye protection and face masks |
|---|------------------------|---------------------------------------|------------------------------------|
| No exposure to blood/body fluids anticipated                                      | No                     | No                                    | No                                 |
| Exposure to blood/body fluids anticipated but low risk of splashing               | Yes                    | Yes                                   | No                                 |
| Exposure to blood/body fluids anticipated with high risk of splashing to the face | Yes                    | Yes                                   | Yes                                |

Source: Public Health England (PHE) 2013, Tattooing and body piercing guideline toolkit.

For information regarding management of a blood or body fluid exposure see [Management of blood or body fluid exposures](#) p. 75.

### Clothing

Clothing should not get in the way of performing good hand hygiene, for example, wearing sleeves that fall over your wrists and hands.

Personal protective equipment protects the clothing and skin from contamination with blood or body fluids/substances.

Do not wear watches or wrist and finger jewellery when working with clients because these items make it harder to perform adequate hand hygiene and can tear gloves.

## **Footwear**

Enclosed footwear should be worn to protect against injury if sharps or contaminated materials are accidentally dropped.

Check if there are other industry footwear requirements, for example, rubber soled shoes if using electrical equipment.

## **Gloves**

Single-use gloves should be supplied for staff to wear for procedures if there is a potential risk of blood or body fluid exposure. Gloves should be made available in a range of sizes for use by different staff.

Wearing gloves does not replace the need for performing hand hygiene. Gloves may have defects that are not immediately obvious, or they may become damaged during use.

Single-use gloves should be carefully removed to avoid contamination of hands or other surfaces. They must not be washed or reused.

When wearing gloves, gloves need to be changed and/or discarded:

- after each client
- in between procedures on the same client
- if damaged during a task or procedure
- on completion of a task or procedure
- before handling the telephone or other equipment not related to a procedure.

Gloves are available in a range of different materials, the most common being latex (natural rubber latex). Latex gloves may be the preferred choice because of their tactile sensitivity, barrier property against viruses, good fit and optimal elasticity.

However, some staff and clients may have an allergy or sensitivity to latex. You should provide alternatives to latex, such as neoprene (green coloured) or nitrile (blue coloured) for these people.

Be aware that using petroleum-based lubricants (for example, Vaseline<sup>®</sup> jelly) alongside latex gloves may affect the glove's integrity and its ability to protect the person using them.

Always ensure hands are completely dry before putting on gloves. When gloves are worn with other PPE, they are put on last and removed first.

### **Gloves used for cleaning**

Use general-purpose utility gloves (for example, kitchen gloves) for environmental cleaning purposes.

Use heavy duty, puncture-resistant gloves for instrument cleaning.

These types of gloves can be reused.

Wash gloves with general-purpose detergent and warm water (or according to manufacturer's instructions) and stored dry between uses.

Replace them when they are damaged or show signs of deterioration.

## Masks

Staff should wear masks if blood or other body fluids/substances may splash or splatter into the mouth and nose.

The type of mask best suited to a particular situation depends on the nature of the activity. There are two main types of mask used in skin penetration procedures and cleaning.

- **Surgical-style face masks** reduce the risk to staff from splashing and spraying of blood or body fluids/substances. They are generally loose fitting without a tight air seal, and they are not efficient in preventing the wearer from inhaling airborne particles. They should be fluid resistant. See 'AS/NZS 4381:2015 Single-use face masks for use in healthcare'.
- **Particulate filter personal respiratory protection devices** (P2 respirators) are close fitting and capable of filtering up to 95 per cent of airborne particles. They may also be referred to as an N95 respirator or mask. See 'AS/NZS 1715:2009 Selection, use and maintenance of respiratory protective devices', and 'AS/NZS 1716:2012 Respiratory protective devices'.

When using lasers, you may need to wear a mask to reduce the risk of inhaling of airborne contamination in accordance with 'AS/NZS 4173:2018 Safe use of lasers and intense light sources in healthcare'.

Check the manufacturer's recommendations.

Masks should:

- be fitted and worn according to the manufacturer's instructions
- not be touched by hands while being worn
- cover both mouth and nose while being worn
- be changed between clients
- be removed by touching the ties and loops only
- not be worn loosely around the neck; must be removed and discarded immediately after use.

## Eye protection

Staff should wear eye protection if there is a risk of blood or body fluids/substances splashing into the eyes. This is particularly relevant during cleaning procedures, although good cleaning practices should keep the risk of these events to a minimum.

Various types of eye protection are available, including goggles, face masks, visors and full-face shields, which have either reusable or single-use guards. If you use reusable goggles/shields, wash them after each client or task using a general-purpose detergent, rinse and store dry.

'AS/NZS 4173:2018 Safe use of lasers and intense light sources in healthcare' specifies that eye protection specifically designed for the wavelength and classification of the laser in use must be worn by all within the laser-controlled area. Check the manufacturer's recommendation for the required type of eyewear.

## Aprons/gowns

Wear waterproof aprons or gowns when there is a risk of clothing being contaminated with blood or body fluids, and also when undertaking cleaning procedures.

Use single-use aprons and change the apron between clients or tasks.

## Safe use and disposal of sharps

Sharps are anything that can penetrate the skin.

Sharps can include items such as needles, scalpels, razors, needle bars with needles attached, cannulae (sometimes used for piercing), glass ampoules and other sharp instruments can penetrate the skin.

Sharps may become contaminated with blood or body fluids, or other hazardous substances (for example, medications or chemicals). Unless you are certain they are sterile, you should consider all sharps contaminated.

Where available, sharps devices with built in safety features that reduce the risk of injury should be used. You should always practice safe handling, use and disposal of sharps. This will help to prevent injury and possible transmission of infection to staff and clients.

Handle all sharps carefully, particularly during procedures, to avoid needle-stick injuries and the possible transmission of blood-borne viruses.

The risk of sharps injuries can be significantly reduced when the person using or generating the sharp takes responsibility for its safe management, and immediately disposes of it after use into an appropriate container.

Sharps are considered clinical waste and must be disposed of into an appropriate sharps container.

Suitable sharps containers should be:

- clearly labelled
- rigid walled
- puncture proof
- with a tight-fitting lid.

These containers can vary in size. Make sure you use a container that is the appropriate size for the type and volume of sharps you use in your business.

Do not overfill sharps containers.

Sharps containers can be:

- (a) **non-reusable**, and should comply with 'AS 4031:1992 Non-reusable containers for the collection of sharp medical items used in healthcare areas', or
- (b) **reusable**, and should comply with 'AS/NZS 4261:1994 Reusable containers for the collection of sharp items used in human and animal medical applications'.

Sharps containers should be placed a minimum of 1 metre above floor level, out of the reach of children. They should also be placed in a secure position or mounted on the wall to prevent tipping.

When the container is full, seal and dispose of it in accordance with Environment Protection Authority (EPA) Victoria requirements.

For further information on waste disposal see [Waste management](#) p. 31.

**Table 2: Safe sharps management**

| <b>What to do</b>   |
|---|
| <ul style="list-style-type: none"><li>• Think about safe disposal before using a sharp. Sharps are best disposed of at the point of use. Strategically placed sharps containers need to be immediately available in all areas where sharps are generated.</li><li>• Accept responsibility for the safe disposal of sharps. The person who uses the sharp is responsible for its safe disposal.</li><li>• Dispose of sharps correctly. Ensure that sharps are immediately placed into a sharps container after use, or placed into a dish or suitable container if not disposed of immediately.</li><li>• Ensure that sharps containers are:<ul style="list-style-type: none"><li>– placed out of the reach of children</li><li>– properly mounted to prevent falling over</li><li>– closed and replaced as appropriate</li><li>– compliant with Australian Standards.</li></ul></li><li>• Ensure that:<ul style="list-style-type: none"><li>– the opening of the sharps container can be clearly seen when disposing of sharps, to avoid accidental injury from protruding sharps</li><li>– full sharps containers are stored safely until collected.</li></ul></li></ul> |
| <b>What not to do</b>   |
| <ul style="list-style-type: none"><li>• Never recap, remove or bend used needles. Most sharps injuries occur when attempting to manipulate a used needle.</li><li>• Do not pass sharps directly from person to person. Use a dish or container to contain the sharp.</li><li>• Do not overfill sharps containers. The practice of compacting sharps by shaking the container or forcing more sharps into an already full container can lead to a sharps injury.</li><li>• Never reopen a full sharps container. Attempting to reopen a full container can lead to a sharps injury.</li></ul>  |

*Adapted from Royal Australian College of General Practitioners (RACGP) 2014, Infection prevention and control standards for general practices and other office-based and community-based practices, 5<sup>th</sup> edition.*

## **Aseptic non-touch technique**

Use an aseptic non-touch technique to prevent contamination during invasive (skin penetration) procedures. This technique aims to prevent infectious microorganisms from being introduced to susceptible sites by hands, surfaces and equipment.

Aseptic non-touch technique can be applied in any setting and needs to be maintained during all procedures.

Aseptic non-touch technique involves:

- effective hand hygiene immediately before and after the procedure
- appropriate use of gloves and personal protective equipment
- creating of an aseptic field/zone on which you only place sterile items
- opening and introducing packages/instruments/fluids to the aseptic field/zone in such a way as to avoid contamination
- cleansing the client's skin with an antiseptic and allowing it to dry before starting the procedure
- ensuring you do not directly touch sterile items and disinfected skin again to prevent contaminating them (thus using a 'non-touch' technique)

- ensuring all sterile items and disinfected skin remain uncontaminated
- if at any time you think you may have contaminated an instrument/piece of equipment, replace it immediately.

## Preparation of the client's skin

Most infections following skin penetration procedures are caused by the normal flora (microorganisms) of the client's own skin or mucous membranes.

It is very important to properly prepare the client's skin before undertaking any skin penetration procedure.

The client's skin should be visibly clean and free from cuts, abrasions and any visible sign of infection. If the skin is soiled, wash the area with a plain liquid soap and water and dry it before applying any skin antiseptic solutions. Disinfect the area just before you start the skin penetration procedure.

Apply the antiseptic to the skin using a clean, single-use swab. You must allow the antiseptic to dry completely. Do not wipe off excess solution. Do not touch the area after the antiseptic has been applied (for example, to test for dryness), as this will re-contaminate the skin.

Discard any remaining antiseptic at the end of a skin penetration procedure. Observe the use-by dates on antiseptics.

### Which product to use?

An antiseptic is an antimicrobial substance, usually a solution, that can be used on skin or tissue.

Use antiseptics to prepare a client's skin before a skin penetration procedure to reduce the risk of infection. As such, it is very important to use an appropriate antiseptic product to disinfect the skin before any skin penetration procedure. For an antiseptic to be effective, it must be allowed to **completely** dry before commencing the procedure.

Use any one of the following antiseptics to disinfect skin:

- 70 per cent w/w ethyl alcohol
- 80 per cent v/v ethyl alcohol
- 60 per cent v/v isopropyl alcohol
- alcohol (60 per cent w/w isopropyl or 70 per cent w/w ethyl) formulations of 0.5 per cent to 4 per cent w/v chlorhexidine
- aqueous formulations of 0.5 per cent w/v chlorhexidine
- aqueous or alcohol povidone-iodine (1 per cent w/v available iodine).

Skin antiseptics are regulated by the Therapeutic Goods Administration (TGA). Only use antiseptic products that are listed or registered on the Australian Register of Therapeutic Goods (ARTG). You can check if products are on the ARTG on the [TGA website](https://tga-search.clients.funnelback.com/s/search.html?query=&collection=tga-artg) <https://tga-search.clients.funnelback.com/s/search.html?query=&collection=tga-artg>.

Ask the client if they have an allergy to alcohol, chlorhexidine or iodine-based products before using any of these products on their skin. Clean areas around the eyes with only warm water or an aqueous (water-based) skin antiseptic; do not use an antiseptic with chlorhexidine near eyes. If you are unsure whether an antiseptic is water-based or not, just use warm water.

Iodine solutions are generally not suitable when tattooing as they may affect the colours of the tattoo.

Use single-use swab packets or sachets of skin antiseptic products instead of large containers intended for multiple use, as these can become contaminated. If you do use a multi-dose container, date the container when opened; discard within 30 days of opening or if not managed in an aseptic manner.

## Appropriate handling and dispensing of products

Products that may be used on several clients, for example wax, ointments, make-up or creams, can easily become contaminated if you do not handle them in a way that prevents contamination.

Use the following processes to avoid contaminating multi-use products:

- Dispense the amount of product that you will use on the client into a separate, clean container. Use only the dispensed product on the client.
- Use a clean (preferably disposable/single-use) applicator to apply the product. Never re-dip the applicator into the original product and/or container – only re-dip into the dispensed product.
- Discard any leftover dispensed product. Do not return leftover product to the original container or use it on another client.
- If a product cannot be dispensed into a separate container for use (for example hot wax), use a separate, clean (preferably disposable/single-use) applicator each time to dip into the product. Never re-dip a used applicator into the original or multi-use container.

Use products in accordance with the manufacturer's recommendations. Do not dilute or mix with other chemicals or products unless specified by the manufacturer.

## Pumps, spray bottles and nozzles

Pump outlets, bottles and nozzles can be a source of contamination, particularly if contents build up around the outlet. Clean nozzles frequently and dry them before use.

Do not top up refillable liquid soap, pump/spray bottles and other reusable dispensers. This can cause contamination. Always empty bottles before washing them and the nozzles in warm water and detergent, rinse under hot running water, and dry using a lint-free cloth. The bottle can then be refilled. Ensure bottles are appropriately labelled with the name of the product, dilution (if diluted) and date of preparation.

Drop-in single-use cassette dispensers may be more convenient and economical.

## Appropriate handling of linen

You should use paper towel, paper strips and/or sheets or clean linen that is changed between clients. Place soiled linen, towels and protective clothing in a washable, leak-proof container, and wash them in hot water (70–80 degrees Celsius) and detergent. If hot water cannot be used to wash linen, you should add a sanitiser or disinfectant (for example, Napisan®) to each load.

Dry linen on the hottest dryer setting.

Store all clean linen, towels and clothing in a clean environment to prevent contamination.

## Waste management

Appropriate and safe waste management is important for the prevention of transmission of infectious diseases. This protects your staff, clients, people who deal with waste downstream, and the community in general.

Management of waste must conform with Environmental Protection Authority (EPA) Victoria requirements, in particular, the management of clinical and related waste.

You can access these documents on the [EPA Victoria website](http://www.epa.vic.gov.au/business-and-industry/guidelines/waste-guidance/clinical-waste-guidance) <<http://www.epa.vic.gov.au/business-and-industry/guidelines/waste-guidance/clinical-waste-guidance>>.

Staff should be trained in correct procedures for handling waste. Always use standard precautions when handling waste to protect yourself and others from exposure to blood and body fluids. Perform hand hygiene following handling of waste.

## **Waste separation**

You need to separate waste into clinical and related waste and general waste at the point of generation. This means having separate bins for different types of waste, identified by colour and/or label. Separating waste allows for safe and correct disposal. It can also help with recycling and waste reduction.

You should line all bins with a plastic bag that can be sealed for disposal.

All sharps containers should meet the specific Australian Standards requirements (see [Safe use and disposal of sharps](#) p. 28).

You should make sure that waste is properly separated, packaged, labelled, handled and transported. This will minimise the risk of occupational injuries, such as needle-stick injuries. It will also reduce the chance of exposing waste handlers and the community to infection.

### **Clinical and related waste**

This type of waste is generated in a clinical or similar setting (for example, waste from skin penetration activities or tattooing), and has the potential to cause disease, injury, or public offence.

Types of clinical waste include:

- human blood, body fluids and tissue (excludes hair, nails, urine and faeces)
- a sharp discarded object or device capable of cutting or penetrating the skin ('sharps')
- materials or equipment contaminated with, or reasonably suspected of being contaminated with, human blood or body fluids (other than urine or faeces).

Hair, nails and materials or equipment contaminated with urine and faeces may be disposed of in general waste.

Clinical waste also includes items such as blood-stained swabs or cotton wool and gloves.

You should place clinical and related waste in a bin lined with a yellow plastic biohazard bag. The bin should have a close-fitting lid marked 'clinical waste'. You should wash the bin regularly.

Clinical waste should be disposed of according to EPA Victoria legislative requirements. All clinical and related waste in Victoria should be transported by an authorised EPA Victoria contractor.

### **General waste**

General waste is any waste that does not fall into the clinical and related waste categories, such as papers and powdered pigments. You can further divide general waste into recyclable and non-recyclable materials.

You should place general waste in a bin lined with a plastic bag. The bin should have a close-fitting lid marked 'general waste'. You should empty the bin regularly, so it does not overflow. You should wash the bin regularly.

General waste can be disposed of via normal refuse collections.

### **Liquid waste**

All liquid waste may be disposed of via the sewer, provided the local water authority has given prior permission. Plumbing should meet relevant regulations and standards (see [General requirements](#) p. 14).

Liquid wastes must not be disposed of into hand basins or equipment cleaning sinks. The risk of contamination of sinks is high, which can lead to contamination of hands or instruments washed in these sinks. It is best if you provide a 'cleaner's sink' or designated 'dirty' sink.



## Routine cleaning of premises

Transmission of infectious agents from the environment to clients may occur if the client has direct contact with contaminated surfaces or equipment. It may also occur indirectly, for example, if you touch contaminated equipment or the environment and then touch a client.

Cleaning means physically removing germs, dirt and organic matter from surfaces. Cleaning alone does not kill germs, but by reducing the numbers of germs on surfaces, cleaning helps to reduce the risk of spreading infection.

Disinfection means using chemicals to kill germs on surfaces. This process does not necessarily clean dirty surfaces or remove germs, but by killing germs that remain on surfaces after cleaning, disinfection further reduces the risk of spreading infection. Cleaning before disinfection is very important as organic matter and dirt can reduce the ability of disinfectants to kill germs.

Providing and maintaining a clean and easily cleanable environment can prevent and control infections. This includes ensuring equipment and work surfaces are suitable for the purpose, can be kept clean (that is, impervious surfaces) and are maintained in good physical repair.

Specific cleaning requirements will vary for each business type. However, all businesses need a written cleaning policy that includes:

- routine, scheduled cleaning of all surfaces and equipment to reduce dust and dirt
- a cleaning protocol for blood, body fluids and other spills.

A risk assessment will determine the cleaning method, frequency, and products and equipment required.

You should have a cleaning schedule that ensures your business premises is systematically and appropriately cleaned. The table below provides some guidance on frequency and method for cleaning of some items or surfaces.

