**[Insert Practice Name]**

**Infection Control Manual**

**[Insert date created or date of last review]**

This manual is designed to assist dental practices in implementing and maintaining high standards of infection control, in line with national infection control guidelines and the Australian Safety and Quality Goals for Health Care.

Practitioners should always use their judgement as to acceptable practices within the dental surgery for each patient and staff member.

ADA Inc acknowledges the contributions of the Infection Control Committee of the Australian Dental Association Victorian Branch Inc. whose 2005 documents have been adapted to form the basis for this manual.

Australian Dental Association

Infection Control Manual

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Disclaimer

The routine work practices outlined in this manual are designed to reduce the number of infectious agents in the dental practice environment.

Professional judgement is essential in determining the necessary application in the particular circumstances of each individual dental practice.

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Purpose of this manual

[Insert practice name] has developed this infection control manual to support staff and practitioner compliance with infection control requirements.

Good infection prevention and control are essential to safe practice. This is reinforced in the AHPRA & National Boards June 2022 *Code of Conduct*. Registered dental practitioners must retain personal accountability for professional conduct and the care provided when working in a team. Dental practitioners must also be aware of and comply with state, territory and federal legal requirements relating to infection prevention and control. Both registered dental practitioners as well as non-registered dental staff such as dental assistants also have obligations for safe methods of working under state and territory work health and safety legislation.

Practitioners must maintain their knowledge and skills in infection prevention and control by being aware of evidence-based practice resources, and emerging issues relating to infection prevention and control. They must minimise risks to patients by maintaining professional capability through ongoing professional development, self-reflection and understanding, and applying the principles of clinical governance, risk minimisation and management in practice.

The Dental Board has identified that resources are available to dental practitioners from professional associations to assist them, and in this regard, the August 2021 4th edition of the [ADA’s *Guidelines for Infection Prevention and Control*](https://www.ada.org.au/Professional-Information/Publications/Infection-Control/Guidelines-for-Infection-Control/1ADA_GuidelinesforInfectionControl_3.aspx)is a relevant resource that gives more detailed guidance and advice on achieving good infection prevention and control. This manual is based on the ADA guidelines.

Each dental practitioner and staff member is responsible for compliance with this manual.

How to use this manual

This manual is designed to help your practice become compliant with infection prevention and control procedures.

**1. Customising this manual for your practice**

This manual is to be customised to reflect the operations of your practice. The ADA encourages practices to customise the manual as much as possible. Make sure to include audits, registers, schedules, and photos as needed and that the manual is accessible to all staff.

Text in square brackets [ ] and in blue requires you to insert your practice name, details, information, role or procedure. Examples listed in blue are a guide and may be adopted, added to or removed, ensuring that the information provided accurately reflects your practice operations. Text in black should not be changed by the practice without advice from the ADA. Blue text should not be left in the completed document; instead, customise it and make it black, or delete it.

**2. Warning regarding the use of this manual**

This manual used in isolation does not satisfy all infection control requirements. The current evidence-based, best-practice infection control guidelines at the time of publication, as listed in Section A, should be used in conjunction with this manual and be easily accessible to all staff.

Practitioners should always use their professional judgement and seek support from the ADA if needed.

Ongoing staff training and regular review of these procedures are essential to maintaining the highest standard of patient care. Any changes in practice procedures must be communicated to staff and updated in this manual.

**3. Supporting Resources**

Throughout this manual are hyperlinks that open other supporting documentation when clicked on.

**4. ADA infection control support and advice**

ADA staff can assist you to customise this document and will provide you with local Infection Control support. Please contact your [ADA branch](https://www.ada.org.au/About/Branches) directly or email [contact@ada.org.au](mailto:contact@ada.org.au) with your enquiry.

ADA encourages the completion of the infection control self-assessment tool available on our website [www.ada.org.au](http://www.ada.org.au); here you can also find a number of infection control resources including videos that will assist you in completing this manual.

**5. Work Health and Safety and Human Resources advice**

Please contact the ADA HR Advisory Service:

Phone: 1300 232 462

Email: [hrhotline@ada.org.au](mailto:hrhotline@ada.org.au)

**6. Feedback**

We welcome your feedback on this template. How easy (or not easy) was it to use? How can we improve it? Have you done a great job of customising it? Would you like to help us build an even better template by showing us yours, so we can learn from it?

Please email [contact@ada.org.au](mailto:contact@ada.org.au)

Definitions

**AS or AS/NZS** refers to the Australian and New Zealand standards. These are referred to as AS or AS/NZS followed by the relevant standard number.

**Aseptic technique** refers to the techniques that maintain objects and areas as free from microorganisms as possible. This is required during invasive procedures such as surgical procedures or extractions, i.e. where the defences of the body are breached.

**Blood-borne viruses (BBVs)** are viruses that are transmitted primarily by blood-to-blood contact.

**Contaminated zone** is that area of work in which contamination by patient fluids or tissue may occur by transfer, splashing or splatter of material.

**Dental Board** refers to the Dental Board of Australia.

**Disinfection** is the destruction of pathogenic and other kinds of microorganisms by physical or chemical means.

**Exposure incident** is any incident where a contaminated object or substance breaches the integrity of the skin or mucous membranes or comes into contact with the eyes.