**Table 3: Recommended routine cleaning frequencies**

| Item   | Frequency                         | Product  |
|--|-----------------------------------|--|
| Surfaces at high risk of blood or body fluid contamination (for example, tattooing chair)    | After each use                    | Detergent and disinfectant   |
| Surfaces at low risk of blood or body fluid contamination (for example, hair dressing bench) | Daily, or spot clean as required  | Detergent (and disinfectant if cleaning up blood or body fluids)       |
| Client tables/beds   | After each client                 | Detergent (and disinfectant if contaminated with blood or body fluids) |
| Hand wash basins and sinks   | Daily                             | Detergent  |
| Floors   | Daily, and spot clean as required | Detergent (and disinfectant if cleaning up blood or body fluids)       |
| Bins   | Weekly and spot clean as required | Detergent  |
| Walls / ceilings   | Spot clean as required            | Detergent  |

| Item   | Frequency         | Product                                   |
|--|-------------------|---|
| Toilets and showers used in colonic irrigation | After each client | Detergent, then disinfectant if necessary |

*Adapted from: PHE 2013, Tattooing and body piercing guideline toolkit; and NHMRC 2010, Australian guidelines for the prevention and control of infection in healthcare.*

## Cleaning method

Effective cleaning consists of a combination of mechanical action, detergent and water. Most hard surfaces can be adequately cleaned with warm water and detergent. You need to ensure surfaces dry rapidly (or are dried), because moisture encourages microorganism growth.

You can also use a disinfectant solution on surfaces where there is a higher risk of contamination with infectious agents. If you are not using a combined cleaning/disinfectant product, you should use the disinfectant after physical cleaning with water and detergent.

Dry-mop floors first to remove debris before washing floors with a damp mop. Do not use a broom, as sweeping disperses dust and microorganisms into the air.

Clean from the least dirty surfaces or areas (least contaminated) to the dirtiest surfaces or areas (most contaminated). For example, clean a pedicure chair before cleaning the footbath. Cleaning this way will help to prevent spreading germs from the most contaminated and dirty surfaces to areas that have fewer germs.

## Cleaning and disinfectant products

### Detergents

You can use household detergent for most routine surface cleaning (for cleaning of instruments, see [Cleaning reusable instruments and equipment](#) p. 39). You can use detergent products that have combined disinfecting abilities for general cleaning.

Single-use disposable detergent wipes are useful for spot cleaning. There are many brands of suitable detergent wipes in varying sizes available. These eliminate the need for preparing daily solutions. Discard wipes after use.

### Disinfectants

Disinfectants can reduce the number of microorganisms on a surface, but they are not a replacement for thorough cleaning. The cleaning process determines the effectiveness of any disinfectant.

You do not always need to use disinfectant, but you may use it on surfaces at high risk of contamination with blood or body fluids. Always clean with detergent and water before using a disinfectant. Alternatively, you can use a commercially available combined disinfectant/detergent product, as long as you still clean manually. Do not mix any other chemicals or products with detergents or disinfectants, unless specified by the manufacturer.

Detergent or disinfectant solutions should be prepared and used in accordance with the manufacturer's directions.

You should write the date on the container when you open it and discard the product as per the manufacturer's recommendation.

Solutions diluted for use should be discarded after 24 hours or as per manufacturer's instructions.

Do not top up detergents or disinfectants as this may lead to contamination.

Discard leftover solutions and wash and dry dispensing bottles/containers before dispensing more product or preparing fresh solutions.

Hard surface disinfectants are regulated by the Therapeutics Goods Administration (TGA). The equivalent of a **hospital grade disinfectant** should be used in registered premises. To ensure compliance of disinfectants used with TGA regulations, check the [TGA website](https://www.tga.gov.au/regulation-disinfectants-summary) here <<https://www.tga.gov.au/regulation-disinfectants-summary>>.

**Note:**

Hard surface disinfectants **must not** be used to disinfect instruments or equipment for use on clients.

***Use of bleach (sodium hypochlorite)***

Bleach is commonly used as an environmental disinfectant. The following points are important to remember when using bleach.

- The disinfectant of choice for general disinfection of the environment is usually a hypochlorite solution containing 1,000 parts per million available chlorine (ppm avCl).
- To make a dilution of 1,000 ppm avCl from household bleach (with 4 per cent available chlorine), use a 1:40 dilution. Add 1 cup (250 mL) of bleach to 10 litres of water (a standard bucket holds approximately 9–10 litres); or 25 mL to 1 litre of water for a smaller volume.
- Mix a fresh solution of diluted bleach, either daily or as required. Hypochlorite solutions are unstable and should be made up daily.
- To prevent deterioration, store bulk bleach containers in dark, cool areas (and strictly adhere to use-by dates on bleach products).
- Wear PPE (gloves, apron and eye protection) when handling bleach, because it can cause skin irritation.
- Leave the bleach solution on the surface you are cleaning for 10 minutes then rinse it off.
- Dry the surface.

You do not need to routinely use bleach or other disinfectants for surfaces. Cleaning surfaces with detergent alone is usually sufficient. Use a disinfectant when surfaces are contaminated with blood or body fluids (see [Clean-up procedures for blood or body fluids spills](#) p. 36). Disinfectants are inactivated by organic material, as such, surfaces must be cleaned first before applying a disinfectant.

## **Cleaning equipment**

Cleaning equipment should be fit for purpose, easy to use and well maintained. Handles on mops should be made of a non-porous material such as aluminium, not wood. You should store cleaning equipment in a designated area after use.

Reusable cleaning cloths need to be washed (laundered) using hot water and detergent and dried after use. Sponges cannot be cleaned, so unless you discard sponges after each use, you should not use them. Consider using single-use cleaning cloths.

Buckets and mop heads need to be washed in hot water and detergent then rinsed clean in hot water after use, and the mop heads wrung out and hung to dry (store upside down).

Use squeeze bottles rather than spray bottles for applying cleaning chemicals. Spray bottles can aerosolise chemicals which can be a health hazard for staff and clients.

You should label all bottles used to dispense cleaning chemicals.

## Cleaning standards for change/shower rooms and toilets

All surfaces should be free from smudges, smears, body fats and mineral deposits. Surfaces include plumbing fixtures, tiles and other polished surfaces. Sanitary disposal units should be regularly emptied.

## Clean-up procedures for blood or body fluids spills

Blood and body fluid spills need to be cleaned promptly to reduce the potential for contact with other clients, staff or visitors. The table below provides guidance for appropriate management of spills of varying size.

**Table 4: Clean-up procedures for blood and body fluid spills**

| Size of spill                            | Clean up procedure  |
|--|---|
| Spot cleaning                            | <ul style="list-style-type: none"> <li>• Select appropriate PPE.</li> <li>• Wipe up spot immediately with a damp cloth, tissue or paper towel.</li> <li>• Discard contaminated materials.</li> <li>• Remove PPE and perform hand hygiene.</li> </ul>  |
| Small spills (up to 10 cm diameter)      | <ul style="list-style-type: none"> <li>• Select appropriate PPE.</li> <li>• Wipe up spill immediately with absorbent material.</li> <li>• Place contaminated absorbent material into an impervious container or plastic bag for disposal.</li> <li>• Clean the area with warm detergent solution, using disposable cloth or sponge.</li> <li>• Wipe the area with 1,000 ppm sodium hypochlorite (bleach) and allow to dry (rinse off metal surfaces after drying as sodium hypochlorite is corrosive).</li> <li>• Remove PPE and perform hand hygiene.</li> </ul>   |
| Large spills (great than 10 cm diameter) | <ul style="list-style-type: none"> <li>• Select appropriate PPE.</li> <li>• Cover area of the spill with an absorbent clumping agent and allow to absorb.</li> <li>• Use disposable scraper and pan to scoop up absorbent material and any unabsorbed blood or body substances.</li> <li>• Place all contaminated items into an impervious container or plastic bag for disposal.</li> <li>• Discard contaminated materials.</li> <li>• Mop the area with detergent solution.</li> <li>• Wipe the area with 1,000 ppm sodium hypochlorite (bleach) and allow to dry (rinse off metal surfaces after drying as sodium hypochlorite is corrosive).</li> <li>• Remove PPE and perform hand hygiene.</li> </ul> |

Source: NHMRC 2010, Australian guidelines for the prevention and control of infection in healthcare.

You do not need to use bleach (sodium hypochlorite) for routinely managing spills, but you may use it in specific circumstances. You should decide to use sodium hypochlorite based on a risk assessment of the environment (hard surface vs soft furnishings), the spill (type of body fluid and size), risk of transmission of disease (whether the surface is frequently touched by clients and staff) and the potential hazards of using the product.

See [Use of bleach \(sodium hypochlorite\)](#) p. 35 for instructions on use and dilution of bleach.

## Reprocessing of reusable instruments and equipment

Reprocessing means cleaning, disinfecting or sterilising instruments and equipment for reuse on another client.

You should always purchase instruments and equipment that can be appropriately reprocessed.

Where possible, you should use pre-sterilised **single-use items** instead of reprocessing reusable instruments and equipment.

Reprocessing of reusable instruments and equipment can include:

- **cleaning** – removing contamination and foreign material (for example, soil and organic material) from items to the level required either for further processing or reuse of the item
- **disinfection** – a process that inactivates microorganisms (but not bacterial spores) on an item to a level appropriate for reuse of the item
- **sterilisation** – a process used to make an item free from viable microorganisms, including bacterial spores.

The minimum level of reprocessing required for an item is based on the risk it poses to the transmission of infection.

The Spaulding classification is a system used to classify items according to the degree of risk for causing infection based on how the item is used. The system specifies the minimum level of reprocessing that is required.

Table 5 below outlines the Spaulding classifications, the level of reprocessing required, and examples of items commonly used in the hair, beauty, tattooing and skin penetration industries.


**Table 5: The Spaulding classification**

| Spaulding classification | Level of risk | Application  | Examples                           | Level of reprocessing required   |
|--------------------------|---------------|--|------------------------------------|--|
| Critical                 | High          | Any item that enters sterile tissue, including instruments that hold sterile items                             | Tattooing needles                  | Sterilisation  |
| Semi-critical            | Medium        | Items that come into contact with mucous membranes or non-intact skin (but are not intended to penetrate them) | Eyelash extension tweezers         | Sterilisation is preferred where possible.<br>If sterilisation is not possible (that is, the item cannot withstand process), then high-level disinfection is the minimum required. |
| Non-critical             | Low           | Items that only come into contact with intact skin   | Eyelash curlers<br>Make-up brushes | Thorough cleaning is sufficient for most non-critical items after each individual use, although low-level disinfection may also be appropriate.                                    |

Source: NHMRC 2010, Australian guidelines for the prevention and control of infection in healthcare.

For further information regarding the level of reprocessing required for commonly used items, refer to the tables 'Cleaning and reprocessing requirements for equipment used' in each of the procedure specific sections in [Part C: Procedure-specific requirements](#) p. 46.

Use the following principles when reprocessing reusable instruments and equipment:

- Handle reusable instruments and equipment in a way that prevents staff, clients and the environment from coming into contact with potentially infectious material.
- Reprocess all reusable instruments and equipment according to their intended use and manufacturer's advice.
- Before purchasing any reusable instruments or equipment, ensure that the manufacturer provides cleaning and disinfection or sterilisation instructions. Ensure you read them and are able to follow them.
- Do not reprocess any item labelled single-use and/or marked with the  symbol, as per Therapeutic Goods Administration (TGA) regulations.
- Using single-use items (and discarding them) removes the need to reprocess items.
- Clean and sterilise items used in association with skin penetration after use. If this is not possible (for example, tattooing motors), use an impervious cover to minimise the possibility of contamination. Use only single-use covers. After use, carefully remove the cover so it does not contaminate the item and disposed of the cover. The item must then be cleaned and disinfected.
- Clean and sterilise reusable instruments and equipment contaminated with blood. If items cannot withstand sterilisation, clean and disinfect them.
- If an item cannot be cleaned, it cannot be disinfected or sterilised (and therefore cannot be reused).

## Staff training

You must train staff who reprocess instruments and equipment for reuse in:

- cleaning of equipment, including using detergents and other reprocessing equipment correctly
- the disinfection process
- preparing items for sterilisation and correctly using, monitoring and maintaining the steriliser (if applicable)
- correct storage of reusable instruments and equipment
- detecting problems in the process and taking action to correct issues.

You should keep records of all staff training you provide.

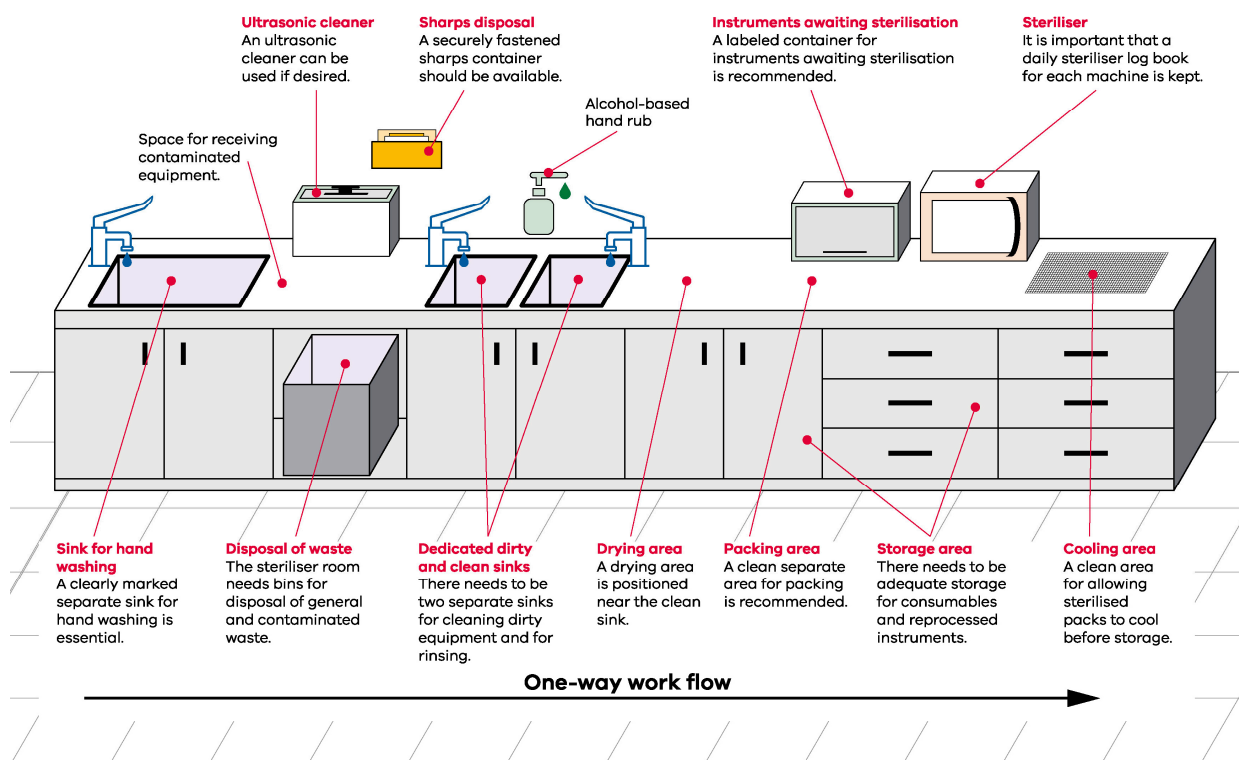
## Equipment reprocessing area

If your business reprocesses instruments and equipment, you must provide an area dedicated to this task. The reprocessing area can be a separate room or a dedicated part of a treatment area.

Items to be reprocessed must flow along a defined one-way path from used/dirty through cleaning, to disinfection or sterilisation, then to clean storage and return to use.

A one-way workflow will ensure that dirty reusable instruments and equipment do not come into contact with clean or sterilised reusable instruments and equipment. Figure 3 below indicates a suggested layout and workflow for an equipment reprocessing area.

**Figure 3: Suggested layout for a reprocessing area**



Adapted from Royal Australian College of General Practitioners (RACGP) 2014, Infection prevention and control standards for general practices and other office-based and community-based practices, 5<sup>th</sup> edition, and Alberta Health Services, Infection prevention and control best practice guideline for foot care devices

Bench surfaces in the reprocessing area should be made from an impervious cleanable material, such as stainless steel. If surfaces are chipped or damaged, they cannot be adequately cleaned, and can harbour microorganisms. Keep surfaces clear of clutter to allow adequate cleaning and prevent accumulation of dust.

The size of the reprocessing area and the equipment you need (for example, an ultrasonic cleaner) will depend on the procedures your business performs and the number of instruments that need to be reprocessed.

If you use only disposable equipment, and do not reprocess instruments or equipment in any way, you do not need to have an equipment reprocessing area.

### Equipment-cleaning sinks

The equipment processing area should have two sinks: a ‘dirty’ sink for washing and a ‘clean’ sink for rinsing washed reusable instruments and equipment.

Do not use equipment-cleaning sinks for hand washing (and do not use hand basins for cleaning instruments and equipment).

### Cleaning reusable instruments and equipment

Clean items before the disinfection or sterilisation process. This ensures proper disinfection and sterilisation can be achieved.

Clean items as soon as possible after use to prevent soil drying onto the instruments or equipment. If soil dries or hardens on an item, the cleaning process will be more difficult and may be less effective.

If you cannot clean the instrument immediately, cover it in warm water to prevent blood and body fluids from drying. Do not leave instruments soaking for longer than one hour. Leaving instruments to soak for prolonged periods may lead to increased bacterial growth, biofilm formation and damage to instruments (for example, rusting), which makes cleaning less effective. If an instrument cannot be immersed in water, you should clean it immediately.

Instruments that can be disassembled must be disassembled before the cleaning and disinfection or sterilisation process.

### **Manual cleaning**

Generally, manual cleaning (cleaning items by hand) is the best cleaning method in hair, beauty, tattooing and skin penetration businesses.

Use manual cleaning when items need to be carefully handled and are not suited to automated cleaning methods.

You should always wear appropriate PPE while cleaning. This includes a plastic apron, heavy utility gloves and face protection when necessary. You should take care to prevent splashes to the face or injuries with sharp instruments.

Method for manual cleaning:

1. Pre-rinse items in warm running water to remove soil.
2. Fill the sink with warm water and detergent to the concentration recommended by the manufacturer.
3. Dismantle or fully open items to ensure all parts are thoroughly cleaned.
4. Immerse items (a few at a time) in the sink with warm water and detergent.
5. Scrub items using a firm-bristle nylon brush. Hold the items low in the sink to prevent scrubbing from creating droplets in the air that you might breathe.
6. Wash all surfaces of the items, including the inside of tubes and valves.
7. Rinse items in warm to hot running water in the second 'clean' sink.
8. Dry items in a drying cabinet or with a clean lint-free cloth. Do not allow items to air dry or drip dry.
9. Visually inspect items for cleanliness.

You should use detergents that are low-foaming, nonabrasive, noncorrosive, biodegradable, free-rinsing, non-toxic, and of a mild alkaline formulation. Do not use common household detergents because they have high-foaming properties and their oily residue is difficult to rinse off.

**Do not** use abrasive cleaners such as steel wool or gritty powders/pastes as they damage the surface of instruments and leave residues.

Cannulated (hollow or lumened) items such as stainless-steel receiving tubes used in body piercing are a particular challenge to clean. Immersion in an ultrasonic cleaner may assist in the manual cleaning by removing or loosening soils.

Reusable tubing is also a challenge to clean and has the potential to generate infectious aerosols. Use single-use tubing instead.

### ***Non-immersible Items***

Items that cannot be fully immersed in water should be wiped with a lint-free cloth dampened in warm water and detergent, then rinsed and dried. Wipe the item over with a 70 per cent ethyl alcohol solution to chemically disinfect.



## **Automated methods of cleaning**

### ***Ultrasonic cleaners***

You can use an ultrasonic cleaner for some parts of the cleaning process (depending on the fragility of the item).

Ultrasonic cleaners do not sterilise or disinfect instruments, but they provide a safe and effective means of cleaning most reusable instruments before sterilisation.

Ultrasonic cleaners work by producing high-frequency, high-energy sound waves that cause organic material to dislodge and drop to the bottom of the tank, or to be loosened enough that it can be rinsed off.

Follow the manufacturer's instructions when using an ultrasonic cleaner.

See [Appendix 1: Ultrasonic cleaners](#) p. 82 for more information.

### ***Washer–disinfectors***

Washer–disinfectors are closed cabinets that are plumbed to the water supply and drainage system.

You need to load instruments into a washer–disinfector carefully. Disassemble instruments as much as possible and do not stack items.

Washer–disinfectors need to be regularly cleaned and maintained to prevent contamination of instruments cleaned in the machine.

## **Cleaning for off-site sterilisation**

Instruments being sterilised offsite should be cleaned and packaged before being transported.

Transport loose instruments in a clean, closed puncture-proof container, to ensure they are not damaged in transit.

Some off-site sterilising services may wish to do the packaging. In this case, you still need to clean instruments before transport.

## **Drying instruments/equipment**

- Do not dry items in ambient air (for example, on a bench), because this will allow airborne contamination.
- Use a clean, lint-free cloth to dry items. Paper towelling is not appropriate because it is not lint free.
- Once items are dry, you can handle them with clean, ungloved hands.
- Do not handle cleaned items or packaging materials if you have recently used a hand cream/lotion. Wash your hands first. Hand creams/lotions, especially oil-based ones, will leave marks that may attract contaminants and provide an impenetrable barrier to steam.
- Make sure equipment wiped over with a 70 per cent alcohol solution is dry before storage.

## **Disinfection of reusable instruments and equipment**

Chemical disinfection has far lower levels of quality assurance than steam sterilisation and must not be used on critical or high-risk items used to penetrate the skin.

Using disinfectants does not replace good cleaning practices. All items should be thoroughly washed and dried before disinfection.

Disinfectants may be used when equipment is contaminated with blood or other body fluid/substances and cannot be sterilised.

Items that can be sterilised must be cleaned and sterilised before reuse when contaminated with blood or body fluid/substances.

**Note:**

Disinfectants can easily become contaminated and are a potential source of infection. Solutions should be labelled appropriately (with the name, date and dilution strength).

Do not mix detergent or disinfectant solutions, because they may react with each other and, in doing so, reduce their effectiveness or cause harm. Always follow the manufacturer's instructions.

Some disinfectants, such as those that are chlorine-producing, should be freshly prepared just prior to use.

**Disinfection processes**

***Thermal disinfection***

Thermal disinfection uses heat and water at temperatures that destroy most organisms. It is the most cost-effective and efficient method of disinfection. It is only suitable for items that can be fully immersed in water at high temperatures.

All items should be fully immersed for the entire time once the water boils (see Table 6). Do not add additional items during this boiling stage. If the water temperature cannot be maintained for the time required, this method of disinfection will not be suitable.

Thoroughly clean and dry items before the thermal disinfection process (see [Cleaning reusable instruments and equipment](#) p.39). Thermal disinfection is suitable for items that can be fully immersed but do not need to be sterile at the time of use.

**Table 6: Time/temperature ratios for thermal disinfection**

| Surface temperature (°C) | Minimum disinfection time (minutes) |
|--------------------------|-------------------------------------|
| 90                       | 1                                   |
| 80                       | 10                                  |
| 75                       | 30                                  |
| 70                       | 100                                 |

Source: AS/NZS 4185:2006

***Chemical disinfection***

Only use chemical disinfection when thermal disinfection is unsuitable. Consider each chemical and its use carefully and follow the manufacturer's instructions. Only use a disinfectant for the approved purpose.

All disinfectants intended to be used to disinfect instruments or devices are regulated by the Therapeutic Goods Administration (TGA). Only use disinfectants specified in the Australian Register of Therapeutic Goods (ARTG) as an **instrument-grade disinfectant** or Class IIb 'Medical Device'. To ensure compliance of disinfectants used with TGA regulations, check the [TGA website](https://www.tga.gov.au/regulation-disinfectants-summary) here <<https://www.tga.gov.au/regulation-disinfectants-summary>>.

Check to see if a product is registered on the [ARTG here](https://tga-search.clients.funnelback.com/s/search.html?query=&collection=tga-artg) <<https://tga-search.clients.funnelback.com/s/search.html?query=&collection=tga-artg>>.

The following principles of disinfection apply.

- All items should be cleaned and dried before chemical disinfection (see [Cleaning reusable instruments and equipment](#) p. 39). You must dry items fully after cleaning and before either wiping or immersing the item in a chemical disinfectant. This is because any moisture/fluid on the item will dilute the chemical disinfectant solution, making it ineffective.
- If immersing items in disinfectant, use a container with a close-fitting lid. Fully immerse items for the time specified by the item/equipment manufacturer and chemical manufacturer. Rinse the item with distilled water and dry with a lint-free cloth.
- Always follow the manufacturer's recommendations for the use of a disinfectant including contact times.
- Spray bottles are not a suitable method for disinfecting equipment because:
  - the droplets produced do not come into contact with all parts of the equipment
  - droplets in the air unnecessarily expose staff to the dangerous chemicals.
- Immediately discard chemical disinfectant solutions used for soaking items (see [Liquid waste](#) p. 32). Do not top disinfectant solutions with fresh solution.

Disinfection is not a sterilisation process. Wherever possible, sterilise items to be used for semi-critical or medium-risk sites, or use sterile single-use items.

**Note:**

Wiping instruments with disinfectants just prior to use does not provide adequate high-level disinfection or sterilise them.

Instruments should not be stored in disinfectants (before or after cleaning) as some disinfectants are corrosive and can damage equipment.

***Suitable disinfectants for non-immersible items***

Suitable disinfectants for non-immersible equipment are those with the following strengths:

- 70 per cent w/w ethyl alcohol
- 80 per cent v/v ethyl alcohol
- 60 per cent v/v isopropyl alcohol

Wipe over non-immersible items with the alcohol solution. Allow the alcohol to evaporate – do not wipe off the alcohol. Store the item dry.

Observe the use-by dates on all disinfectants, including those on decanted containers.

**Note:**

Items that cannot be immersed must not be used as semi-critical (medium risk) or critical (high risk) instruments as they cannot be appropriately disinfected or sterilised. They may only be used as a non-critical (low risk) instrument.

## **Sterilisation of reusable instruments and equipment**

Sterilisation makes an item free from all forms of viable microorganisms.

Unless items are processed under controlled conditions, they will have microorganisms on them and will, therefore, be non-sterile.

The purpose of sterilisation is to destroy all of these microbiological contaminants.

Sterilisation may be achieved by heat, chemicals or ionizing radiation.

Office-based facilities can use two methods of sterilisation: steam under pressure (steam sterilisation) and dry heat.

All sterilisers must be listed on the Australian Register of Therapeutic Goods (with the TGA). When purchasing a steriliser ensure the product complies with this requirement.

### **Dry-heat sterilisers**

Although you may use a dry-heat steriliser in your hair, beauty, tattooing or skin piercing business, this type of steriliser has limitations.

Dry heat requires very high temperatures (160–180 degrees Celsius) and considerable time (for example, a holding time of 120 minutes) to achieve sterilisation.

The high temperatures required may damage materials.

For this reason, we do not recommend using a dry-heat steriliser in your business.

### **Steam sterilisers**

Steam sterilisation under pressure is the most reliable way of sterilising reusable instruments in hair, beauty, tattooing and skin penetration businesses.

Small steam sterilisers are usually called 'bench-top' or 'portable' sterilisers.

The relevant Australian Standard for reprocessing of reusable instruments for the hair, beauty, tattooing and skin penetration industries is 'AS/NZS 4815:2006 Office-based health care facilities – reprocessing of reusable medical and surgical instruments and equipment, and maintenance of the associated environment'. If sterilising your own items, you should comply with this Standard.

The following equipment will not **sterilise** items. **Do not** use any of these items for this purpose.

- microwave ovens
- pressure cookers
- incubators
- ultraviolet cabinets
- boiling-water units
- ultrasonic cleaners
- household ovens
- other similar units, such as pie warmers
- dishwashers
- glass (heat) bead 'sterilisers'
- 'steam sterilisers' for babies' bottles and equipment (electric or microwave versions).

Unless your staff have adequate training in the sterilisation process, we recommend you purchase sterilisation services from an appropriate local provider. Alternatively, you can use pre-sterilised single-use items so you do not need to sterilise your own items.

Always clean instruments before sterilisation. See [Cleaning reusable instruments and equipment](#) p. 39 for further details.

Refer to the manufacturer's instructions and see [Appendix 2: Sterilisers and the sterilisation process](#) p. 83 for further information about using sterilisers.

### ***Cannulated items and reusable tubing***

These items and tubing can be difficult to sterilise. Air or water may be trapped in cannulated items and tubing during the sterilisation cycle.

Any air remaining in the steriliser chamber or cannulated items/tubing will prevent effective sterilisation, leading to sterilisation failure.

Water remaining in reusable tubing will wet the packaging, rendering the tubing non-sterile. We recommend using single-use tubing.

# Part C: Procedure-specific requirements

Make sure you have read and understood [Part B: Principles of infection prevention and control before you read these procedure-specific requirements](#) p. 17.

The principles outlined in Part B are the basis of all the following procedures.

## Note:

The cleaning or reprocessing requirements in these sections is the minimum level of reprocessing required.

If a non-skin penetrating instrument or piece of equipment accidentally penetrates the skin or becomes contaminated with blood, it should be disposed of or cleaned and sterilised before being re-used.

## Hairdressing and barbering

Hairdressing includes services such as hair shampooing, cutting, colouring and styling. Barbering businesses may also include beard trimming and face-shaving services.

### Key points for business proprietors

- Hairdressing and barbering pose a **low risk** for transmission of infection.
- Using **razors and scissors** presents a small risk of transmission of blood-borne viruses.
- Razors should be **single-use only**.
- We do **not** recommend using electric shavers as they can become contaminated the same way that razors can.

### Specific health-risk information

Although infections can occur during hairdressing and barbering procedures, in general they pose a low risk for transmission of infection.

Infections that can be spread in hairdressing premises include skin infections on the scalp, face and neck such as impetigo (also known as school sores) and fungal infections such as tinea capitis and ringworm.

These infections can spread when you do not clean instruments and equipment between clients, when you do not handle instruments hygienically, and when things like furnishings and fittings are not kept clean and in good repair.

Pediculosis or head lice are common and often cause concern. Head lice are spread through direct hair-to-hair contact. Head lice do not have wings or jumping legs so they cannot fly or jump from head to head. They can only crawl. Head lice do not transmit any infectious diseases and there is no evidence to suggest that the environment is of significant concern in their transmission. Infection in wounds caused by scratching may occasionally occur. While there is no regulation preventing a person with head lice or their eggs from using or attending a hairdressing salon, you may ask someone to reschedule their appointment. Although head lice only survive on the human head, all hair dressing equipment should be washed and dried before reuse. Lice are easily killed by water temperatures greater than 60 degrees Celsius. No disinfection or fumigation of the salon is required.

Further information about head lice can be found at the [Better Health Channel](https://www.betterhealth.vic.gov.au/health/ConditionsAndTreatments/head-lice-nits) <<https://www.betterhealth.vic.gov.au/health/ConditionsAndTreatments/head-lice-nits>>.

There is a small risk of transmission of blood-borne viruses through the use of razors and scissors. Razors should be single-use only. If other items such as scissors are contaminated with blood or body fluids, you should clean and sterilise them before reuse, or disposed of them if they cannot be sterilised.

You should ask clients if they have any skin lesions such as prominent moles. Ask the client to specify the location so you can take care to avoid damaging them.

Electric shavers are considered contaminated with blood after use in the same way that other razors and blades are contaminated. The blades, mesh and the blade mechanism housing are difficult to clean and will not withstand the sterilisation process. This difficulty is due to their design and the materials they are made from. Debris from shaving, such as blood, hair and skin cells, have been found in the body and motor of electric razors. We do not recommend using electric shavers on clients, and you should not lend electric shavers to clients.

WorkSafe Victoria provides an occupational health and safety risk assessment tool in the *Guide to the management of hazardous substances in the hairdressing and beauty industry*, 2<sup>nd</sup> edition, June 2017.

This can be accessed at the [WorkSafe website](https://www.worksafe.vic.gov.au/resources/management-hazardous-substances-hairdressing-and-beauty-industry)

<<https://www.worksafe.vic.gov.au/resources/management-hazardous-substances-hairdressing-and-beauty-industry>>.

## Cleaning and reprocessing requirements for equipment

**Table 7: Cleaning and reprocessing requirements for hairdressing and barbering**

| Equipment  | Use of item                      | When              | Recommendations   |
|--|----------------------------------|-------------------|---|
| Disposable razors  | Shaving                          | After each client | Dispose of into a sharps container.   |
| Disposable razor blades (safety-type razor with reusable handle) | Shaving or cutting/razoring hair | After each client | Blade: <ul style="list-style-type: none"> <li>• Dispose of into a sharps container.</li> </ul> Handle: <ul style="list-style-type: none"> <li>• Wash in warm water and detergent.</li> <li>• Rinse in hot running water.</li> <li>• Dry with a lint-free cloth.</li> <li>• Note: if contaminated with blood dispose of into clinical and related waste, or clean and sterilise.</li> </ul>  |
| Straight blade (cut throat) razor                                | Shaving                          | After each client | With disposable blade: <ul style="list-style-type: none"> <li>• Dispose of blade into a sharps container.</li> <li>• Handle: <ul style="list-style-type: none"> <li>– Wash in warm water and detergent.</li> <li>– Rinse in hot running water.</li> <li>– Dry with a lint-free cloth.</li> <li>– Note: if contaminated with blood dispose of into clinical and related waste, or clean and sterilise.</li> </ul> </li> </ul> All in one blade and handle: <ul style="list-style-type: none"> <li>• Wash in warm water and detergent.</li> <li>• Rinse in hot running water.</li> <li>• Dry with a lint-free cloth.</li> <li>• Package and sterilise.</li> </ul> |

| Equipment   | Use of item             | When   | Recommendations   |
|---|-------------------------|--|---|
| Dye mixing bowls  | Mixing hair-dye colours | After each client  | Rinse free of dye.<br>Wash in warm water and detergent.<br>Rinse in hot running water.<br>Dry with a lint-free cloth.   |
| Dye brushes/<br>applicators   | Applying dye to hair    | After each client  | Rinse free of dye.<br>Wash in warm water and detergent.<br>Rinse in hot running water.<br>Dry with a lint-free cloth.   |
| Hair brushes<br>Combs<br>Neck brushes<br>Rollers<br>Hair pins/clips   | Styling hair            | After each client  | Use a lint-free cloth to remove hair.<br>Wash in warm water and detergent.<br>Rinse in hot running water.<br>Dry with a lint-free cloth.  |
| Scissors<br>Clippers  | Cutting hair            | After each client  | Use a lint-free cloth to remove hair.<br>Wash in warm water and detergent.<br>Rinse in hot running water.<br>Dry with a lint-free cloth.<br>Note: if contaminated with blood dispose of into a sharps container, or clean and sterilise.<br>Electric clippers hand piece: <ul style="list-style-type: none"> <li>• Wipe over with cloth dampened with warm water and detergent.</li> <li>• Rinse by wiping with cloth dampened in hot water.</li> <li>• Dry thoroughly.</li> <li>• Note: if contaminated with blood, disinfect by wiping with a cloth dampened with 70 per cent alcohol solution and allow to dry.</li> </ul> |
| Shaving brushes   | Applying shaving soap   | After each client  | Rinse free of hair and shaving cream.<br>Wash in warm water and detergent.<br>Rinse in hot running water.<br>Dry thoroughly.  |
| Linen <ul style="list-style-type: none"> <li>• Towels</li> <li>• Gowns or capes</li> <li>• Hair covers</li> <li>• Hair bands</li> </ul> | Assorted uses           | After each client (unless a clean towel or paper tape is used around the neck) | Wash in hot water (70–80 degrees Celsius) and detergent.<br>Dry as required according to material type (clothes dryer on hot setting or air dry).   |
| Electric razors   | Shaving                 | Do not use   | Cannot withstand immersion or sterilisation.  |



## Cosmetic application including eyelash tinting and spray tanning

Cosmetic application involves applying temporary cosmetics or make-up such as lipstick, mascara and eye shadow.

Semi-permanent make-up or cosmetic tattooing, such as eyebrow feathering, that involves skin penetration or tattooing are not discussed in this section. See [Tattooing \(including cosmetic tattooing\)](#) p. 64.

### Key points for business proprietors

- Make sure you **thoroughly clean** all make-up brushes and applicators between clients.
- Use only **single-use sponges**.
- Do not apply make-up if a client has an **open sore**.
- **Dispense products** from larger multi-use containers into smaller single-use containers.

### Specific health-risk information

Skin infections, such as impetigo and herpes (cold sores), can be easily spread via contaminated hands and equipment. It is essential that all make-up brushes and applicators are thoroughly cleaned (washed in warm water and detergent) between clients to ensure there is no cross contamination between clients. Sponges, due to their porous nature, cannot be cleaned or disinfected adequately between clients. We recommend using single-use sponges.

Do not apply make-up if a client has open weeping sores. The risk of transmission of infection is much greater when there are actively infected sores or wounds present.

Dispense products to be used on a client from larger multi-use containers into smaller single-use (or washed and dried reusable) containers or use a single-use spatula to ensure there is no contamination of the original product (see [Appropriate handling and dispensing of products](#) p. 31).

### Spray Tanning

Spray tanning should be conducted in a well-ventilated room, this includes recirculating and filtered air booths to avoid respiratory problems.

All surfaces in the tanning booth and treatment room should be smooth and washable, and cleaned at least weekly to remove excess tanning solution that may harbour microorganisms.

Give clients:

- disposable panties
- eye protection.

Staff should use appropriate PPE. This includes:

- a single-use P2 respirator
- a disposable apron
- eye protection.

PPE should be single-use and disposed of after each client. If reusable (for example, eye protection), the item should be cleaned between uses, particularly if worn by more than one staff member.

### Eyelash tinting

Eyelash tinting involves applying dye to the eyelashes. Care should be taken when applying any products to the eyelashes to avoid product or chemicals getting into the eyes.

Ensure all equipment has been thoroughly cleaned between clients in order to avoid the spread of infections such as conjunctivitis.

Clients with any signs of eye-related infection should have their treatment postponed until the infection has cleared.