**Exposure-prone procedures (EPPs)** are procedures where there is a risk of injury to the health care worker (HCW) resulting in exposure of the patient’s open tissues to the blood of the HCW. These procedures include those where the HCW’s hands (whether gloved or not) may be in contact with sharp instruments, needle tips or sharp tissues (spicules of bone or teeth) inside a patient’s open body cavity, wound or confined anatomical space where the hands or fingertips may not be completely visible at all times. This definition comes from the 2018 [CDNA *Australian National Guidelines for the Management of Health Care Workers known to be Infected with Blood-Borne Viruses*](https://www.health.gov.au/resources/collections/cdna-national-guidelines-for-healthcare-workers-on-managing-bloodborne-viruses) (CDNA guidelines). Examples of EPPs include maxillofacial surgery and oral surgical procedures, including the extraction of teeth (but excluding extraction of highly mobile or exfoliating teeth), periodontal surgical procedures, endodontic surgical procedures, and implant surgical procedures.

**Non-exposure prone procedures** (non-EPPs) are procedures where the hands and fingers of the HCW are visible and outside of the body at all times and procedures or internal examinations that do not involve possible injury to the HCW’s hands by sharp instruments and/or tissues, provided routine infection prevention and control procedures are adhered to at all times. Examples of non-EPPs include routine oral examination.

**Invasive procedure** is any procedure that pierces skin or mucous membrane or enters a body cavity or organ; this includes surgery.

**Penetrating injury** is any injury from a sharp object such as an injection needle, scalpel blade or dental bur contaminated with a patient’s blood or saliva.

**Personal protective equipment (PPE)** is equipment used to protect the person, and includes gloves, masks, protective eyewear, clinical gowns and footwear.

**Sterilisation** is the process of destroying all microorganisms on the surface of an item, to prevent disease transmission resulting from the use of that item.

**Surgical procedure** involves a planned breach of a patient’s skin or mucosa and penetration into deeper layers of tissue.

[Insert practice name] infection control manual

[Insert practice name] has developed this infection control manual, which is consistent with the current legislation and guidelines.

[Owner/Owners/Senior Management/Clinical Directors/Principal Dentist] will provide all staff with access to this manual and training on the outlined procedures. All staff are expected to comply with the practice procedures as outlined in this manual. Staff members are aware of their legal obligations. These include work health and safety legislation stipulating the need to follow legal directions including compliance with infection control protocols.

Our practice encourages staff to regularly review infection control protocols, training and documentation. Compliance with this manual ensures that infection control risks are reduced, and therefore compliance issues with infection control protocols are addressed in staff performance reviews.

[Owner/Owners/Senior Management/Clinical Directors/Principal Dentist] will ensure:

* Staff compliance with hand hygiene requirements is regularly audited and action is taken to address non-compliance or an inability to comply.
* Staff compliance with standard and transmission-based precautions is regularly audited and action is taken to address non-compliance or an inability to comply.
* That the environmental cleaning schedule is regularly reviewed and monitored.
* That a batch control system is in place that allows identification of the steriliser cycle batch information undertaken on a critical reusable device, equipment or instrument that has been sterilised and used on an individual patient.

A. Infection control

The transmission of infection in dental practice requires a source of infectious agents, typically microorganisms, a mode of transmission and a susceptible host.

1. What is infection control?

The purpose of infection control is to reduce the prevalence and prevent the transmission of infectious microorganisms. This is critical to providing high quality health care for our patients and a safe working environment for our staff. This requires:

* Understanding the principles of transmission of infection.
* Comprehensive infection control training for each clinical staff member.
* Remaining up to date regarding relevant infectious diseases, new guidelines, products and procedures, and particularly newly evolving infection risks, such as respiratory viruses and multiple-resistant organisms, and how to take precautions against them.

2. Transmission of infection

In dental practice, pathogenic microorganisms may be inhaled, implanted, ingested, injected, or splashed onto the skin or mucosa. The main modes for transmission are contact (including blood borne), droplet and airborne. The mode/s of transmission vary by type of microorganism. In some cases, a microorganism can be transmitted in multiple ways, for example human influenza virus can be transmitted by both contact and droplet routes.

Proper techniques and effective work practices in our practice minimise the risk of transmission of infection. These include:

* Good personal hygiene practices, particularly hand hygiene.
* Personal protective equipment (PPE).
* Risk minimisation techniques such as screening, facility controls, protocols for cleaning and reprocessing and procedural controls such as pre-procedural rinsing and dental dam use.

# 2.1 Contact transmission

Contact is the most common mode of transmission of infection, and usually involves direct or indirect transmission by touch or contact with body substances.

# 2.2 Droplet transmission

Droplet transmission occurs when an infected person produces respiratory droplets by coughing, sneezing or talking and during certain procedures. Droplet distribution is limited to around one metre in distance.

# 2.3 Airborne transmission

Airborne transmission occurs via particles containing infectious agents that remain infective over time and distance, and can be promoted by certain dental procedures that promote the generation of particles, as well as by coughing.

3. Legislative frameworks

Registered dental practitioners are legally required to comply with the Dental Board of Australia’s Code of Conduct. The Dental Board also provides further resources including a reflective tool for infection control. The responsibility for compliance with Dental Board requirements rests on the practitioner, and cannot be delegated to other staff.

This manual is based on the current edition of theADA’s *Guidelines for Infection Control* andthe NHMRC *Australian Guidelines for the Prevention and Control of Infection in Healthcare,* as well as *AS/NZS 4815* and/ or *AS/NZS 4187* for instrument reprocessing.