## Cleaning and reprocessing requirements for equipment

**Table 8: Cleaning and reprocessing requirements for cosmetic application**

| Equipment  | Use of item                                 | When              | Recommendations  |
|--|---|-------------------|--|
| Face brushes <ul style="list-style-type: none"> <li>• Make-up</li> <li>• Eyebrow</li> <li>• Eyelashes</li> </ul> | Application of make-up or tint to eyelashes | After each client | Rinse free of lotions, creams or make-up.<br>Wash in warm water and detergent.<br>Rinse in hot running water.<br>Dry thoroughly. |
| Eyelash curlers  | Shape eyelashes                             | After each client | Rinse free of lotions, creams or make-up.<br>Wash in warm water and detergent.<br>Rinse in hot running water.<br>Dry thoroughly. |
| Eye protection   | Used during spray tanning                   | After each client | Rinse free of lotions, creams or make-up.<br>Wash in warm water and detergent.<br>Rinse in hot running water.<br>Dry thoroughly. |
| Face sponges   | Application and blending of make-up         | After each client | As they are unable to be cleaned or disinfected satisfactorily, single-use is recommended.                                       |

## Hair removal

There are several ways hairs are removed in the beauty therapy setting. These include:

- waxing
- plucking
- threading
- sugaring
- electrolysis
- laser or intense-pulsed light (IPL)

Laser and IPL are also used for other cosmetic treatments. See [Laser and intense pulsed light](#) p. 61.

Waxing is a common method of temporary hair removal. Waxes are supplied in several forms, with different methods of application and use employed for each type of wax. Different types of waxes include glucose-based (water-soluble) wax, soft wax and hard wax.

Application methods also vary according to the type of wax used. These can include roll-on or spatula applicators (for example wooden 'ice-cream' sticks).

Whichever waxing product or method is used, you must maintain basic principles of infection prevention.

Plucking (for example tweezers) and threading are other methods of hair removal that may be used for smaller areas (for example eyebrows).

## Key points for business proprietors

- The risk of infection from waxing is very **low**.
- **Clean** the area to be waxed with a skin antiseptic.
- Use a **single-use pot** for each client.
- If you use a multi-use container, use a **new spatula** each time you dip it into the wax.
- Do **not** apply wax to broken skin or if the client is bleeding.

## Specific health-risk information

### Waxing

Although the risk of infection associated with waxing is very low, you should still take steps to reduce the risk further.

Before waxing a client, clean the area of skin with a skin antiseptic. This will reduce the levels of skin bacteria and the risk of skin infection.

To prevent cross-contamination between clients, use either of the following two methods for wax application.

- Use a single-use pot for each client. Clean the pot thoroughly after each client.
- If using a multi-use container, never double-dip into wax. Use a new spatula each time. We recommend using disposable single-use wooden spatulas.

However, if neither of these methods is practical, you must use temperature control to minimise possible risk.

- Keep types of wax (both strip and hot wax) undisturbed at a minimum temperature of 70–80 degrees Celsius for a minimum of 15 minutes between clients. (Generally, viruses such as HIV are inactivated at this temperature.)
- For strip waxing, monitor temperature and record it before the first client and at least one other time during the day.
- For hot waxing, monitor temperature between clients, or at least twice during an eight-hour day.
- For both strip and hot wax, monitor temperature after pots have been refilled or replaced with a new pot.
- You should keep records of temperature and time of holding make them available for inspection for a reasonable period (at least one year).

Do not apply wax to broken skin or over an area where blood has been drawn. If wax and/or instruments are contaminated with blood, use the following procedures:

- Immediately discard wax into the clinical and related waste container.
- Discard wooden applicators into the clinical and related waste container.
- Discard metal applicators or tweezers into a sharps container, or clean and sterilise them before using them on another client.

Take special care when removing hair from the upper lip, underarm or pubic area. These areas are either moist or close to mucous membrane areas, which are more sensitive and support a higher level of microorganisms.

Do not re-use hot hard wax between clients.

### **Roll-on applicators**

Where possible, we recommend using roll-on applicators that can be dismantled and thoroughly cleaned between clients. Applicators that cannot be dismantled may not be able to be adequately cleaned and disinfected between clients.

Place wax cartridges with their roll-on applicators attached in an enclosed heating unit capable of heating the wax cartridge and roller head to a temperature level of 70–80 degrees Celsius for a minimum of 15 minutes between each client.

### **Plucking**

Plucking is more likely to cause bleeding than other hair removal processes. Instruments must be cleaned and disinfected after each client or cleaned and sterilised if contaminated with blood.

### **Threading**

Threading involves pulling hairs from the follicles using a thread that is moved quickly over the skin, catching the hairs and causing their dislodgement from the follicle. Threads must be used only once and then discarded.

### **Sugaring**

Sugaring involves the use of a thick sugar-based paste which is spread onto the skin and then removed using the hands to 'roll' it against the hairs to remove them.

Sugar-based pastes provide an ideal environment for potentially harmful organisms to grow. As such, you must make sure the original product does not become contaminated.

Wash your hands or use an alcohol-based hand rub and put on a new pair of gloves each time you remove a portion of sugar-based paste from the original container.

### **Electrolysis**

There are three types of electrolysis used to remove unwanted hairs:

1. **Thermolysis** uses radio waves to generate heat. This destroys the papilla (blood supply) and prevents it from feeding the bulb, stopping the follicle from producing more hairs.
2. **Electrolysis** uses a direct current (galvanic). When applied through the probe, the current produces a chemical called 'lye', which destroys the growing cells and the papilla.
3. A **combination** of the two types can also be used.

All three methods are applied by passing a fine probe down the hair follicle without breaking the skin. When the probe is in position, the correct amount of one or both currents is applied.

Blood-borne viruses and other infections may occur during electrolysis because the electrically heated needles inserted into hair follicles can become contaminated with blood.

To reduce the risk of infection, use only sterile single-use needles. Sterile, single-use needles are inexpensive and readily available, there is no need to re-use electrolysis needles. You can use one needle for removing as many hairs as necessary from one client during one session, but the needle should be sterile at the first time of use. Dispose of the needle into an approved sharps container immediately after use.

## Cleaning and reprocessing requirements for equipment used

**Table 9: Cleaning and reprocessing requirements for hair removal**

| Equipment            | Use of item  | When              | Recommendations   |
|----------------------|--|-------------------|---|
| Single-use wax pots  | To dispense wax for individual clients from larger container     | After each client | Remove wax using appropriate solvent for the type of wax.<br>Wash in warm water and detergent.<br>Rinse in hot running water.<br>Dry with a lint-free cloth.  |
| Applicators/spatulas | Application of wax   | After each client | If single-use dispose of into general waste or into clinical and related waste if contaminated with blood.<br>If reusable: <ul style="list-style-type: none"> <li>Remove wax using an appropriate solvent for the type of wax.</li> <li>Wash in warm water and detergent.</li> <li>Rinse in hot running water.</li> <li>Dry with a lint-free cloth.</li> </ul> Note: if contaminated with blood dispose of into clinical and related waste, or clean and sterilise. |
| Wax thermometers     | Measure temperature of wax                                       | After each client | If single-use dispose of into general waste or into clinical and related waste if contaminated with blood.<br>If reusable: <ul style="list-style-type: none"> <li>Remove wax using an appropriate solvent for the type of wax.</li> <li>Wash in warm water and detergent.</li> <li>Rinse in hot running water.</li> <li>Dry with a lint-free cloth.</li> </ul> Note: if contaminated with blood dispose of into clinical and related waste, or clean and sterilise. |
| Tweezers             | Plucking individual hairs.<br>May become contaminated with blood | After each client | Wash in warm water and detergent.<br>Rinse in hot running water.<br>Dry with a lint-free cloth.<br>Note: if contaminated with blood dispose of into a sharps container or clean and sterilise.  |
| Threads              | Hair removal   | After each client | Single-use only. Dispose of into general waste after use.   |

| Equipment               | Use of item  | When              | Recommendations  |
|-------------------------|--|-------------------|--|
| Roll on applicators     | Application of wax                                       | After each client | <p>If head can be dismantled:</p> <ul style="list-style-type: none"> <li>• Dismantle and remove wax with an appropriate solvent.</li> <li>• Wash in warm water and detergent.</li> <li>• Rinse in hot running water.</li> <li>• Dry with a lint-free cloth and reassemble.</li> <li>• Return to unit and heat wax to 70–80 degrees Celsius for a minimum of 15 minutes.</li> </ul> <p>If head cannot be dismantled:</p> <ul style="list-style-type: none"> <li>• Remove wax with an appropriate solvent.</li> <li>• Wipe over with cloth dampened with warm water and detergent.</li> <li>• Rinse by wiping with cloth dampened in hot water.</li> <li>• Dry with a lint-free cloth.</li> <li>• Return to unit and heat wax to 70–80 degrees Celsius for a minimum of 15 minutes.</li> </ul> |
| Electrolysis needle     | Inserted into hair follicle to apply current             | After each client | Pre-sterilised single-use only. Dispose of into a sharps container after use.  |
| Electrolysis hand piece | Holds electrolysis needle and delivers current to needle | After each client | <p>Wipe over with cloth dampened with warm water and detergent.</p> <p>Rinse by wiping with cloth dampened in hot water.</p> <p>Dry thoroughly.</p> <p>Wipe over with cloth dampened with 70 per cent alcohol solution and allow to dry.</p>   |

## Facials

Facials include a broad range of skincare treatments such as steam, exfoliation, extraction, creams, peels and massage. Light treatments such as LED and laser may also be used (for further information on lasers see [Laser and intense pulsed light](#) p. 61).

### Key points for business proprietors

- **Clean** the client's face before you give a facial massage or apply any products.
- Do not provide a facial massage if the client has **open sores**.
- Dispense products from multi-use containers into **single-use containers**.

## Specific health-risk information

Clean the client's face before a facial massage or applying any products. Do not conduct a facial massage if the client has open, weeping sores. The risk of transmission of infection is much greater when there are actively infected sores or wounds present.

Dispense products to be used on a client from larger multi-use containers into smaller single-use containers or use a single-use spatula to ensure there is no contamination of the original product (see [Appropriate handling and dispensing of products](#) p. 31).

## Cleaning and reprocessing requirements for equipment

**Table 10: Cleaning and reprocessing requirements for facials**

| Equipment          | Use of item   | When              | Recommendations   |
|--------------------|---|-------------------|---|
| Comedone extractor | Removal of blackheads   | After each client | Single-use is recommended. Dispose of into a sharps container.<br>If reusable: <ul style="list-style-type: none"><li>• Wash in warm water and detergent.</li><li>• Rinse in hot running water.</li><li>• Dry with a lint-free cloth.</li><li>• Package and sterilise.</li></ul> |
| Single-use pots    | To dispense products for individual clients from larger container | After each client | Rinse free of lotions or creams.<br>Wash in warm water and detergent.<br>Rinse in hot running water.<br>Dry with a lint-free cloth.   |
| Face sponges       | Application of products   | After each client | As they are unable to be cleaned or disinfected satisfactorily, single-use is recommended.  |

## Eyelash extensions

Eyelash extensions are semi-permanent extensions adhered to the natural lash. Two types of artificial lashes are commonly used.

- Strip lashes are eyelash hairs on a band that are applied to the natural lash line.
- Individual lashes are separate artificial lashes that are applied to the base of the individual natural eyelash.

Lashes can be made from a variety of different materials, including synthetic, mink and sable, or silk. Adhesive is used to make the artificial eyelashes adhere.

## Key points for business proprietors

- Clients can have an **allergic reaction** to adhesives or dyes. The client may wish to test the product on their skin at least 24 hours before the procedure.
- Use an **aseptic non-touch technique** (see p. 29).
- **Dispense product** from larger containers into single-use containers.

## Specific health-risk information

The adhesives and dyes you use must be fit for purpose.

Allergic reactions are the most common risk. If the client is unsure or thinks they may have a reaction, they may wish to test the adhesive or dye on their skin at least 24 hours before the procedure.

Applying eyelash extensions may also spread conjunctivitis or other skin infections. Use an aseptic non-touch technique to ensure the artificial eyelashes are not contaminated before or during the procedure.

Dispense products (for example, eyelashes or glue) to be used on a client from larger containers into a smaller single-use (or cleaned and dried reusable) container to ensure there is no contamination of the original product.

## Cleaning and reprocessing requirements for equipment used

Table 11: Cleaning and reprocessing requirements for eyelash extensions

| Equipment       | Use of item  | When              | Recommendations  |
|-----------------|--|-------------------|--|
| Tweezers        | Separating eyelashes and applying individual artificial lashes   | After each client | Wash in warm water and detergent.<br>Rinse in hot running water.<br>Dry with a lint-free cloth.<br>Thermally disinfect or sterilise. |
| Single-use pots | To dispense product for individual clients from larger container | After each client | Rinse free of lotions or creams.<br>Wash in warm water and detergent.<br>Rinse in hot running water.<br>Dry with a lint-free cloth.  |

## Manicure, pedicure and nail treatments

Manicures and pedicures include filing and shaping of nails, exfoliation of dead skin, moisturising and massage.

### Key points for business proprietors

- The risk of infection from manicure, pedicure and nail treatments is generally **low**. However, poorly cleaned, disinfected or sterilised instruments can lead to serious infections.
- Maintaining **good hygiene** and taking sensible precautions can reduce the risk of infection.
- **Clean and dry** the client's hands or feet before the procedure.
- Use **first aid** if you cut or injure the client. The wound may become infected from their own normal flora (microorganisms).

## Specific health-risk information

Fungal infections can cause tinea or ringworm, affecting hair, skin and nails.

Paronychia (infection of the nail folds) can be caused by *Candida albicans* (a form of yeast infection) and bacteria such as *Staphylococcus aureus* and *Streptococcus pyogenes* (group A streptococcus).

If the bacterium causes cellulitis (a spreading infection below the surface of the skin with redness, warmth, swelling and pain), then it can cause severe damage and become serious very quickly.

Fungi more commonly infect toenails than fingernails. Less than 10 per cent of nail infections involve fingernails.



It is important that you do not perform work on nails that are abnormal in appearance or have any sign of infection (redness, pus, tenderness or swelling). You should not cover up infected nails. Advise the client to consult a medical practitioner.

When acrylic nails and similar products are attached to normal nails, avoid leaving any space between the natural and acrylic nail. These spaces provide the perfect environment for microorganisms to grow.

Pedicures can present more potential for damage and infection to clients than manicures. Before conducting a pedicure, ask the client if they have any health conditions (for example, diabetes), which may place them at a greater risk of infection or complication.

You should also check the client's skin integrity. Do not perform a pedicure if there are any signs of broken skin (for example, blisters) or infection (for example, tinea).

You may use items such as nail files and buffers on one client for a period of time, however equipment should be stored in an appropriately labelled container, for example, a zip-lock plastic bag with the client's name on it. These items will still need to be cleaned between uses and stored dry.

Information regarding the safe use and management of hazardous substances used in nail products can be found in the *Guide to the management of hazardous substances in the hairdressing and beauty industry*, edition 2, June 2017.

This can be accessed at the [WorkSafe website](https://www.worksafe.vic.gov.au/resources/management-hazardous-substances-hairdressing-and-beauty-industry)

<<https://www.worksafe.vic.gov.au/resources/management-hazardous-substances-hairdressing-and-beauty-industry>>.

### **Foot spas**

Foot spas (foot baths with a whirlpool action or water jets) have been associated with a number of bacterial outbreaks, particularly non-tuberculous mycobacteria. Poor cleaning and disinfection practices lead to a build-up of organic debris in the filters and jets, allowing microorganisms to multiply and recirculate in the footbath water.

A single-use disposable foot spa liner can be used for each client. Otherwise, the foot spa must be drained, cleaned and disinfected between each client and at the end of each day. See below for links to examples of instructions for cleaning and disinfection of foot spas.

[New South Wales Health – fact sheet](http://www.health.nsw.gov.au/environment/factsheets/Pages/foot-spa.aspx) <<http://www.health.nsw.gov.au/environment/factsheets/Pages/foot-spa.aspx>>

[Queensland Department of Health – How to clean a foot spa between clients](https://www.health.qld.gov.au/public-health/industry-environment/personal-appearance/services/resources)  
<<https://www.health.qld.gov.au/public-health/industry-environment/personal-appearance/services/resources>>

[Queensland Department of Health – How to clean a foot spa at the end of the day](https://www.health.qld.gov.au/public-health/industry-environment/personal-appearance/services/resources)  
<<https://www.health.qld.gov.au/public-health/industry-environment/personal-appearance/services/resources>>

## Cleaning and reprocessing requirements for equipment used

**Table 12: Cleaning and reprocessing requirements for manicure, pedicure and nail treatments**

| Equipment  | Use of item                                  | When              | Recommendations   |
|--|--|-------------------|---|
| Buffers<br>Nail burrs<br>Nail files<br>Drill bits and grinders | Shape and polish nails                       | After each client | Single-use is recommended. Dispose of into general waste.<br><br>Alternatively, these items may be kept for reuse on the same client. Store in a labelled, closed container.  |
| Foot files   | Smooth and reduce foot calluses              |                   | If reusable: <ul style="list-style-type: none"> <li>• Wash in warm water and detergent.</li> <li>• Rinse in hot running water.</li> <li>• Dry thoroughly.</li> <li>• Note: if contaminated with blood dispose of into clinical and related waste, or clean and sterilise.</li> </ul>  |
| Emery board  | Shape and polish nails                       | After each client | Emery boards must be single-use as they cannot be washed and dried effectively. Dispose of into general waste.  |
| Cuticle stick or pusher  | Push back cuticle tissue from the nail plate | After each client | If reusable: <ul style="list-style-type: none"> <li>• Wash in warm water and detergent.</li> <li>• Rinse in hot running water.</li> <li>• Dry thoroughly.</li> <li>• Note: if contaminated with blood dispose of into a sharps container, or clean and sterilise.</li> </ul> Single-use only if made from porous material (for example, wood). Dispose of into general waste. |
| Nail clippers/scissors<br>Nail nippers                         | Shape nails and/or trim dead skin            | After each client | Wash in warm water and detergent.<br>Rinse in hot running water.<br>Dry thoroughly.<br>Note: if contaminated with blood dispose of into a sharps container, or clean and sterilise.   |
| Cuticle cutters  | Trim cuticles                                | After each client | Wash in warm water and detergent.<br>Rinse in hot running water.<br>Dry with a lint-free cloth.<br>Package and sterilise.   |

| Equipment                         | Use of item                               | When  | Recommendations  |
|-----------------------------------|---|---|--|
| Foot razor                        | Shave hardened skin and callouses         | After each client                           | <p>Blade:</p> <ul style="list-style-type: none"> <li>• Dispose of into a sharps container.</li> </ul> <p>Handle:</p> <ul style="list-style-type: none"> <li>• Wash in warm water and detergent.</li> <li>• Rinse in hot running water.</li> <li>• Dry with a lint-free cloth.</li> <li>• Note: if contaminated with blood dispose of into clinical and related waste, or clean and sterilise.</li> </ul>   |
| Foot spas (with whirlpool action) | Soak feet to soften the skin              | After each client and at the end of the day | <p>Between each client:</p> <ul style="list-style-type: none"> <li>• Drain the water.</li> <li>• Clean the surfaces with detergent and warm water using a cloth.</li> <li>• Rinse with hot running water.</li> <li>• Dry with a lint-free cloth.</li> <li>• Disinfect the surfaces.</li> <li>• Circulating spas will need to be disinfected by circulating water and disinfectant according to the manufacturer's instructions.</li> <li>• After disinfection, rinse and dry with a lint-free cloth.</li> </ul> <p>At the end of the day:</p> <ul style="list-style-type: none"> <li>• Drain the water.</li> <li>• Remove the foot spa components and wash in warm water and detergent.</li> <li>• Disinfect the removable parts (follow manufacturer's recommendations for contact times).</li> <li>• Rinse and reassemble.</li> <li>• Refill with clean water and disinfectant. Run through for required contact time according to the manufacturer's instructions.</li> <li>• Drain, rinse and dry with a lint-free cloth.</li> </ul> |
| Toe separators                    | Separate toes for nail polish application | After each client                           | <p>Toe separators are generally made from foam and due to the porous nature cannot be cleaned properly.</p> <p>Single-use is recommended. Dispose of into general waste after each client.</p>   |

| Equipment                             | Use of item  | When              | Recommendations  |
|---------------------------------------|--|-------------------|--|
| Product application brushes           | Used to apply nail oils, nail polish, or nail treatments | After each client | Single-use only for product that can harbour or support growth or microorganisms (for example, nail oils). Dispose of into general waste.<br><br>Reusable if product is not capable of harbouring or supporting growth or microorganisms (for example, nail polish, light cured gels, nail primers). |
| Finger bowl                           | Soak nails/finger tips to soften the skin and cuticles   | After each client | Wash in warm water and detergent.<br>Rinse in hot running water.<br>Dry with a lint-free cloth.  |
| Pumice stones (natural or artificial) | Smooth and reduce foot calluses and rough skin           | After each client | As they are unable to be cleaned or disinfected satisfactorily, single-use is recommended.   |
| Foot baths (no whirlpool action)      | Soak feet to soften the skin                             | After each client | Wash in warm water and detergent.<br>Rinse in hot running water.<br>Dry with a lint-free cloth.<br>Disinfect after cleaning.   |

## Dry needling and other therapeutic skin penetration procedures

Dry needling uses a solid, filament needling technique. It is used by myotherapists, physiotherapists or osteopaths, and is different from the acupuncture techniques used by Chinese Medicine specialists. The theory, clinical reasoning and application behind the two techniques is different.