This manual is supplemented by and is to be read in conjunction with the following references:

* *Dental Board of Australia Self-Reflective Tool for Infection Prevention and Control (July 2022)*, available at [www.dentalboard.gov.au](https://www.dentalboard.gov.au/Codes-Guidelines/Infection-prevention-and-control/Resources-for-practitioners.aspx)
* *Australian Guidelines for the Prevention and Control of Infection in Healthcare* *(current edition) (NHMRC Guidelines),* available at [www.nhmrc.gov.au](http://www.nhmrc.gov.au)
* AS/NZS 4815: current edition *Office-based health care facilities – Reprocessing of reusable medical and surgical instruments and equipment, and maintenance of the associated environment,* available at [www.infostore.saiglobal.com](https://infostore.saiglobal.com)
* AS/NZS 4187: current edition *Cleaning, disinfecting and sterilising reusable medical and surgical instruments and equipment, and maintenance of associated environments in health care facilities,* available at [www.infostore.saiglobal.com](https://infostore.saiglobal.com/en-au/) (note that both reprocessing standards will be superseded by AS 5369 *Reprocessing of reusable medical devices in health and non-health related facilities*, when that new standard is published).
* The National Hand Hygiene Initiative, with resources, including the hand hygiene manual, available at [www.safetyandquality.gov.au/](https://www.safetyandquality.gov.au/)
* *National Safety and Quality Health Service (NSQHS) Standards.* For private practice *version 1* has been superseded but is still applicable to dentistry. For public sector dentistry, version 2 of these standards is relevant. Both are available at [www.safetyandquality.gov.au](http://www.safetyandquality.gov.au)
* ADA’s *Guidelines for* *Infection Control* *(current edition)*, available at [www.ada.org.au](http://www.ada.org.au)
* *Creutzfeldt-Jakob Disease* [*Infection Control Guidelines*](https://www.health.gov.au/resources/publications/creutzfeldt-jakob-disease-infection-control-guidelines) *(current edition)*, available at [www.health.gov.au](http://www.health.gov.au)
* *Australian Dental Association Practical Guide to Infection Control* and practical guides (current editions), available at [www.ada.org.au](http://www.ada.org.au)
* *The Australian Immunisation Handbook,* available at [www.immunisationhandbook.health.gov.au](https://immunisationhandbook.health.gov.au/)
* [*Australian Guidelines for the Management of Health Care Workers known to be Infected with*](https://www.health.gov.au/resources/collections/cdna-national-guidelines-for-healthcare-workers-on-managing-bloodborne-viruses)[*Blood-Borne Viruses (current edition)*,](https://www.health.gov.au/resources/collections/cdna-national-guidelines-for-healthcare-workers-on-managing-bloodborne-viruses) available at [www.health.gov.au](http://www.health.gov.au)

4. Duty of care

Each registered dental practitioner has a legal duty of care to provide and maintain a safe working environment for their staff, patients and members of the public.

Each registered dental practitioner ensures the dental clinic environment is kept clean and hygienic to prevent the spread of infectious diseases in their practice.

Work health and safety legislation stipulates the legal requirement of written safety instructions or directives from the employer, which includes infection control protocols. All staff in our practice understand and comply with the infection control policies outlined in this manual and the legislative requirements that underpin them.

5. Checklist of requirements

[Owner/owners/senior management/clinical directors/principal dentist]

|  |
| --- |
| * Has developed and implemented processes to comply with infection control requirements. |
| * Ensures that all staff have access to and are trained and current in the infection control processes used in our practice. * Maintains records of relevant training, education sessions, and infection control updates. |
| * Provides staff with access to key resources such as this manual, the current version of the ADA*’s Guidelines for Infection Prevention and Control*, the NHMRC *Australian Guidelines for the Prevention and Control of Infection in Healthcare*, and the relevant reprocessing standard (such as AS/NZS 4815 or AS/NZS 4187), which are located [describe where in the practice these documents can be found, electronic or hard copy. If you are unsure which standards you are required to have please contact your ADA Branch]. |
| * Has a system for reporting, monitoring and rectifying breaches of infection control processes [describe how is this done / who does it / what happens]. |
| * Ensures that allergy records are updated each year by each member of staff [who is responsible for collecting and maintaining staff allergy records]. |
| * Implements a hand hygiene program consistent with current recommendations from the National Hand Hygiene Initiative. |
| * Implements systems for the safe handling of sharps, and for the disposal of sharps. |
| * Implements systems to prevent and manage occupational exposure to blood-borne viruses, and ensures that there is appropriate follow-up of exposure incidents. * Maintains a record of workplace incidents and accidents (including sharps injuries), as required by national work health and safety legislation. |
| * Implements systems for environmental cleaning. |
| * Implements systems for reprocessing of reusable instruments and devices. |
| * Is aware of their own immune status for blood-borne viruses based on testing undertaken at least once every three years, and seeks expert medical advice from an infectious diseases specialist familiar with the requirements of dental practice if they are infected. |

B. Standard precautions of infection control

In our practice, [Owner/Owners/Senior Management/Clinical Directors/Principal Dentist] and our clinical staff understand that infection control requires consideration of the specific situation of each patient and the appropriate use of standard precautions for all patients, supplemented with transmission-based precautions for certain situations.

We request that patients and visitors be aware of their role in minimising infection risk in our practice by following basic hand hygiene measures, as well as respiratory hygiene and cough etiquette. These are outlined in the NHMRC *Australian Guidelines for the Prevention and Control of Infection in Healthcare*.