Acupuncturists who are registered with the Chinese Medicine Board of Australia under the Health Practitioner Regulation National Law are exempt from the requirement to register their business with local council. Registration of individuals can be checked on the [AHPRA website](https://www.ahpra.gov.au/) <<https://www.ahpra.gov.au/>>.

Although physiotherapists and osteopaths are also required to be registered with AHPRA, they have not been provided with an exemption from registering their business if they undertake skin penetration procedures under the Public Health and Wellbeing Regulations (2019) (see r. 24 for the full list of health professionals and businesses exempt from the requirement to register their business).

If you are a physiotherapist or osteopath who performs dry needling, you must register your business with your local council.

In some instances, other physical therapists who are not registered with AHPRA, for example myotherapists, may also perform dry needling or other therapies that involve skin penetration procedures, for example wet cupping. If you perform skin penetration procedures in this type of healthcare business, you must register your business with the local council.

### Key points for business proprietors

- The risk of infection from dry needling is **low**.
- You should ensure the skin is **clean** and free from oils. You may need to wash the skin.
- **Disinfect** the skin before any skin penetration procedure.

## Specific health-risk information

The skin surface should be clean and free of emollients or oils.

You may need to wash the area with soap and water prior to a treatment.

Although the risk of infection is low from these types of therapies, particularly from very fine acupuncture-type needles, you should disinfect the skin prior to any skin penetration procedure (see [Preparation of the client's skin](#) p. 30).

## Cleaning and reprocessing requirements for equipment used

**Table 13: Cleaning and reprocessing requirements for dry needling and other therapeutic skin penetration procedures**

| Equipment                            | Use of item                  | When              | Recommendations  |
|--------------------------------------|------------------------------|-------------------|--|
| Acupuncture needles (and introducer) | Dry needling                 | After each client | Pre-sterilised single-use only. Dispose of into a sharps container after each use.   |
| Dermal hammers                       | Superficial skin penetration | After each client | Pre-sterilised single-use only. Dispose of into a sharps container after each use.   |
| Cups (glass or plastic)              | Cupping                      | After each client | <p>If used on intact skin:</p> <ul style="list-style-type: none"> <li>• Wash in warm water and detergent.</li> <li>• Rinse in hot running water.</li> <li>• Dry with a lint-free cloth.</li> </ul> <p>If contaminated with blood or used on non-intact skin:</p> <ul style="list-style-type: none"> <li>• It is recommended that these items be single-use only and disposed of into clinical and related waste.</li> <li>• If reused, they will need to be cleaned and sterilised.</li> </ul> |
| Bamboo cups                          | Cupping                      | After each client | Single-use only. Due to its porous nature, bamboo is not able to be cleaned, disinfected or sterilised. As such, bamboo cups must only be used on intact skin. Dispose of into general waste after use unless contaminated with blood then dispose of into clinical and related waste.   |

## Laser and intense pulsed light (cosmetic procedures and tattoo removal)

Both laser and intense pulsed light (IPL) use light to perform skin treatments such as, hair removal, treatment of skin pigmentation and blemishes, and tattoo removal.

Lasers work by producing a beam of light that has a single wavelength (monochromatic). The beam of light can be focused on the area to be treated.

Lasers are classified according to 'AS/NZS IEC 60825.1:2014 Safety of laser products, Part 1: Equipment classification, requirements'. There are several classes and types of laser available.

Lasers used for cosmetic purposes are usually classes 3B and 4. Each poses a different level of risk to both clients and staff. You must make sure equipment is used safely.

Lasers are sold under various names and you should ask for clear information related to the type/class of laser you are considering, including safety information.

Registered premises operating lasers should follow 'AS/NZS 4173:2018 Guide to the safe use of lasers in health care' and 'AS/NZS IEC 60825.14:2011 Safety of laser products, Part 4: A user's guide'.

Refer to the department's Radiation Safety Team for additional information on the use of lasers. Phone 1300 767 469 or [email the team](mailto:radiation.safety@dhhs.vic.gov.au) <radiation.safety@dhhs.vic.gov.au>.

IPLs work by producing intense pulses of light over a range of wavelengths. The light produced can be filtered and manipulated by the machine to make its effects more specific.

## Key points for business proprietors

- Staff need to undergo **training** before they can use any type of laser or IPL device.
- Lasers and IPLs can be **dangerous**. They can burn, blister or scar the client. They can cause eye damage.
- Staff and clients should **wear protective eye wear**.
- Different devices have different **cleaning and disinfection** requirements.

## Specific health-risk information

Lasers and IPLs used for cosmetic purposes can be hazardous. Clients have been injured following use of laser or IPL for cosmetic procedures. Injuries include burns, blistering, scarring, increased or decreased skin pigmentation and eye damage.

Rooms in which lasers are used should be designed for the purpose. Clients and staff should wear PPE, including gloves, single-use face masks suitable for the purpose and eyewear that meets the standard for use with lasers.

Lasers/IPLs used for cosmetic purposes are usually self-contained units that need minimal cleaning and sterilisation.

The end where the laser/IPL beam emerges should not come into contact with the client. However, it may become contaminated via the dispersal of contaminated tissue including body hair.

There are devices with ends that can be removed for cleaning and sterilisation. Some devices can be used with a protective cover (sheath) to reduce contamination. We recommend using single-use sheaths or protective covers for procedures where there is a high likelihood for skin damage, for example tattoo removal. You will still need to reprocess the laser/IPL device in the usual way.

Cleaning and disinfection of lasers/IPLs will depend on the type of device used. Devices with end pieces (of the laser/IPL arm) that can be dismantled should be cleaned after each client. If the skin is damaged (broken) during the procedure, the arm is likely to be contaminated with blood or body fluids and should be cleaned and sterilised after use. Devices that are self-contained (that is, the arm cannot be dismantled) should be cleaned and disinfected as for non-immersible items (see [Non-immersible items](#) p. 40).

The Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) have developed nationally available advice for the cosmetic and beauty therapy industry to promote a uniform approach to managing key issues around the use of light-based devices for non-surgical cosmetic treatments. Information for consumers and providers of lasers and other light-based cosmetic therapies can be found at the following websites.

[ARPANSA advisory note](https://www.arpansa.gov.au/understanding-radiation/sources-radiation/more-radiation-sources/lasers-and-intense-pulsed-light-ipl) <<https://www.arpansa.gov.au/understanding-radiation/sources-radiation/more-radiation-sources/lasers-and-intense-pulsed-light-ipl>>

[ARPANSA advice for providers](https://www.arpansa.gov.au/understanding-radiation/sources-radiation/more-radiation-sources/lasers-and-intense-pulsed-light-ipl) <https://www.arpansa.gov.au/understanding-radiation/sources-radiation/more-radiation-sources/lasers-and-intense-pulsed-light-ipl>

[ARPANSA advice for consumers](https://www.arpansa.gov.au/understanding-radiation/sources-radiation/more-radiation-sources/lasers-and-intense-pulsed-light-0) <https://www.arpansa.gov.au/understanding-radiation/sources-radiation/more-radiation-sources/lasers-and-intense-pulsed-light-0>

## Cleaning and reprocessing requirements for equipment used

**Table 14: Cleaning and reprocessing requirements for laser and IPL**

| Equipment                  | Use of item                                  | When              | Recommendations   |
|----------------------------|--|-------------------|---|
| Sheath or protective cover | To reduce contamination of the laser/IPL arm | After each client | Single-use only. Dispose of sheath into general waste or into clinical and related waste if contaminated with blood.  |
| Laser or IPL machine       | Generates the laser beam or IPL              | After each client | Wipe over with a cloth dampened with warm water and detergent.<br>Dry with a lint-free cloth.   |
| Eye protection for clients | Protect eyes during treatments               | After each client | Wash in warm water and detergent.<br>Rinse in hot running water.<br>Dry with a lint-free cloth.   |
| Laser or IPL end piece     | Held by staff member to direct laser/IPL     | After each client | Contamination can be reduced with use of an impervious barrier (for example plastic sleeve/sheath). Remove the sheath carefully after use to minimise transfer of any contamination to the item.<br>If device is <b>immersible</b> : <ul style="list-style-type: none"> <li>• Wash in warm water and detergent.</li> <li>• Rinse in hot running water.</li> <li>• Dry with a lint-free cloth.</li> <li>• Note: if contaminated with blood clean and sterilise.</li> </ul> If device is <b>non-immersible</b> : <ul style="list-style-type: none"> <li>• Wipe over with cloth dampened with warm water and detergent.</li> <li>• Rinse by wiping with cloth dampened in hot water.</li> <li>• Dry thoroughly.</li> <li>• Note: if contaminated with blood wipe over with cloth dampened with 70 per cent alcohol solution and allow to dry.</li> </ul> |

## Tattooing (including cosmetic tattooing)

Tattooing is a very popular form of body art. It involves injecting ink into the dermal layer of the skin to permanently or semi-permanently colour the skin for body art or cosmetic purposes. Semi-permanent cosmetic tattooing includes microblading or feathering.

Tattoo inks consist of a colourant combined with a carrier. Colourants used may be pigments that are insoluble in water or dyes which are soluble in water. Frequently heavy metals such as mercury, lead or cadmium are used in pigments as well as metal oxides or other elements such as carbon or arsenic. A carrier acts as a solvent to keep the ink evenly mixed and aid in application. Carriers include water, glycerol, propylene glycol, alcohols (isopropyl or methyl alcohol) and witch hazel.

### Note:

It is against the law to tattoo anyone under the age of 18 years. See [Legislation](#) p. 12 for more information.

### Key points for business proprietors

- Preventing **contamination of tattoo inks** is very important.
- **Dispense inks** into sterile containers or caps.
- Request a **product quality data sheet** when you buy inks to confirm the product is safe and legal to use in Victoria.
- Use an **aseptic non-touch technique** (p. 29).
- Open **sterile items** in front of the client so they know you are using sterile instruments.
- **Clean and disinfect** skin before tattooing.
- Give the client a **fact sheet** about the potential risk associated with tattooing. Download these from the [department's website](https://www2.health.vic.gov.au/public-health/infectious-diseases/personal-care-body-art-industries/client-information-sheets) <<https://www2.health.vic.gov.au/public-health/infectious-diseases/personal-care-body-art-industries/client-information-sheets>>.

### Specific health-risk information

The most common complications from tattooing are skin infections and allergic reactions to the ink.

Outbreaks of skin infections caused by *Mycobacterium chelonae*, a non-tuberculous *Mycobacteria* (NTM), in New York State, USA were associated with contaminated tattoo ink. Investigation of this and other NTM clusters of infections by the Centers for Disease Control and Prevention (CDC) found all were related to inks likely contaminated by the use of non-sterile water in either the manufacture of the inks or during dilution by the tattoo artist just prior to use on a client.

Preventing contamination of tattoo inks is very important. Do not use inks or other products that are not intended for tattooing. Use an aseptic non-touch technique to dispense inks into pre-sterilised containers or caps before working on a client. If inks require dilution only use **sterile** water and discard any leftover inks. Use sterile water to rinse equipment (for example, needles) during tattooing.

It is your responsibility to ensure you request a product quality data sheet (certificates of analysis or an equivalent statement) when purchasing inks from suppliers or directly from manufacturers to confirm that the product is safe and legal for use in Victoria. You should ensure, for each substance you intend to use, the tattoo ink is correctly labelled and does not contain anything that should not be used for tattoos.

Certain chemicals are specifically prohibited for use in tattoo inks under the Poisons Standard. The Poisons Standard can be accessed on the [Federal Register of Legislation](https://www.legislation.gov.au/Details/F2018L00625) <<https://www.legislation.gov.au/Details/F2018L00625>>.

You can prevent transmission of blood-borne viruses using standard precautions. Use an aseptic non-touch technique to set up the work area and equipment. At the end of a tattoo session, dispose of all



contaminated items, waste and leftover products. Wipe down all work surfaces and the client chair before setting up for the next tattoo (see [Routine cleaning of premises](#) p. 33).

Open all sterile items in front of the client to show them you are using sterile instruments. Check the chemical indicators for colour change and, if satisfactory, assemble the handpiece. Replace any sterile instruments or needles you accidentally touch or contaminate in any way, either before or during a treatment, with another sterile instrument or needle. If more ink or other items are required during a procedure, remove gloves and perform hand hygiene before dispensing or opening other items.

Ensure the client's skin is clean and free from infection, sores or wounds on or around the tattoo site. If the tattoo area needs to be shaved, use a new single-use safety razor for each client. Disinfecting skin prior to tattooing will also decrease the risk of skin infections (see [Preparation of the client's skin](#) p. 30). Dispense other products to be used on a client into smaller single-use containers or use a single-use spatula (see [Appropriate handling and dispensing of products](#) p. 31).

Under the Public Health and Wellbeing Regulations 2019 (r. 35), you must give the client accurate, written information about the transmission of infectious diseases associated with the process.

People who have tattoos, including cosmetic tattoos, cannot donate blood for four months after getting the tattoo. For more information see the [Australian Red Cross Blood Service website](http://www.donateblood.com.au/faq/tattoo) <<http://www.donateblood.com.au/faq/tattoo>>.

## Cleaning and reprocessing requirements for equipment used

**Table 15: Cleaning and reprocessing requirements for tattooing**

| Equipment      | Use of item   | When              | Recommendations  |
|----------------|---|-------------------|--|
| Razor          | Shave hair from tattoo area   | After each client | Single-use only. Dispose of into a sharps container.   |
| Stencils       | Outline design on skin  | After each client | Non-reusable: <ul style="list-style-type: none"> <li>• Dispose of into general waste.</li> </ul> Reusable: <ul style="list-style-type: none"> <li>• Wash in warm water and detergent.</li> <li>• Rinse in hot running water.</li> <li>• Dry with a lint-free cloth.</li> </ul>               |
| Skin markers   | Mark design onto skin   | After each use    | Single-use only. Dispose of into general waste.  |
| Rubber bands   | Steady the needle<br>Will become contaminated with blood during use | After each client | Single-use only. Dispose of into clinical and related waste.   |
| Ink wells/caps | Holds ink and will become contaminated with blood during use        | After each use    | Single-use is recommended. Dispose of into clinical and related waste.<br>If reusable: <ul style="list-style-type: none"> <li>• Wash in warm water and detergent.</li> <li>• Rinse in hot running water.</li> <li>• Dry with a lint-free cloth.</li> <li>• Package and sterilise.</li> </ul> |

| Equipment  | Use of item   | When              | Recommendations  |
|--|---|-------------------|--|
| Ink cap trays  | Holds ink caps and will become contaminated with blood during use                       | After each use    | Single-use is recommended. Dispose of into clinical and related waste.<br>If reusable: <ul style="list-style-type: none"> <li>• Wash in warm water and detergent.</li> <li>• Rinse in hot running water.</li> <li>• Dry with a lint-free cloth.</li> <li>• Package and sterilise.</li> </ul>   |
| Holders for needles, for example, tube, tip and grip | Holds needles that pierces skin   | After each client | Pre-sterilised single-use recommended. Dispose of into a sharps container.<br>If reusable: <ul style="list-style-type: none"> <li>• Wash in warm water and detergent.</li> <li>• Rinse in hot running water.</li> <li>• Dry with a lint-free cloth.</li> <li>• Package and sterilise.</li> </ul>   |
| Needles and needle bars                              | Pierce skin   | After each client | Pre-sterilised single-use only. Dispose of into a sharps container.  |
| Motors and clipcords                                 | Drives tattoo needle<br>Will become contaminated with blood during use                  | After each client | Contamination can be reduced with use of an impervious barrier (for example, a single-use plastic sleeve/sheath).<br>Remove sheath carefully after use to minimise transfer of any contamination to the handle. Dispose of into clinical and related waste.<br>Wipe over with cloth dampened with warm water and detergent.<br>Rinse by wiping with cloth dampened in hot water.<br>Dry thoroughly.<br>Wipe over with cloth dampened with 70 per cent alcohol solution and allow to dry. |
| Microblading or feathering devices                   | Used to apply semi-permanent tattoos to eyebrows<br>Will become contaminated with blood | After each client | Blade: <ul style="list-style-type: none"> <li>• Pre-sterilised single-use only. Dispose of into a sharps container.</li> </ul> Handle: <ul style="list-style-type: none"> <li>• If single-use, dispose of into clinical and related waste.</li> <li>• If reusable: <ul style="list-style-type: none"> <li>– Wash in warm water and detergent.</li> <li>– Rinse in hot running water.</li> <li>– Dry with a lint-free cloth.</li> <li>– Package and sterilise.</li> </ul> </li> </ul>     |

## Body piercing and other forms of body modification

Body modification is the deliberate altering of a person's physical appearance. Many forms of body modification have been practiced throughout history by many different cultures. Body piercing (for example, ear or nose piercing) is one of the most common forms of body modification.

Other forms of body modification include:

- **scarification** – cutting skin with a scalpel or laser to produce scarring. Foreign matter, such as clay or ash, may be inserted or rubbed into the wounds to achieve permanently raised welts or keloid scarring
- **branding** – using a hot or very cold branding iron to produce scarring
- **braiding** – cutting adjacent strips of skin (one end remains attached), braiding the strips of skin together, then reattaching the ends to the skin
- **beading** – implanting foreign objects beneath the skin, such as beads, rings or other shapes.