1. Standard precautions

In our practice, the following standard precautions are performed at all times by all staff for the treatment of patients:

* Hand hygiene in accordance with the ‘five moments’ for hand hygiene.
* Use of PPE such as gloves, masks, eye protection, gowns, and appropriate footwear.
* Use of PPE during clinical procedures, and when cleaning and reprocessing instruments.
* Appropriate reprocessing of reusable instruments and disposal of single-use items.
* Effective environmental cleaning.
* Use of barriers such as plastic coverings on surfaces that may become contaminated and are difficult to clean, in line with manufacturer’s instructions.
* Respiratory hygiene and cough etiquette.
* Use of aseptic technique.
* Appropriate handling of linen and clinical gowns.
* Correct handling and disposal of contaminated waste.
* Safe handling and disposal of sharps.
* [Insert any other standard precautions performed in the practice].

Note that during the COVID-19 pandemic, due to risks associated with contact, droplet and aerosol (airborne) transmission, other measures for all patients are used, as described in the [*ADA Risk Management Principles for Dentistry during the COVID-19 Pandemic*](https://www.ada.org.au/Risk-Management-Principles)*,* including:

a. Triage and altered service provision as directed by public health authorities.

b. Mask wearing at workplaces as directed by public health authorities.

c. Staff immunisation for COVID-19 as directed by public health authorities.

d. Patient and staff screening.

e. Screening of staff for respiratory symptoms.

f. Hand hygiene for patients.

g. Social distancing in communal areas.

h. Pre-procedural mouth rinses.

i. Dental dam and high-volume evacuation.

2. General personal hygiene

Practitioners and staff are always required to maintain excellent personal hygiene, and when undertaking clinical procedures maintain the ‘Bare Below the Elbows’ approach: (i.e.)

1. Remove all jewellery (including bangles, bracelets, watches, Fitbits, and rings) from hands and arms.
2. Keep nails short, smooth, clean and free of nail polish or artificial nails.
3. Ensure that hands are well cared for and that hand skin is intact. Treat and cover broken or injured skin appropriately with a waterproof dressing and change when dressing becomes soiled. Staff with skin problems or weeping dermatitis should discuss any skin care concerns with [practice owner/practice manager] and seek medical advice.
4. Ensure that hands and forearms are clean and bare.
5. Ensure that long hair is securely tied back.

3. Hand hygiene

Hands can become contaminated with infectious microorganisms through contact with a patient, the patient’s surroundings, the environment, or other healthcare workers.

Our practice encourages good hand care by:

* Supporting staff with skin care concerns (such as irritant dermatitis) to seek professional advice [describe who in the practice skin concerns should be reported to].
* Providing compatible water-based moisturisers [Insert the hand moisturiser products provided by the practice and describe where they are located, supplier details, where the products are stored and where to find the product information].

Hand hygiene reduces the number of microorganisms on hands. Hand hygiene involves the application of a waterless antimicrobial agent to the surface of the hands (alcohol-based hand rub or ABHR), or the use of soap/solution (plain or antimicrobial soap) and water.

Comprehensive information on hand hygiene measures is found in the NHMRC *Australian Guidelines for the Prevention and Control of Infection in Healthcare* and from the National Hand Hygiene Initiative (NHHI) which is located on the Australian Commission on Safety and Quality in Healthcare (ACSQHC) website at [www.safetyandquality.gov.au/our-work/infection-prevention-and-control/national-hand-hygiene-initiative](http://www.safetyandquality.gov.au/our-work/infection-prevention-and-control/national-hand-hygiene-initiative)

Staff compliance with hand hygiene requirements is regularly audited in our practice as it is fundamental to infection control.

ADA recommends the use of a hand hygiene audit. The NHHI has provided an audit tool for the Dental 5 Moments of hand hygiene at [www.hha.org.au/audits/audit-tools/dental](http://www.hha.org.au/audits/audit-tools/dental)

ADA also has an audit tool for hand hygiene at [www.ada.org.au](https://www.ada.org.au/infection-control)

4. Hand washing techniques

Effective hand hygiene relies on the selection of the correct product and use of the appropriate technique.

# 

# 4.1 Alcohol-based hand rubs (ABHR)

A TGA-approved ABHR is used by staff in our practice for all clinical situations where hands are visibly clean, including:

* Entering and leaving a clinical area.
* Before touching a patient.
* Before a procedure.
* After a procedure or body substance exposure risk.
* After touching a patient or a patient’s surroundings.
* Before putting on gloves.
* After the removal of gloves.
* Before handling an instrument for patient care.
* Between patient appointments and during interruptions.
* Before and after touching a computer keyboard in a clinical area.

Technique:

1. Apply manufacturer’s recommended amount into dry hands (1–3 mL).
2. Rub hands together so that the solution comes into contact with all surfaces of the hands, paying particular attention to the tips of the fingers and thumbs.
3. Rub vigorously until the solution has evaporated and the hands are dry.
4. ABHR can be used during the day as often as is required.
5. Bottles of ABHR are not ‘topped up’. Empty dispensers are discarded and not reused.

[Insert details of the ABHR products provided by the practice and describe where they are located, supplier details, where the products are stored and where to find the product information].

Information on choosing ABHR is available at [www.safetyandquality.gov.au](http://www.safetyandquality.gov.au) – search for Choosing alcohol-based hand rub products.

# 4.2 Routine (plain liquid soap and water) hand washing

Staff in our practice wash their hands with plain soap (liquid detergent) and water:

* At the start and end of the working day/session.
* When hands are visibly dirty or contaminated with blood or other body tissue/fluids.
* Before and after meal breaks.
* After toilet breaks.