### Note:

It is against the law to:

- perform scarification, tongue splitting, branding, beading and intimate body piercing on anyone under the age of 18 years
- perform non-intimate body piercing on someone under the age of 16 years without the consent of a parent or guardian and the person to be body pierced, if the person is over the age of 10 years and has the capacity to consent
- allow a person under the age of 16 years to perform intimate body piercings.

See [Legislation](#) p. 12 for more information.

### Key points for business proprietors

- Use **aseptic non-touch technique** (p. 29).
- **Clean and disinfect** the client's skin before the procedure.
- Use **single-use** instruments where possible.
- Give the client a **fact sheet** about the potential risks associated with these procedures. Download these from the [department's website](https://www2.health.vic.gov.au/public-health/infectious-diseases/personal-care-body-art-industries/client-information-sheets) <<https://www2.health.vic.gov.au/public-health/infectious-diseases/personal-care-body-art-industries/client-information-sheets>>.

### Specific health-risk information

Common complications of body piercing and other body modification procedures include:

- localised or systemic infection
- excessive scarring (for example, keloid)
- excessive bleeding
- reactions to the material inserted for piercings or implantations.

You can significantly reduce the risk of infection by using aseptic non-touch technique and appropriate antiseptics of the skin before piercing or cutting the skin.

Using disposable single-use instruments also significantly reduces transmission of blood borne viruses.

To minimise the chance of the client having a reaction to the metal in body-piercing jewellery, use jewellery manufactured from surgical stainless steel (nickel free), titanium, niobium or similar inert metals.

Under the Public Health and Wellbeing Regulations 2019 (r. 35), you must give the client accurate, written information about the transmission of infectious diseases associated with the process.

People who have a body piercing may be ineligible to donate blood for up to four months. For more information see the [Australian Red Cross Blood Service website](http://www.donateblood.com.au/faq/piercings) <<http://www.donateblood.com.au/faq/piercings>>.

### Use of local anaesthetic

Topical anaesthetics like EMLA 5 per cent cream (lidocaine/prilocaine) are Schedule 2 poisons or Pharmacy Medicines. They can be bought at a pharmacy without a prescription. If you are using a topical anaesthetic, the client should buy their own tube from a pharmacist and use it as required.

Injectable anaesthetics, for example ropivacaine, are Schedule 4 poisons or 'Prescription Only Medicines'. Schedule 4 medicines can only be prescribed by a registered medical practitioner and be administered by a registered medical practitioner or a registered health practitioner (such as a nurse) under the instruction of a registered medical practitioner. Injectable anaesthetics cannot be used by non-medical proprietors and staff.

### Cleaning and reprocessing requirements for equipment used

**Table 16: Cleaning and reprocessing requirements for body piercing and body modification**

| Equipment  | Use of item                                       | When               | Recommendations  |
|--|---|--------------------|--|
| Needles, cannulas                                  | Pierce skin                                       | After each use     | Pre-sterilised single-use only. Dispose of into a sharps container.  |
| Jewellery  | Inserted into sterile tissues                     | Before each client | Pre-sterilised recommended.<br>If purchased as non-sterile, must be cleaned and sterilised before use.   |
| Spatulas, cotton, gauze, paper towels              | Materials used during body piercing/ modification | After each use     | Single-use only. Dispose of into clinical and related waste.   |
| Clamps, looped forceps, pliers and receiving tubes | Hold skin/tissue during piercing                  | After each client  | Single-use is recommended. Dispose of into clinical and related waste.<br>If reusable: <ul style="list-style-type: none"> <li>• Wash in warm water and detergent.</li> <li>• Rinse in hot running water.</li> <li>• Dry with a lint-free cloth.</li> <li>• Package and sterilise.</li> </ul> |
| Cartridges used with ear piercing guns             | Hold ear piercing jewellery                       | After each client  | Pre-sterilised single-use only. Dispose of into clinical and related waste.  |

| Equipment         | Use of item   | When              | Recommendations   |
|-------------------|---|-------------------|---|
| Ear piercing gun  | Used to hold cartridges with earrings, and pierce ears.   | After each client | Wipe over with cloth dampened with warm water and detergent.<br>Rinse by wiping with cloth dampened in hot water.<br>Dry thoroughly.<br>Wipe over with cloth dampened with 70 per cent alcohol solution and allow to dry.   |
| Vernier callipers | For taking measurements to determine jewellery size<br><br>Should only be used on clean unbroken skin | After each client | Wash in warm water and detergent.<br>Rinse in hot running water.<br>Dry with a lint-free cloth.<br>For genital or oral piercings: <ul style="list-style-type: none"> <li>• Single use is recommended. Dispose of into clinical and related waste.</li> </ul> or <ul style="list-style-type: none"> <li>• Wash in warm water and detergent.</li> <li>• Rinse in hot running water.</li> <li>• Dry with a lint-free cloth.</li> <li>• Package and sterilise.</li> </ul> |

## Colonic irrigation

Colonic irrigation is also known as colonics, colonic lavage, colon irrigation, high colonic or colon hydrotherapy. The practice involves cleansing the entire colon from the rectum to the caecum through the administration of water, herbal solutions, enzymes or other substances such as coffee.

Colonic irrigation differs from the enema currently used in the healthcare environment. Enemas use small amounts of electrolyte-based solutions to clean the bowel before surgery and to assist in faecal disimpaction procedures.

Colonic irrigation can be administered via an open or closed system. Both involve insertion of a catheter or speculum into the rectum and gravity or pressure-fed water to flush the contents of the colon. In an open system the catheter inserted is small and only used to flush water into the bowel. The water and faecal matter then drain away freely, usually into the sink of a specifically designed table. In a closed system a speculum is inserted, and a small catheter attached for water to flow into the bowel and a larger tube attached to drain away the water and faecal matter.

### Key points for business proprietors

- Seek **consent** of your local water authority before installing equipment.
- Use a **licensed plumber** to install equipment.
- Follow the manufacturer's **instructions** and recommended **maintenance procedures**.
- Colonic irrigation equipment must **not** be directly connected to mains water. This can be dangerous for the client.
- Clients should **not** be able to alter control settings once the procedure commences.
- Use **single-use tubing** where possible. Reusable tubing is difficult to clean, disinfect and sterilise.

## Specific health-risk information

### Equipment

Colonic irrigation equipment is a medical device. It should have an Australian Register of Therapeutic Goods (ARTG) inclusion number (listing or registration). You should have policies and procedures for safe operation in place, and you should follow the manufacturer's instructions, including maintenance procedures.

Under no circumstances should the colonic irrigation equipment be connected directly to a potable water supply system. A direct connection could result in a serious (and possibly fatal) injury to a client due to application of mains pressure, and if there is a sudden drop in mains water pressure, the potable water supply could become contaminated with faecal material.

The following practices are also important.

- Place controls so clients cannot alter settings once the procedure commences.
- Use suitable water filters (1–20 microns filtration) on all systems to reduce/remove particulate matter. Filter water before it enters the storage tank. Replace filter elements as per manufacturer's instructions and as necessary. (It may also be necessary to install a pump to ensure adequate water flow to the storage tank.)
- For a gravity-fed system, the minimum vertical distance between the top of the couch and the tank outlet spigot should be 650 millimetres. The maximum distance between the couch top and the upper level of water in the feed tank should be 1,300 millimetres.
- There should not be pumps, other pressure-enhancing devices or suction facilities on the client side of the tank. Mechanisms for regulating water temperature should be installed at the mains and the tank.
- It is recommended that single-use tubing be used wherever possible, as reusable tubing poses a challenge to cleaning processes. Cleaning processes can generate infectious droplets in the air (particularly given that tubing is difficult to sterilise). If equipment tubing needs lubrication, moistened each end with water before connection.
- If you use UV light, it should be fitted with screening to protect the client, because it can damage the skin and retina.

### Catheters

Catheters should be sterile and single-use only. You should only purchase items that are on the Register of Therapeutic Goods, and you should ask suppliers for the ARTG number.

Single-use tubing is recommended as per Section 2.7 (p. 18) of AS/NZS 4815:2006. Cleaning and sterilisation of tubing is problematic, so you should use single-use tubing.

Reprocessing reusable tubing can create infectious droplets in the air. Reusable tubing is difficult to clean and sterilise. It is hard to completely remove air from tubing. If air remains in the tubing, steam cannot penetrate the lumen and the tubing will not be sterilised.

### Plumbing/sewage disposal

You should seek the consent of the local water authority before you install any colonic system. Installation should conform with the standards of the Plumbing Industry Commission (Victoria) and Standards Australia (see below).

Show the following Australian Standards to a licensed plumber to ensure compliance.

- AS/NZS 3500.1:2015 Plumbing and drainage – Water services
- AS/NZS 3500.2:2015 (incl. Amdt 1:2017) Plumbing and drainage – Sanitary plumbing and drainage
- AS/NZS 3500.4:2015 Plumbing and drainage – Heated water services.

For practices that will be in areas where a non-potable water supply and/or non-mains sewage system is to be used, for example on a rural property with a private water supply and septic tank system, seek council advice before registration to ensure you comply with local requirements.

The following practices are also important.

- Treatment beds connected to either a water supply or sanitary plumbing system should be authorised and certified prior to being installed in a plumbing system.
- All plumbing should be easily accessible.
- The system should be odourless and prevent backflow to, and subsequent contamination of, mains water.
- A reduced pressure zone device should be fitted on the water supply line to the colonic equipment.
- Water authorities may also require a reduced pressure zone device to be fitted at the water meter outlet to contain any possible backflow within the property.
- The storage tank should be vented to atmosphere. Gravity-fed tanks create a physical air gap, known as a registered air break, to prevent backflow.
- The treatment bed should be equipped with non-return and pressure-reducing valves to prevent backflow of faecal material.
- Waste should be removed by the installation of flushing-floor waste in lieu of normal floor waste.
- All waste should be discharged to a sewer, and there should be approval for this connection.
- A pressure hose should be available to clean the system.
- Hot water installations should deliver water at the outlet of all sanitary fixtures used primarily for personal hygiene at a temperature to ensure scalding does not occur.
- Hot water is to be stored at 60 degrees Celsius to inhibit the growth of *Legionella* bacteria.

**Note:**

*Legionella* is not a transmission risk during colonic irrigation procedures, but it may be during tank cleaning if aerosols are present.

Water temperature should be regulated to normal body temperature to prevent thermal shock or scalding. The temperature of the water delivery should be 34–40 degrees Celsius and should never exceed 40 degrees Celsius. Normal body temperature (37.6 degrees Celsius) should be the guide.

A water-based lubricant in a single-use sachet is recommended to assist catheter insertion. If the client is positioning the catheter, then they should be provided with single-use gloves and moist wipes. Care should be taken to avoid cross-contamination.

Clients should seek medical advice before undertaking any colonic irrigation procedure. Potential risks for clients include:

- infection due to inadequately cleaned and disinfected or sterilised equipment
- infection due to equipment that permits backflow of faecal material to and from the water system
- trauma to the colon or exacerbation of bowel diseases
- thermal shock or scalding if regulation of the water temperature fails
- a reduced capacity to control bowel movements for a period of time after the procedure
- a change in bowel flora, which may lead to such problems as gastrointestinal infections.

The operator/therapist should wear appropriate PPE to avoid contamination of clothing or splashes to face and eyes (see [Personal protective equipment](#) p. 25).

**Disinfectants**

Disinfectants should be used in colonic irrigation premises for the couch, the external irrigation system and ensuite facilities due to the high risk of faecal contamination.

Use a disinfectant registered or listed with the TGA as a hospital-grade disinfectant that is effective against norovirus and *Clostridium difficile* spores. Sodium hypochlorite (bleach) at a minimum of 1,000 ppm is generally the best disinfectant for this purpose for routine disinfection of surfaces.

Sodium hypochlorite is corrosive on some materials, particularly metal. After the appropriate contact time required for disinfection (usually 10 minutes), you should rinse or flush surfaces or equipment to remove any bleach residue.

## Cleaning and reprocessing requirements for equipment used

**Table 17: Cleaning and reprocessing requirements for colonic irrigation**

| Equipment                       | Use of item  | When                        | Recommendations   |
|---------------------------------|--|-----------------------------|---|
| Catheter                        | Inserted into rectum to deliver water to bowel.                          | Immediately after use       | Pre-sterilised single-use only. Dispose of into clinical and related waste.   |
| Speculum                        | Inserted into rectum (closed system).                                    | Immediately after use       | Pre-sterilised single-use is recommended. Dispose of into clinical and related waste.<br>If reusable: <ul style="list-style-type: none"> <li>• Wash in warm water and detergent.</li> <li>• Rinse in hot running water.</li> <li>• Dry with a lint-free cloth.</li> <li>• Package and sterilise.</li> </ul> |
| Tubing                          | Deliver water to bowel.<br>Empties away bowel contents in closed system. | Immediately after use       | Pre-sterilised single-use only. Dispose of into clinical and related waste.   |
| Procedure table or couch        |  | After each client and daily | Wash with warm water and detergent.<br>Dry with a lint-free cloth.<br>Wipe over with a hospital-grade surface disinfectant.   |
| Equipment controls (if present) | See procedure parameters   | After each client and daily | Wash with warm water and detergent.<br>Dry with a lint-free cloth.<br>Wipe over with a hospital-grade surface disinfectant.   |
| Client toilet or shower         |  | After each client and daily | Wash with warm water and detergent.<br>Dry with a lint-free cloth.<br>Wipe over with a hospital-grade surface disinfectant.   |
| Linen                           | Assorted uses  | After each client           | Wash in hot water (70–80 degrees Celsius) and detergent.<br>Dry as required according to material type (clothes dryer on hot setting or air dry).   |



| Equipment               | Use of item                  | When   | Recommendations   |
|-------------------------|------------------------------|--------|---|
| External tank equipment |                              | Weekly | Wash with warm water and detergent.<br>Dry with a lint-free cloth.<br>Wipe over with a hospital-grade surface disinfectant.                     |
| Internal water tank     | Water storage for procedures | Weekly | Fill tank with 5,000 ppm (5 per cent) sodium hypochlorite solution.<br>Leave for 10 minutes.<br>Rinse thoroughly using two full tanks of water. |

# Part D: Occupational health and safety

## Quick guide for business proprietors

This quick guide provides an overview of the main points of occupational health and safety for your business.

The quick guide may not contain everything you need to know to meet your legal obligations.

Use the page references to find out more about each topic.

### **Provide a safe working environment (p. 75)**

It is your responsibility to provide a **safe** working environment for staff and clients.

### **Vaccination (p. 75)**

Staff who perform skin penetration and tattooing, or who clean instruments and equipment, should be **vaccinated for hepatitis B**.

Staff who perform colonic irrigation should be **vaccinated for hepatitis A**.

### **Exposure to blood or body fluids (p. 75)**

All staff need to know how to **prevent exposure** to blood and body fluids.

Staff also need to know what to do if they are exposed.

### **First aid (p. 76)**

All staff should be trained in first aid for the types of injuries that may occur in your business.

For example, if you provide waxing services, staff should know what to do if someone is burned by hot wax.

### **Chemicals (p. 76)**

You must store and use **chemicals** safely.

## Providing a safe work environment

You are responsible for providing a safe work environment to minimise risks to the health of employees, clients and other people entering the premises. The *Occupational Health and Safety Act 2004* and *Occupational Health and Safety Regulations 2017* set out the key principles, duties, rights and obligations of all employers and employees.

This involves providing:

- adequate staff training, including training in infection prevention and control
- properly maintained facilities and equipment, including personal protective equipment
- a suitably designed and clean workplace to minimise potential hazards, such as the safe storage of equipment and chemicals, sharps and other clinical and related waste.

This can be achieved through a good understanding of these guidelines and their application.

## Vaccination

Vaccination for hepatitis B is recommended for all staff involved in skin penetration and tattooing procedures, and for staff involved in cleaning instruments/equipment.

Hepatitis A vaccination is recommended for staff working in colonic irrigation premises.

Vaccination can be arranged through a general practitioner.

Further information on hepatitis A and B vaccination is available on the [department's website](https://www2.health.vic.gov.au/public-health/immunisation) <<https://www2.health.vic.gov.au/public-health/immunisation>>.

## Occupational exposure to blood or body fluids

The blood and body fluids of all persons are to be considered potential sources of infection, regardless of perceived risk.

Transmission of blood-borne viruses may result from a 'sharps' injury, that is, an injury from an instrument that breaks the skin, or 'splash' exposure to the eyes, mouth or onto broken skin.

The risk of acquiring hepatitis C, hepatitis B or HIV depends on the amount of blood/body fluid the person is exposed to, and the method of exposure (that is sharps injury vs splash exposure).

All staff need to know how to prevent exposure to blood and body fluids, and what to do in the event of a blood or body fluid exposure.

## Management of blood or body fluid exposures

### Intact skin

There is no evidence that blood-borne viruses can be transmitted by blood or body fluid contamination of intact skin.

If blood or body fluids come into contact with intact skin, wash the area thoroughly with liquid soap and warm water and dry with paper towel.

### Non-intact skin

If blood or body fluids come into contact with skin that is chapped, cut or abraded, or has dermatitis, or if accidental penetration (for example, a sharps injury) occurs, you should:

- Allow the wound to bleed (if a puncture wound) and wash the area with soap and warm water. There is no need to squeeze a puncture wound to promote bleeding.
- Thoroughly pat the area dry with paper towel.

- Cover the wound with a waterproof dressing.
- Apply firm pressure to control bleeding if required.

### **Mucous membranes (eyes/mouth)**

If blood or body fluids come into contact with mucous membranes, you should:

- for eyes, rinse gently with eyes open, using plenty of tap water or saline solution
- for the mouth, spit out the blood or body fluid, then rinse the mouth thoroughly and repeatedly with warm tap water.

### **Follow-up action**

The proprietor should have available a written procedure for follow up actions should an injury occur.

Report the incident to the proprietor or manager of the business immediately. An appointment should be arranged for you (as the recipient) to see a general practitioner.

You should also write down:

- The name of the exposed individual.
- The date and time of exposure.
- How the incident occurred.
- A description of the injury and treatment provided.
- The name and contact details of the individual who is the source of the blood or body fluid (if known).

A sample occupational exposure incident form can be found in [Appendix 3](#) p.92.

A general practitioner should evaluate all exposures as soon as possible for both the source individual and the person exposed.

## **First aid**

All premises should be aware of the types of injuries that may occur as a result of the procedures the business undertakes, for example burns due to hot wax or chemicals.

Staff should be appropriately trained to manage these types of injuries. You should provide easily accessible information on how to treat injuries.

Further information on first aid basics can be found at the Better Health Channel.

[First aid basics](https://www.betterhealth.vic.gov.au/health/conditionsandtreatments/first-aid-basics-and-drsabcd) <https://www.betterhealth.vic.gov.au/health/conditionsandtreatments/first-aid-basics-and-drsabcd>

[Burns and scalds](https://www.betterhealth.vic.gov.au/health/conditionsandtreatments/burns-and-scalds) <https://www.betterhealth.vic.gov.au/health/conditionsandtreatments/burns-and-scalds>

## **Use and storage of chemicals**

Many chemical products used in the hair, beauty, tattooing and skin penetration industries have the potential to harm staff and clients if they are not used appropriately.