In our practice, liquid handwash from dispensers is used for hand washing. [Insert details of the neutral pH liquid soap products provided by the practice and describe where they are located, supplier details, where the products are stored and where to find the product information.]

Technique:

1. Wet hands thoroughly with cold or warm water.
2. Apply the recommended amount of plain detergent handwash from the dispenser.
3. Rub hands together to form a lather, and continue for a minimum of 15 seconds. Make sure that the solution comes into contact with all surfaces of the hands, paying particular attention to the tips of the fingers, thumbs and areas between the fingers.
4. Rinse hands thoroughly under running tap water to remove all traces of detergent.
5. Pat dry using single-use paper towels.
6. Turn off taps using aseptic technique [describe how this is done in the practice].

Hand washing posters are available at [www.safetyandquality.gov.au](http://www.safetyandquality.gov.au) – search for NHHI promotional materials.

Note that there are certain situations when using handwashing is essential, rather than alcohol-based hand gel. These include when working in environments where it is more likely that norovirus, *Clostridium difficile*, or other pathogens that are not readily inactivated by alcohols, are present (e.g. working in a patient’s home or in a residential aged care facility).

# 4.3 Surgical hand preparation

Staff in our practice perform pre-operative surgical hand preparation using a TGA-approved alcohol-based formulation for pre-operative surgical hand preparation [Insert details of the surgical hand preparation products provided by the practice and describe where they are located, supplier details, where the products are stored and where to find the product information].

Technique:

1. Ensure all jewellery (including plain band rings) has been removed from the hands and wrists, and that the hands are dry.
2. Apply the TGA-approved pre-operative surgical hand preparation product onto the palm, using the manufacturer’s recommended amount   
   (1–3 mL).
3. Rub hands together so that the solution comes into contact with all surfaces of the hands, paying particular attention to the tips of the fingers and thumbs.
4. Use the product for the stipulated time (e.g. 90 seconds), rubbing vigorously. At the end, the hands are dry.
5. Place on sterile PPE (gown and gloves).

[Insert details of the specific pre-operative surgical hand preparation products provided by the practice and describe where they are located, supplier details, where the products are stored and where to find the product information.]

1. At the end of the procedure, after removing the sterile gloves, perform regular hand hygiene.
2. A compatible water-based hand moisturiser is used as often as required (up to four times a day).

5. Personal protective equipment (PPE)

Our clinical staff are required to wear PPE provided by the practice in the following contaminated and clinical zones:

* Laboratory areas.
* Instrument processing area / sterilising room.
* Surgery/ies.
* [Insert any other zones e.g. in theatre or hospital settings].

Our staff are educated in the correct use of these items. Disposable gloves that are contaminated are removed before leaving the contaminated zone of the work area (i.e. dental surgery and instrument processing areas), and hand hygiene undertaken before entering clean zones.

The following PPE is used in the practice:

* masks
* gloves
* eyewear
* gowns
* [Insert any other PPE used in your practice, e.g. face shields, hair nets, surgical respirators].

PPE storage:

[Describe where PPE is stored/located]

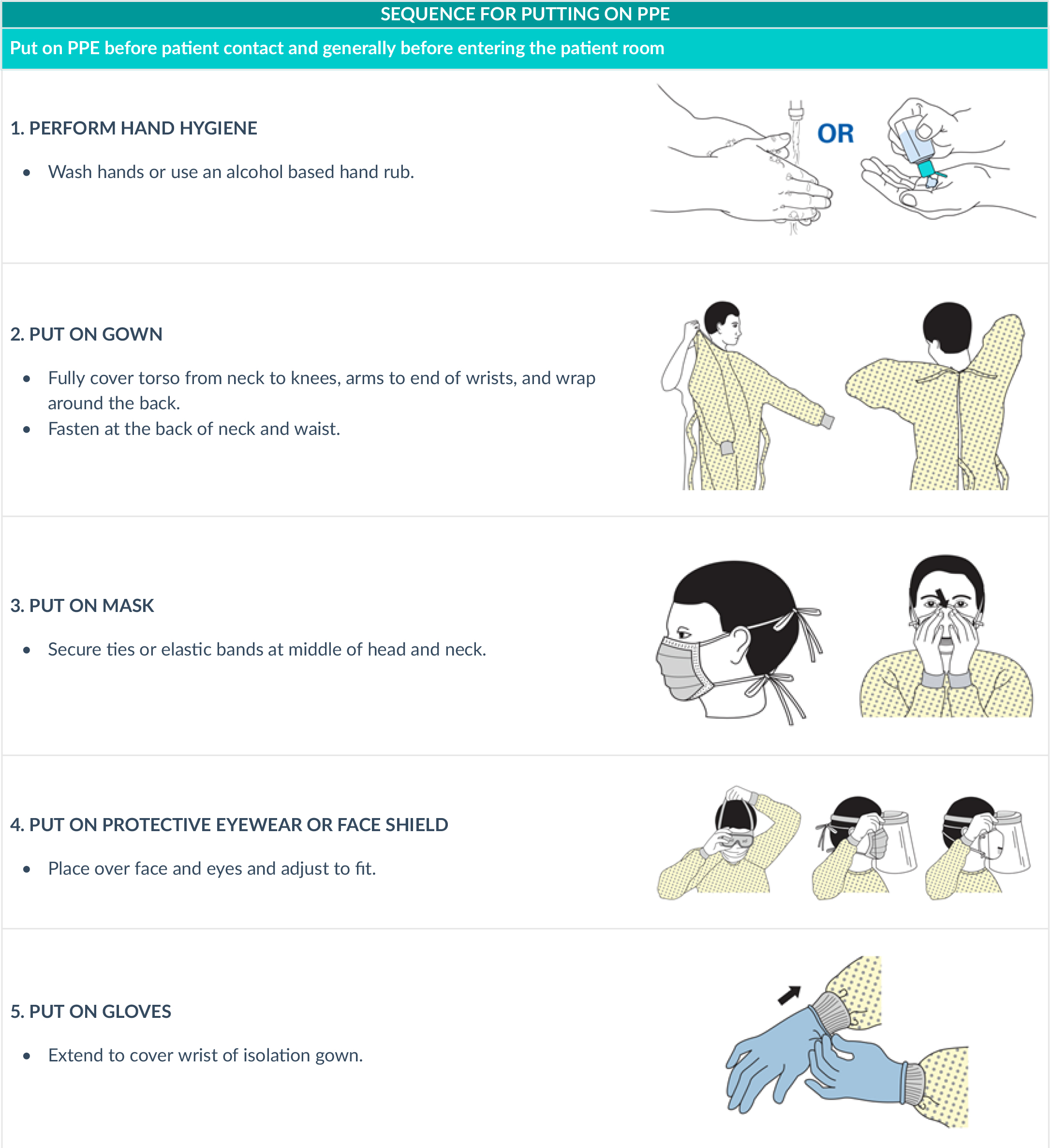
PPE disposal technique:

[Describe PPE disposal]

[Insert any other information, such as ordering new PPE and reporting issues with existing equipment, and insert photos of the correct use of PPE or any other information helpful to staff]

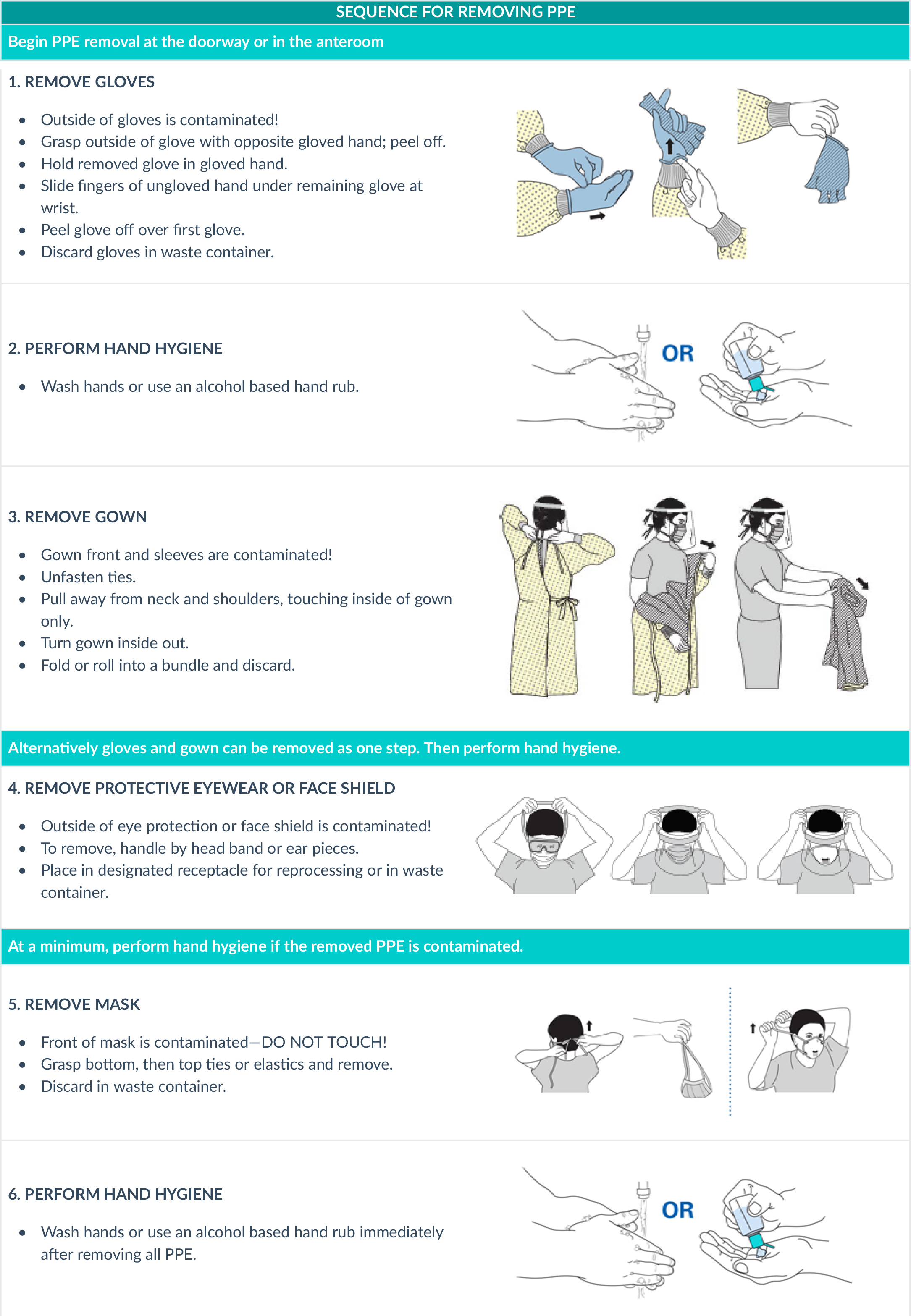
PPE is put on and removed in a defined sequence to reduce the transmission of infection. Hand hygiene is performed before PPE is put on, and again after all PPE has been removed.