It is beyond the scope of this document to provide advice about using and storing chemicals.

However, you should ensure you ask manufacturers or suppliers of chemicals for safety data sheets (SDS) relating to the safe handling, storage and first aid requirements for all chemical products used within the business.

All proprietors of hair, beauty, tattooing and skin penetration businesses should refer to these sheets for advice, and keep copies on the premises at the point of use.

If chemicals are decanted into other containers, these containers must be appropriately labelled.

## Ventilation

Part of your responsibility to provide a safe work environment includes appropriate ventilation to reduce the risk of exposure to hazardous chemicals.

An occupational health and safety risk assessment tool is provided by WorkSafe Victoria in the *Guide to the management of hazardous substances in the hairdressing and beauty industry*, edition 2, June 2017.

Use this assessment tool to determine additional controls required to minimise such risks.

You can download the document from the [WorkSafe website](https://www.worksafe.vic.gov.au/resources/management-hazardous-substances-hairdressing-and-beauty-industry)

<<https://www.worksafe.vic.gov.au/resources/management-hazardous-substances-hairdressing-and-beauty-industry>>.

Your business should also comply with the Australian Standards for ventilation and air conditioning in buildings.

- 'AS 1668.2-2012 The use of ventilation and air conditioning in buildings – Mechanical ventilation in buildings'
- 'AS 1668.2-2012/Amdt 1-2013 The use of ventilation and air conditioning in buildings – Mechanical ventilation in buildings'
- 'AS 1668.2-2012/Amdt 2-2016 The use of ventilation and air conditioning in buildings – Mechanical ventilation in buildings'.

## Part E: Glossary

The following definitions apply throughout these guidelines.

|                                    |  |
|------------------------------------|--|
| <b>antiseptics</b>                 | The elimination of microorganisms that cause disease by the use of chemical or physical methods.   |
| <b>antiseptic</b>                  | A chemical agent applied to living tissue/skin to reduce the possibility of infection.   |
| <b>aseptic</b>                     | Free from microorganisms that cause disease.   |
| <b>aseptic non-touch technique</b> | Work practices that reduce the risk of post procedure infections by preventing contamination of the equipment used for invasive procedures.  |
| <b>benchtop steam steriliser</b>   | A self-contained, portable, electrically heated machine that has an integral water storage reservoir, generates saturated steam at selected temperatures up to 134 degrees Celsius by an electrical heating unit within or on the sterilising chamber, and may be designed to dry wrapped items.   |
| <b>biofilm</b>                     | A complex structure that consists of colonies of bacteria and other organisms in a protective sticky coating. Biofilms adhere tightly to instruments/equipment and environmental surfaces and are not easily removed.  |
| <b>blood-borne virus</b>           | Blood-borne viruses are viruses that people may carry in their blood and can be spread from person to person through blood-to-blood contact. The most common blood-borne viruses are human immunodeficiency virus (HIV), hepatitis B and hepatitis C.  |
| <b>body fluids/substances</b>      | Blood, mucous, sweat, saliva, urine, ooze from a festering sore, tears, faeces.  |
| <b>calibration</b>                 | The comparison of a measurement system or device of unknown accuracy to a measurement system or device of a known accuracy, to detect, correlate, report or eliminate by adjustment any variation from the required performance limits of the unverified measurement system or device.   |
| <b>cleaning</b>                    | The removal of soiled matter (including organic material) and the reduction of the number of microorganisms from the surface of an item by a process such as detergent and water to the extent necessary for further processing or for intended use.   |
| <b>clinical waste</b>              | Waste generated in a clinical or similar setting (for example, body piercing activities) that has the potential to cause disease, injury or public offence. Examples of clinical and related waste include: human blood and body fluids other than urine or faeces; any body fluid, materials or equipment containing urine or faeces where there is visible blood; human tissue, including teeth contaminated with blood but not hair and nails; materials or equipment containing human blood or body fluids other than urine or faeces. |
| <b>commissioning</b>               | Obtaining and documenting evidence that equipment has been provided and installed in accordance with its specification and that it functions within predetermined limits when operated in accordance with the manufacturer's instructions.   |
| <b>contamination</b>               | The introduction of microorganisms or foreign matter to sterile or non-sterile materials or tissues.   |
| <b>critical instrument</b>         | Any instrument or item that comes into contact with sterile tissue and that must be sterile at the time of use.  |
| <b>detergent</b>                   | A substance that enhances the cleansing action of water (preferably warm/hot) or another liquid.   |

|                                     |   |
|-------------------------------------|---|
| <b>disinfect / disinfection</b>     | A process that reduces the number of viable organisms on an item to a level specified as appropriate for its intended further handling or use.  |
| <b>disinfectant</b>                 | A chemical agent that is applied to non-living objects to kill microorganisms.  |
| <b>drying cycle</b>                 | The stage in the steam steriliser cycle during which the items in the chamber are dried. This stage occurs immediately following the sterilisation stage, while the steriliser chamber remains sealed.  |
| <b>environmental health officer</b> | An authorised officer employed by either local government or the Department of Health and Human Services.   |
| <b>event-related sterility</b>      | <p>The application of stock storage based on events rather than on time. The continued sterility of stock is related to events that affect the packaging and contents, including:</p> <ul style="list-style-type: none"> <li>• the shelf life of the type of packaging materials used</li> <li>• the type of storage and handling conditions</li> <li>• possible damage to the packaging from contents such as sharp items</li> <li>• the likelihood of product material deterioration</li> <li>• packaging design</li> </ul> <p>The dating of sterile stock is to aid the rotation so older stock is used first. This reduces the time for which stock is on the shelf and reduces the opportunities for damage to the packaging due to poor storage conditions.</p> |
| <b>holding time</b>                 | The minimum time at a given temperature that has been established to destroy all microorganisms within the sterilisation load.  |
| <b>hollow devices</b>               | If a device is open at one end, it is considered hollow if the ratio of the cavity length to diameter is greater than 1. If a device is hollow at both ends, the ratio of cavity length to diameter must be greater than 2 to be considered hollow.   |
| <b>Hollow load Type A</b>           | Hollow ware devices with a narrow lumen where the ratio of cavity length to diameter is greater than or equal to 5.   |
| <b>Hollow load Type B</b>           | Hollow ware devices with a narrow lumen where the ratio of cavity length to diameter is greater than or equal to 1 and less than or equal to 5.   |
| <b>hygienic</b>                     | An environment in which protective measures have been taken to limit the spread of infectious diseases.   |
| <b>infection</b>                    | Invasion and multiplication of microorganisms in body tissue.   |
| <b>instrument</b>                   | An appliance, apparatus or tool (including a needle).   |
| <b>monitoring</b>                   | A programmed series of challenges and checks, repeated periodically and carried out according to a documented protocol to demonstrate that a process is reproducible and reliable.  |
| <b>mucous membrane</b>              | A layer of tissue which lines many body cavities and tubular organs and is continuous with the skin at various body openings, for example, eyes, nose and mouth.  |
| <b>non-critical instrument</b>      | Any instrument or item that only comes into contact with intact skin and not mucous membranes and only requires cleaning after each individual use, although low-level disinfection may also be appropriate.  |
| <b>occupational exposure</b>        | When a person is exposed to something harmful in fulfilling the duties of his or her job.   |

|                                   |  |
|-----------------------------------|--|
| <b>parametric release</b>         | The declaration of a product as sterile, based on physical or chemical (or both) process data, rather than on sample testing or biological indicator results—for example, the time, temperature and pressure relationships in steam sterilisation.   |
| <b>penetration time</b>           | The time required for every part of a load to reach the selected sterilising temperature after that temperature has been reached in the sterilising chamber.   |
| <b>pressure</b>                   | A steady force exerted on or against an object by something in contact with it, measured in these guidelines by kilopascals.   |
| <b>proprietor or occupier</b>     | The person or company to which the premises are registered under the Public Health and Wellbeing Act 2008. This may be the owner of the business, or the actual premises. The proprietor or occupier is the legal entity responsible for all practices occurring within the premises.  |
| <b>related waste</b>              | Wastes associated with the healthcare industry as well as other premises such as tattoo artists. It includes wastes made up of or contaminated with chemicals and other pharmaceutical substances. For example, pharmaceuticals that have reached their use-by date, such as antiseptic solutions containing ethyl alcohol and/or chlorhexidine. All pharmaceutical waste must be incinerated. Proprietors or occupiers should obtain suitable containers from an approved waste disposal contractor who will arrange incineration. Disposal via the sewer or general waste IS NOT an approved method of disposal. |
| <b>reusable instrument</b>        | An instrument designated or intended by the manufacturer as suitable for reprocessing and reuse. It is not a device that the manufacturer designates or intends for single-use only.   |
| <b>safety data sheet</b>          | A document specifying the properties of a substance, its potential hazardous effects for humans and the environment and the precautions necessary to handle and dispose of the substance safely.   |
| <b>semi-critical instrument</b>   | Any instrument or item that comes into contact with non-intact skin or mucous membranes. Sterilisation of these instruments is preferred where possible. If sterilisation is not possible (that is, item cannot withstand process) then high-level disinfection is required as a minimum.  |
| <b>sharp</b>                      | Any object that is capable of penetrating the skin or mucous membranes. Examples include: needles, scalpels, glass ampoules (when broken/opened) and other sharp instruments that have the potential to penetrate the skin.  |
| <b>single-use</b>                 | An instrument or article designed and labelled for one use only. It must be immediately discarded after use.   |
| <b>skin penetration procedure</b> | Any process involving the piercing, cutting, scarring, branding, scraping, puncturing or tearing of the skin or mucous membrane.   |
| <b>soil</b>                       | Visible dirt or debris that may protect, harbour or assist the growth of microorganisms. It may include organic matter, inorganic matter, blood, tissue and other biological material.   |
| <b>solute</b>                     | A substance dissolved in a mixture or solution   |
| <b>solution</b>                   | A mixture of one or more solutes dissolved in a solvent  |
| <b>solvent</b>                    | The substance in which a solute dissolves to produce a solution  |
| <b>spore</b>                      | A minute, typically single-celled, reproductive unit characteristic of lower plants, fungi, protozoans and bacteria capable of giving rise to a new individual without sexual fusion. Bacterial spores are highly durable and can germinate after years of dormancy.   |



|                              |  |
|------------------------------|--|
| <b>sterile</b>               | The state of being free from viable microorganisms, including bacterial spores   |
| <b>sterilisation</b>         | The validated process used to render a product free of all forms of viable microorganisms  |
| <b>sterilisation process</b> | A series of actions or operations needed to achieve the specified requirements for sterility.  |
| <b>sterilisation time</b>    | The total time of the sterilisation stage after the load in the sterilising chamber has reached sterilising conditions (penetration time plus holding time plus safety factor)   |
| <b>sterilising agent</b>     | The medium used for the sterilising process. For the purpose of these guidelines the sterilising agent is steam under pressure.  |
| <b>temperature</b>           | The degree or intensity of heat under pressure in a substance or object. It is measured in these guidelines by degrees Celsius. Sensible heat is the quantity of heat that is required to raise the temperature of water to boiling point. Latent heat is the additional heat that is absorbed when boiling water is converted to steam at the same temperature (100 degrees Celsius at atmospheric pressure). |
| <b>validation</b>            | The documented procedure for obtaining, recording and interpreting the results required to establish that a process will consistently yield a product complying with predetermined specification (see AS/NZS 4815:2003 appendix F)   |
| <b>weight/weight (w/w)</b>   | Number of grams of solute per 100 grams of solution  |
| <b>weight/volume (w/v)</b>   | Number of grams of solute per 100 millilitres of solution  |
| <b>volume/volume (v/v)</b>   | Number of millilitres of solute per 100 millilitres of solution  |

# Part E: Appendices

## Appendix 1: Ultrasonic cleaners

### Ultrasonic cleaner method

Use the following method for ultrasonic cleaning.

1. Fill tank with water (temperature is not critical) and add measured amount of recommended detergent for ultrasonic use. Use only a detergent recommended by the manufacturer because others may limit the effectiveness of the ultrasonic cleaner.
2. Operate the machine for a short time to degas the solution.
3. Ensure any gross contamination is first wiped or rinsed off instruments.
4. Dismantle or fully open items to ensure all parts are present and to facilitate cleaning.
5. Place the instruments in the machine's basket and submerge basket in the water tank.
6. Close the lid and commence the cycle (for length of cycle refer, to the manufacturer's instructions).
7. Keep the lid on during the operation to prevent aerosols and splashing.
8. Remove the basket with the instruments after the specified time and rinse under warm to hot running water.
9. Dry items in a drying cabinet or with a lint-free cloth. Do not allow items to 'air-dry'.
10. Visually inspect items for cleanliness.
11. Do not reassemble the items before thermal disinfection or sterilisation.

Brush cannulated items thoroughly and rinse them before placing them into the ultrasonic tank. Ensure air is not trapped inside the lumen.

Brush items again on removal (using a clean brush) to remove loosened debris. Ultrasonic cleaners do not sterilise or disinfect instruments, but they provide a safe and effective means of cleaning most reusable instruments before sterilisation.

#### **Note:**

Mechanical shaking can blunt fine points on instruments if they bump against the sides of the basket/ultrasonic cleaner.

### Maintenance and monitoring of ultrasonic cleaners

Ultrasonic cleaners should be operated and maintained according to the manufacturer's instructions. Ultrasonic cleaners should comply with 'AS 2773.1–1998 Ultrasonic cleaners for health care facilities, Part 1: Non-portable' and with 'AS 2773.2–1999 Ultrasonic cleaners for health care facilities, Part 2: Benchtop'.

Check and clean base plate, gaskets, water strainers and filters daily. Conduct a performance test (follow manufacturer's recommendations) daily to check the transducer function (for example, the aluminium foil test). Document results of the daily performance test. An unsatisfactory result indicates that the ultrasonic cleaner is not functioning at maximum efficiency, and it should not be used until it has been serviced.

## Appendix 2: Steam sterilisers and the sterilisation process

### Types of steam sterilisers

Sterilisers are classified according to the types of cycles they can run. There are three different types of sterilisers: Type N, S and B. They have sterilisation cycles that are linked to their intended use. That is, the type of cycle and the type of instrument being sterilised. Some more advanced sterilisers are capable of switching modes and run different classes of cycle. If a steriliser can switch modes, take care to ensure you use the correct cycle for the instruments being sterilised.

#### Type N cycles

These cycles do not have an active drying cycle. They are used for sterilising unwrapped solid (that is, non-lumened and non-porous) items.

Instruments sterilised in this type of cycle are intended for immediate use (which is not recommended) or for non-sterile storage. They can be used for items that need to be sterilised after use, but do not need to be sterile at the time of use.

#### Note:

We do not recommend using sterilisers without a drying cycle, as wrapped items cannot be processed.

#### Type S cycles

Sterilisers with Type S cycles have an active drying cycle. They are capable of sterilising unwrapped solid items, and at least one of the following:

- porous items
- Hollow load Type A or B (see Hollow load Type A or B [Glossary](#) p. 79)
- single and double layer wrapped items.

The following sterilisers are capable of providing Type S cycles:

- gravity or downward displacement with active drying cycle
- purge under pressure (assisted air removal)
- single vacuum pulsed (pre-vacuum, preliminary vacuum, vacuum assisted)
- multiple vacuum pulse (but not Type B cycles).

#### Type B cycles

These types of cycles are capable of sterilising:

- all wrapped (single and double) and unwrapped items
- hollow items that do not exceed the specifications of a Hollow load Type A
- solid and porous items.

Type B cycles are suitable for sterilising very long, narrow, cannulated/lumened devices.

Sterilisers with a drying cycle are recommended as these can process packaged items. Premises reprocessing cannulated or lumened instruments or equipment require sterilisers with Type B or S cycles.

Sterilisers should have a sterilisation cycle process recorder/printer that monitors cycle parameters because this saves time during the sterilisation process. If a process recorder printer is not fitted, then every sterilising cycle should be monitored every 10 seconds and the time, pressure and temperature recorded. Existing sterilisers without process recorder/printers are not recommended and should be upgraded or replaced to ensure automatic parameter (time/temperature/pressure) monitoring and a permanent cycle record.

## Packaging of items to be sterilised

The purpose of packaging or wrapping items for sterilisation is to provide an effective barrier against sources of contamination during storage and to allow the aseptic removal of the contents at the time of use.

The principles of packaging are as follows.

- Packaging of instruments for sterilisation should be undertaken in a clean area, preferably dedicated to this purpose.
- Always perform hand hygiene before packaging items to reduce the risk of contamination prior to sterilisation. Do not handle cleaned items or packaging materials after recent use of a hand cream/lotion; wash hands first.
- Packages should not be overfilled.
- Hollowware (bowls) should be packaged separately from instruments, with the opening facing the paper side of the laminate/paper packaging (pouches) to allow air to escape.
- Items should not be too heavy for the type of packaging used, because they may break the package, particularly if they are also sharp.
- The tips of sharp items should be protected to maintain sharpness and to prevent damage to packaging. Tip protectors that are steam penetrable are readily available.
- Items with ratchets or toothed tip clips should not be sterilised in the locked position. Leave items open to allow steam to penetrate all surfaces.
- Suitable fully perforated instrument trays may be used. Instrument trays should be inserted into the package with the contents clearly visible through the laminate side of the packaging.
- If drapes are used, then they should be single-use and packaged separately from all other items. Sterile single-use drapes are available commercially.

Once packaged, care should be taken to keep these items separate from sterile items: they should be stored in a separate, clearly labelled cupboard or covered container in a dust and moisture free environment. Best practice is always to sterilise items as soon as possible after packaging.

### Packaging materials

The type of packaging chosen will depend upon the:

- type of steriliser used
- size and contents of the packaging system (for example, laminate pouches come in a limited range of sizes)
- type of reusable instrument/equipment to be placed into packaging.

Do not use rubber bands around packages (or items within packages), because air/moisture will be trapped during sterilisation. The use of rubber bands to hold sterile packages together can cause crinkling and creasing that can weaken the paper packaging and compromise sterility.

If the integrity of a sterilised package is compromised, then the items should be completely reprocessed, commencing with the cleaning process. Packages should not be re-labelled and re-sterilised.

### Labelling

Packaging should be dated (date of sterilisation) and labelled prior to being sterilised. A self-adhesive label, permanent felt-tipped marker or rubber stamp may be used to label packaging. Each item being sterilised should have an identifying code for tracing steriliser faults if required. This code should be recorded on the sterilisation monitoring record.

Do not use a sharp pen (for example, ballpoint pen) because it will damage the packaging material. Water-based ink pens should not be used, because they will 'run' during sterilisation.

## Sealing packaging

The purpose of sealing is to maintain pack integrity. You can use self-sealing pouches, heat sealers or steriliser indicator tape. Methods that compromise the integrity of the pack must not be used.

If using steriliser indicator tape to seal a package, it should be specific to the type of steriliser and compatible with the packaging material used. Fold the opening of a non-self-seal bag/pouch two or three times before sealing. The indicator tape should be long enough to completely seal the front with a small fold to the back.