**Sequence for putting on PPE (donning) [[1]](#footnote-2)**



NHMRC Australian Guidelines for the Prevention and Control of Infection in Healthcare 2010, Table 14, pages 124–126.

**Sequence for removing PPE (doffing)**



# 5.1 Gloves

Staff in our practice are educated in the importance of wearing gloves as a part of standard precautions. All gloves used in the practice are approved by the Therapeutic Goods Administration (TGA) and comply with the current versions of AS/NZS 4011 *Single-use medical examination gloves*, or AS/NZS 4179 *Single-use sterile rubber surgical gloves*.

The following gloves are provided by the practice:

* [List and describe all sizes and all glove types, e.g. nitrile, neoprene, polyisoprene, latex, sterile gloves, non-sterile, hypo-allergenic, powdered, non-powdered and utility gloves.]

Glove supply:

[Who is responsible for ordering gloves, maintaining adequate stock levels and where are gloves ordered from?]

Storage:

[Describe bulk and daily storage levels including adequate stock levels].

Glove quality issues are to be reported to: [Insert title of person responsible and describe the process].

Gloves are worn for all clinical procedures. The types of gloves worn are selected according to the task:

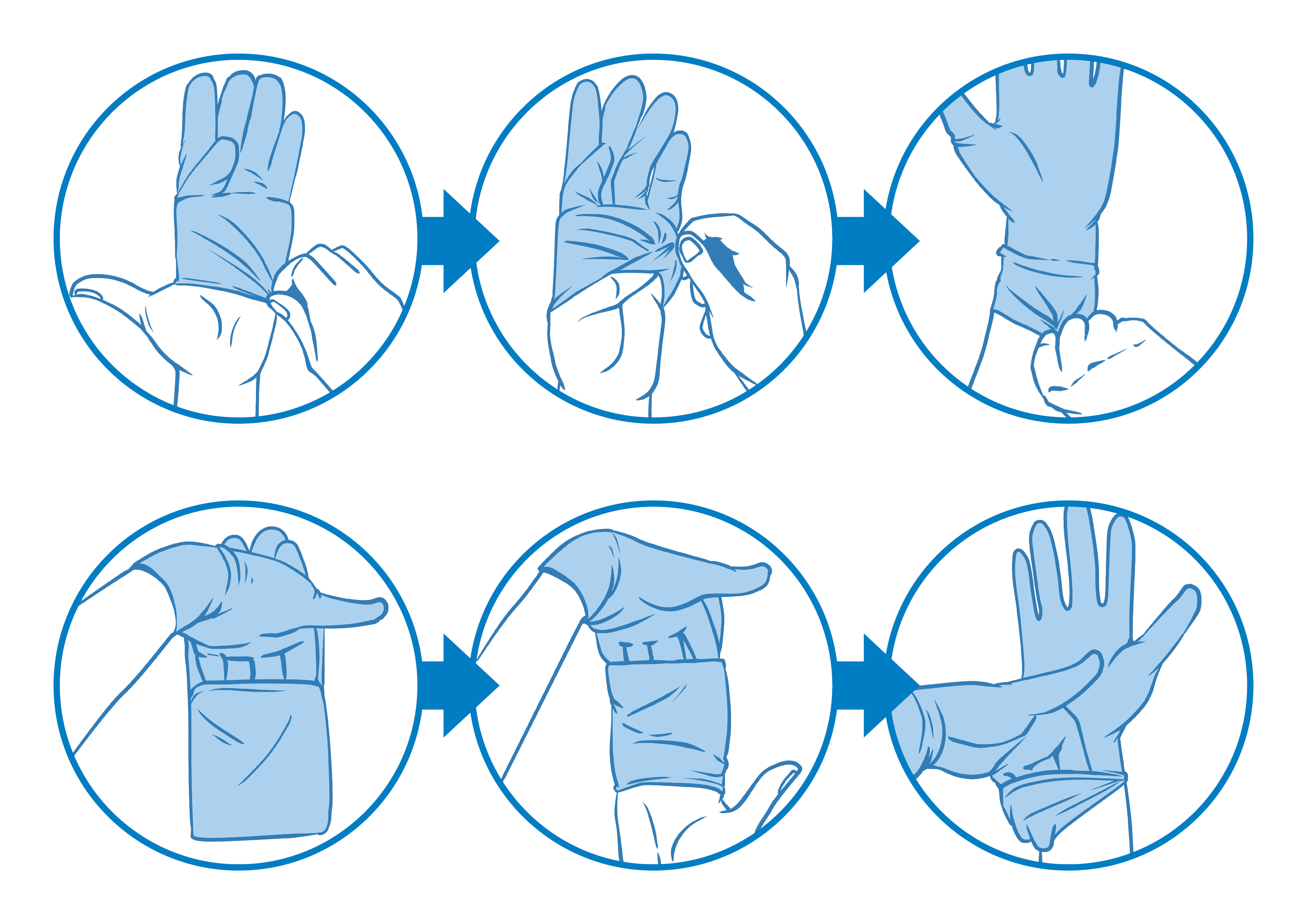
* Sterile gloves for surgical procedures.
* Latex-free gloves for latex-allergic patients or staff, or staff with sensitive skin.
* Hypo-allergenic gloves for staff with skin reactions to polymerising agents.
* Non-sterile gloves for examinations and non-surgical dentistry.
* Utility gloves for instrument reprocessing, when washing contaminated instruments by hand.