A heat-sealing unit may be used for sealing both laminate/paper and paper bags.

Check the package seal before and after sterilisation.

Do not use staples, string, non-adhesive tape, masking tape and elastic bands as sealing agents.

## Loading the steriliser

Correct loading of the steriliser is essential for effective sterilisation.

Correct loading techniques:

- permit efficient air removal from the chamber
- allow total steam penetration and saturation of all items
- allow condensate to drain
- assist drying
- reduce damage to packaging.

In effect, correct loading maximises efficient steriliser use. Items should not exceed the boundaries of the loading tray within the chamber and should not touch the walls of the chamber (this will bring them into contact with condensate on the chamber walls).

Tilt hollowware (bowls) on their side to permit drainage of both air and condensation during the sterilisation process. Load linen so the layers are vertical for efficient air removal and steam penetration. Do not load hollowware or instrument packages above linen, because any condensation will wet the linen/packaging, making it difficult for steam to penetrate the linen/packs and sterilise the items.

Position packages of laminate pouches or paper bags on their edge, with each package surface being paper to laminate. Use a rack to separate bags and pouches. Do not place too many packages together, because air removal and steam penetration may be compromised. They may be laid flat on the loading tray in a single layer with the paper side downwards on the tray surface to enable air removal and steam penetration.

## Sterilisation cycle parameters

Follow the manufacturer's instructions for steriliser use, for example only using distilled water. Each steriliser is designed to achieve specific sterilisation cycle parameters (time/temperature/pressure) that should not be altered without the manufacturer's agreement.

## Processing time

The total processing time for a load includes 'penetration time' plus 'holding time'. The holding time is the time the whole load must be held at the sterilising temperature (see [Table 18: Time / temperature / pressure relationships \(parameters\)](#) p. 86). The holding time includes a safety factor. Penetration time is the time taken for all parts of the load (inside the packaging) to reach the required sterilising temperature. All times and temperatures are based on the assumption that the items within the chamber are completely clean.

## Penetration time

Penetration time is determined against the most difficult to sterilise package and the most difficult to sterilise load that the business intends to sterilise. Determining penetration time should be conducted by a service technician or suitably qualified person. Details of this process will need to be documented.

## Holding time

The holding time is the time a load must be held at the sterilising temperature. The table below indicates required holding times according to temperature and pressure. All times and temperatures are based on the assumption that items being sterilised are completely clean.

**Table 18: Time / temperature / pressure relationships (parameters)**

| Temperature (°C) | Pressure (kPa) | Pressure (Mb) | Pressure (psi*) | Holding time (minutes) |
|------------------|----------------|---------------|-----------------|------------------------|
| 121              | 103            | 1030          | 15              | 15                     |
| 126              | 138            | 1380          | 20              | 10                     |
| 132              | 186            | 1860          | 27              | 4                      |
| 134              | 203            | 2060          | 30              | 3                      |

Source: AS/NZS 4815:2006

\* psi = pounds per square inch

## Monitoring the sterilisation cycle

To ensure sterility, you should comply with performance testing and cycle monitoring as per AS/NZS 4815:2006. The selected cycle parameters, that is temperature, steam pressure and time, must be monitored and evidence provided that they have been met. There are three methods for monitoring the sterilisation cycle.

- mechanical/physical indicators, that is, time and temperature monitoring, either manually or by automatic printout or computerised data logger
- chemical indicators
- biological/enzymatic indicators.

### Mechanical/physical monitoring

All sterilisers should produce evidence that the selected sterilisation cycle parameters have been met. This may be via a process data logger or printer. Cycle parameters must be checked at the end of each cycle to ensure all parameters have been met. Results of the cycle (pass/fail) must be entered into the steriliser log.

If a process recorder printer or data logger is not working (for example, awaiting repairs to a faulty data logger or printer), then every sterilising cycle should be monitored every 10 seconds and the time, pressure and temperature of every cycle recorded. Existing sterilisers without process recorder/printers are obsolete and should be upgraded or replaced to ensure automatic parameter (time/temperature/pressure) monitoring and a permanent cycle record.

## Chemical indicators

Chemical indicators are used in addition to mechanical/physical monitoring as part of the routine process for monitoring the sterilisation cycle. They are designed to monitor one or more sterilisation process parameters for the purpose of detecting equipment malfunction or sterilisation process failure.

Chemical indicators are divided into six classes, and various indicators are available (see Table 19: Classes of chemical indicators and their use below). The higher the class, the more information and specificity of the chemical indicator.

Chemical indicators are not to be used as a substitute for a permanent record of the sterilisation process (as per mechanical/physical monitoring). The exposed indicator may alter with time (for example, it may fade) and is not reliable for record-keeping. The result of the chemical indicator should be recorded into the steriliser log.

The manufacturer's instructions should be followed when using chemical indicators. You should talk to the manufacturer (of both steriliser and indicator) about the best indicator to use, taking into account the types of item being sterilised, the type of packaging and the type of steriliser being used.

Chemical indicators should be used according to their classification, and a chemical indicator failure should be investigated to establish the cause of the failure of the sterilisation cycle before continuing to use the steriliser. Items from a sterilisation cycle with a failed chemical indicator should be re-cleaned and re-packaged before being re-sterilised.

**Table 19: Classes of chemical indicators and their use**

| Class   | Test for                      | Example of indicator                | How used  | When used   |
|---------|-------------------------------|-------------------------------------|---|---|
| Class 1 | Evidence of a process         | Indicator tape                      | With a single item—external indicator usually integral to the packaging   | <ul style="list-style-type: none"> <li>On every pack in every load</li> <li>On the tray of every unwrapped load</li> </ul>  |
| Class 2 | Specific tests of the process | Air removal or Bowie Dick type test | Specific tests as per AS/NZS 4187:2014  | To check performance of steriliser (usually daily prior to use)   |
| Class 3 | A single specific parameter   | Temperature                         | For one critical parameter essential to the sterilisation process   | <ul style="list-style-type: none"> <li>On every pack in every load</li> <li>On the tray of every unwrapped load</li> </ul>  |
| Class 4 | More than one parameter       | Temperature and time                | For two or more critical parameters essential to the sterilisation process  | For extra assurance of correct sterilisation parameters.  |
| Class 5 | Integrating indicators        | Time, temperature and moisture      | React to all critical parameters over a specified range of sterilisation cycles, based on stated microorganism inactivation | <ul style="list-style-type: none"> <li>To provide high-level assurance of successful sterilisation cycle</li> <li>May be used in the absence of a printout</li> </ul> |

| Class   | Test for             | Example of indicator                                | How used  | When used  |
|---------|----------------------|---|---|--|
| Class 6 | Emulating indicators | Cycle verification (134°C for 3.5 minutes in steam) | React to all critical parameters over a specified range of sterilisation cycles, based on the steriliser settings | For all loads when: <ul style="list-style-type: none"> <li>• using an 'on-loan' steriliser</li> <li>• awaiting validation of new steriliser or recently repaired steriliser</li> <li>• using a steriliser without a printer</li> </ul> |

Ref: AS/NZS 4815:2006

### Biological/enzymatic indicators

This type of indicator monitors the microbial killing power of the sterilisation process.

Biological/enzymatic indicators may include bacterial spores, bacterial spores coated with an enzyme preparation, or enzymes extracted from bacterial spores. For steam sterilisation, the preferred test organism is *Geobacillus stearothermophilus*.

Biological/enzymatic indicators should be used:

- after installation of a steriliser
- after major repairs
- as part of a validation procedure
- to investigate cycle failures.

Biological indicators require incubation (to look for growth), whereas enzymatic indicators do not require incubation (the indicator will change colour with the drop of a solution after the cycle is completed).

Failures (that is, when growth is detected) should be investigated before continued use of the steriliser. Items from a sterilisation cycle process with a failed biological/enzymatic indicator must be completely reprocessed (that is, re-cleaned, re-packaged and re-sterilised).

Incubation of biological/enzymatic indicators should be conducted according to the manufacturer's instructions (incubation kits are available from manufacturers). An indicator not exposed to the sterilisation process should also be incubated as a control for the exposed biological/enzymatic indicator. A permanent record of these results should be kept on file.

### Unloading the steriliser

#### Drying cycle

Once drying stage of the cycle is complete, the load should be removed immediately from the chamber and visually inspected to ascertain that the load is dry, that the indicators used have changed to the required colour and that the seals are intact. Unpackaged items should not be directly handled, because this would render the item unsterile. All other parameters (time, temperature, pressure) should be checked, then recorded and signed as correct by the person removing the load. This is referred to as a parametric release.

Packaged items that are still damp at the end of the drying stage should not be considered sterile and should be fully reprocessed. Check both cycle parameters and the method of chamber loading to ascertain the cause of cycle failure. The number of items per load should be limited to allow the sterilising cycle to work effectively.



Items should be placed in an area where disturbance is minimal, to cool down. Forced cooling is not permitted because it will compromise the integrity of the item and its packaging. Items should not be placed directly onto solid surfaces during this cooling phase, because condensation will result from vapour still inside the package. Wet packaging, dropped items or non-intact seals mean the item cannot be considered sterile and should be fully reprocessed.

**Without a drying cycle**

Items processed without a drying cycle will be non-wrapped. Removal of these items will depend on whether the item is intended for immediate use or for storage and later use. Items for immediate use as sterile items should be removed using sterile gloves. Items for storage should be dried with a single-use lint-free cloth before being stored. It should be noted that unpackaged, stored items should not be used as sterile items and should be reprocessed prior to use if required to be sterile for use. Parameters (time, temperature, pressure) should be checked, then recorded and signed as correct by the person removing the load.

**Storage of reprocessed items**

All items must be stored in a manner that maintains their level of reprocessing. Sterilised packaged items should be stored in a way that will prevent contamination and damage to packaging. Storage may be in cupboards with close-fitting doors and smooth washable surfaces, or in washable plastic containers with close-fitting lids. Cupboards and containers should be moisture, dust, insect and vermin free, and used only for sterile items. Cupboards should be cleaned and dried weekly, and the cleaning process should not compromise sterility of the item.

Instruments must not be stored in disinfectants or under ultraviolet lamps before or after any form of reprocessing.

**Table 20: General criteria for reprocessing and storage of instruments and equipment**

| Level of risk | Storage   |
|---------------|---|
| Critical      | Wrapped sterile items must be stored and handled in a manner that: <ul style="list-style-type: none"> <li>• maintains the integrity of the packaging</li> <li>• prevents contamination from any source.</li> </ul> Items to be stored unwrapped must be: <ul style="list-style-type: none"> <li>• subjected to the full cleaning and sterilisation process before being stored</li> <li>• cleaned and resterilised immediately prior to use.</li> </ul> Items must not be stored in ultraviolet light cabinets or in disinfectants. |
| Semi-critical | If unwrapped store in clean, dry, dust-free, dedicated drawers or containers to protect them from environmental contamination.<br>Do not leave instruments soaking in disinfectant.   |
| Non-critical  | Store in a clean, dry, dust free place to prevent environmental contamination.  |

Source: AS/NZS 4815:2006

Ultraviolet cabinets are not suitable storage places. The ultraviolet rays act only on surfaces that they contact, and they damage packaging compromising sterility. Cardboard boxes are not suitable containers for storage of sterile items because they are porous, cannot be cleaned and may harbour harmful microorganisms. Items purchased sterile from commercial sources require similar storage conditions to those items sterilised in-house.

The shelf life of sterile stock is event-related (see event-related sterility [Glossary](#) p. 79). Influential factors on shelf life of sterile stock include the shelf life of the type of packaging material used (as per manufacturer's recommendation), the type of storage and handling conditions (that is, the likelihood of product material deterioration and package design).

Ensure the oldest stock is used first. A sterile stock rotation system (for example place most recently sterilised items at the back of the storage container and only use stock from the front) should be implemented.

Factors that compromise sterile stock include incorrect cleaning procedures in storage areas, the presence of moisture and condensation, climatic extremes (that is temperature and humidity), excessive exposure to sunlight or other sources of ultraviolet light, vermin or insects, inappropriate packaging materials, incomplete sealing of packaging, the presence of sharp objects or rough handling causing damage, and incorrect handling during transportation.

Sterile stock should not be stored close to water sources (for example near sinks and hand basins) as water splashes onto sterile stock will render it 'unsterile'. Excessive or rough handling and the use of rubber bands or other items that may damage packaging should not be used as these too will render stock unsterile.

## **Monitoring, validation and maintenance of sterilisers**

### **Performance monitoring of sterilisers**

Sterilisers require commissioning on installation before being used. Commissioning involves testing the steriliser cycle parameters for performance on-site. Performance testing or validation (see validation [Glossary](#) p. 81) of the sterilising cycle parameters should be undertaken on installation, after routine servicing, after major repairs and when validating steriliser loads and packaging materials. Routine calibration testing should be performed at least every six months.

Monitoring of the sterilising process includes the cycle parameters, chemical and/or biological indicators results, load contents and number, date and time as previously discussed (see [Monitoring the sterilisation cycle](#) p. 86).

Sterilisers may require leak, steam penetration and air removal tests between validations (for example a Bowie-Dick-type test). These should be conducted in accordance with the manufacturer's recommendations.

### **Maintenance of sterilisers**

Routine daily/weekly/monthly/quarterly scheduled maintenance as per the manufacturer's recommendations must be performed as appropriate by trained staff and service personnel.

Loading trays should be cleaned daily and the steriliser cleaned when cool enough to permit the chosen cleaning agent to work efficiently and to prevent occupational health and safety hazards. The chamber drain should be kept clear and the recording device should function correctly. All gauges should be accurate, and the door gasket should be intact.

### **Validation of steriliser loads**

Validation is required on commissioning (installation) prior to use and according to the manufacturer's standards for performance. Validation is performed to evaluate the reliability of the sterilisation process and must be documented. It includes identification of the steriliser, the process parameters (time, temperature, pressure), steriliser chamber characteristics (such as hot and/or cold spots), the types of item(s) being routinely sterilised, and details of the cleaning and packaging processes used with the items being sterilised.

Three successful, consecutive and identical loads are required for a demonstrated validated cycle, although routine monitoring of the steriliser cycle is still required. Validation should be repeated if changes occur in the type of packaging used, major servicing of the steriliser is performed, the package contents are substantially changed, or the routine load or cycle parameters are changed.

### **Records**

Results of all commissioning, validation and monitoring (daily and for each load) must be documented and maintained for a minimum period of 12 months. This also applies to other equipment that requires regular testing to confirm correct functioning and maintenance (for example ultrasound cleaner, heat sealing unit).

## Appendix 3: Sample occupational exposure for blood-borne virus incident form

| <b>Recipient to complete this section</b>   |                          |
|---|--------------------------|
| <b>First Aid</b>  |                          |
| <p>Sharp (penetrating) injury—wash immediately with soap and water (no need to squeeze). Apply a waterproof dressing.</p> <p>Splash with blood or body fluid:</p> <ul style="list-style-type: none"> <li>Eyes: rinse gently with eyes open, using plenty of tap water or saline solution</li> <li>Mouth: spit out the blood or body fluid, then rinse the mouth thoroughly and repeatedly with warm tap water</li> <li>Non-intact skin wash with warm tap water and soap</li> </ul>   |                          |
| <p><b>Details</b></p> <p>Skin puncture <input type="checkbox"/>      Splash to eye <input type="checkbox"/>      Splash to mouth <input type="checkbox"/>      Splash to non-intact skin <input type="checkbox"/></p> <p>Date of injury: ____/____/____      Time: ____:____ AM/PM</p> <p>Did you perform First Aid immediately?      Yes <input type="checkbox"/>      No <input type="checkbox"/></p> <p>If not immediately, how soon after: _____</p> <p>If sharps injury causing skin puncture, had the device/needle been used on a client?</p> <p style="padding-left: 40px;">Yes <input type="checkbox"/>      No <input type="checkbox"/> there is no risk of blood borne virus transfer (you are safe)</p> <p>Describe how did the injury occurred:</p><br><p>What your GP will want to know:</p> <ul style="list-style-type: none"> <li>The details of the injury (as described above) and what first aid was performed</li> <li>Your hepatitis B immunisation status</li> <li>The source name and contact details</li> </ul> |                          |
| <b>Proprietor/Manager to complete this section</b>  |                          |
| <b>Action</b>   | <b>Complete (tick)</b>   |
| Arrange (or assist) the recipient in making an appointment with a GP (preferably within 2 hours if skin puncture).  | <input type="checkbox"/> |
| Explain what happened to the client, request they provide name and contact details. (The GP may contact them to discuss the incident.)  | <input type="checkbox"/> |
| Investigate the event and identify any unsafe work practices or workplace risks leading to the injury.  | <input type="checkbox"/> |
| Comments:   |                          |

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## Victorian legislation

*Drugs, Poisons and Controlled Substances Act 1981*

Drugs, Poisons and Controlled Substances Regulations 2017

*Occupational Health and Safety Act 2004*

Occupational Health and Safety Regulations 2017

*Public Health and Wellbeing Act 2008*

Public Health and Wellbeing Regulations 2019

*Summary Offences Act 1966*

## Australian Standards

AS 1668.2-2012 The use of ventilation and airconditioning in buildings – Mechanical ventilation in buildings

AS 1668.2-2012/Amdt 1-2013 The use of ventilation and airconditioning in buildings – Mechanical ventilation in buildings

AS 1668.2-2012/Amdt 2-2016 The use of ventilation and airconditioning in buildings – Mechanical ventilation in buildings

AS 2773.1-1998 Ultrasonic cleaners for health care facilities – Non-portable

AS 2773.2-1999 Ultrasonic cleaners for health care facilities – Benchtop

AS 3816:2018 Management of clinical and related wastes

AS 4031:1992 Non reusable containers for the collection of sharp medical items used in health care areas

AS 4031:1992/Amdt 1-1996 Non reusable containers for the collection of sharp medical items used in health care areas

AS/NZS 4381:2015 Single-use face masks for use in health care settings

AS/NZS 1715:2009 Selection, use and maintenance of respiratory protective devices

AS/NZS 1716:2012 Respiratory protective devices

AS/NZS 3500.1:2015 Water Services

AS/NZS 3500.2:2015 Sanitary and Drainage

AS/NZS 3500.4:2015 Heated Water Services

AS/NZS 4011.1:2014 Single-use medical examination gloves – Specification for gloves made from rubber latex or rubber solution

AS/NZS 4011.2:2014 Single-use medical examination gloves – Specification for gloves made from poly(vinyl chloride)

AS/NZS 4146:2000 Laundry practice

AS/NZS 4173:2018 Safe use of lasers and intense light sources in health care

AS/NZS 4179:2014 Single-use sterile rubber surgical gloves – Specification

AS/NZS 4261:1994 Reusable containers for the collection of sharp items used in human and animal medical applications

AS/NZS 4261:1994/Amdt 1:1997 Reusable containers for the collection of sharp items used in human and animal medical applications

AS/NZS 4381:2015 Single-use face masks for use in health care

AS/NZS 4815:2006 Office-based health care facilities—Reprocessing of reusable medical and surgical instruments and equipment, and maintenance of the associated environment

AS/NZS IEC 60825.14:2011 Safety of laser products Part 14: A user's guide