In our practice, gloves are used in the following way:

* Gloves are worn intact and with the correct size.
* Other than utility gloves, all gloves are strictly single use.
* Bulk storage (boxes of gloves) are in a clean area.
* Both opened and unopened boxes of gloves are stored away from exposure to aerosol contamination.
* Glove stock levels are checked regularly and at the start of each day. New boxes of non-sterile gloves are not opened.

The suggested method of donning sterile gloves, to prevent contamination of the external surface of the glove, is as follows (for right-handed staff):

* Open the glove packaging by peeling open the packet of gloves and unfolding the packet. At this stage, do not touch the exterior surface of the gloves.
* Apply the first glove to the left (non-dominant) hand, by sliding the palm up into the left glove (with the thumb facing outwards). Then bend the thumb towards the centre of the palm and continue to slide into the left glove while at the same time pulling up on the cuff until all fingers are fully gloved. Leave the cuff of the left glove rolled up at this stage.
* Slide the four gloved fingers of the left hand into the cuff of the second glove (the dominant hand, in this case, the right-hand glove). At this stage the gloved left thumb is still facing outwards. Now begin to slide the ungloved fingers of the right hand into the glove. As before, keep the ungloved right thumb facing outwards. Then bend the right thumb towards the centre of the right palm and continue to slide the right hand into the right glove, while at the same time pulling up with fingers of the gloved left hand.
* Last of all, complete donning the gloves by pulling up the cuff of the left (first) glove with the gloved fingers of the right hand. Make sure the cuffs extend over the surgical gown. The procedure is illustrated below:



In our practice, gloves are discarded as follows: [Describe what happens in the practice – e.g. heavily soiled gloves with visible blood are to be discarded in clinical waste; discard gloves as close as possible to the point of use. Include details about the location of the bins].

Technique:

1. Wash hands before gloving, and again after removing gloves.
2. Use a compatible water-based hand moisturiser as often as required, in accordance with the manufacturer’s instructions.
3. Wear non-sterile, powder free examination gloves for procedures that do not require a sterile field, or for routine cleaning duties.
4. Use the correct method to remove examination gloves, to avoid contamination of the work environment. Place them straight into the waste, rather than onto the working surface.
5. Discard and change examination gloves:

* As soon as glove damage occurs (torn or punctured).
* After contact with each patient.
* On completion of any task requiring the use of gloves but not involving patient contact.
* Before answering the telephone or recording patient notes or other procedures with a risk of cross-contamination (unless the pen, keyboard or telephone is covered with a plastic barrier or specifically designed for decontamination processes between patients).
* General purpose utility gloves are to be worn only for general cleaning in non-clinical areas. If appropriate, these gloves can be reused for additional tasks if washed in detergent after use, dried with paper towelling, and stored appropriately. These utility gloves are replaced when they become torn, are cracked or peeling, or otherwise showing signs of wear and tear.

# 5.2 Masks

In our practice, clinical staff wear a TGA-approved surgical face mask that is compliant with the current edition of AS 4381. This mask has level 2 splash protection when there is the likelihood of saliva or blood splashes (including procedures when a triplex is used).

Stock levels of masks are checked regularly and at the start of each day. Boxes of masks are not opened until ready for use.

The following masks are provided by the practice:

* [List and describe all sizes and all mask types, e.g. ear loop and tie. Describe whether there are different types of masks available in the practice and when those are to be worn, e.g. some masks are labelled as high filtration masks because they have particle filtration capabilities as well as bacterial filtration capabilities.]

Mask supply:

[Insert who is responsible for ordering masks and maintaining adequate stock levels. Indicate where are masks are ordered from.]

Storage:

[Describe bulk and daily storage levels including adequate stock levels]

Mask quality issues are to be reported to: [insert title of person responsible and process].

Technique:

1. Put on gown, then mask, then eye protection before gloves.
2. Ensure that the mask is worn according to the manufacturer’s instructions. Use both tie strings where the mask has two ties. Adapt the mask to the bridge of the nose by shaping the insert to the nose. The mask is fitted to cover both the nose and mouth, and where possible, it is folded out fully to cover the chin and upper neck.
3. Avoid touching mask with hands whilst the mask is worn.
4. Do not wear masks loosely around the neck or under the chin.
5. Change masks between appointments, or as soon as practicable after they become moist or visibly soiled.
6. Remove masks with care, by touching the strings or loops only.
7. Discard the mask into the general waste or contaminated waste as appropriate.

Perform hand hygiene after all PPE is removed.

Correct mask wearing is shown below:



# 5.3 Eye protection

In our practice, eye protection is worn to protect the mucous membranes of the eyes from exposure to aerosols, splattering and penetration from projectiles. Protective eyewear provided by our practice complies with AS 1337, which means it is to be clear, anti-fog, distortion free, close fitting and shielded at the side.

Dental practitioners, staff and patients wear protective eyewear during all clinical procedures. Eye protection is also required when reprocessing instruments and working in clinical and laboratory areas. [Insert any other areas/times staff wear eyewear in your practice].

Eyewear that is not single use is decontaminated between patient appointments [describe process, the detergent/product used, where this is done and who does it].

[Insert any other details about the eyewear used in your practice, who supplies it, who to report issues to, etc.].

# 5.4 Clothing

The clothing worn by staff in our practice provides a protective barrier to infection.

Our practice uniform/s are: [insert a description of the practice uniform/s details, including as appropriate:

* clinical gowns
* non-clinical uniforms
* surgical scrub suit

and whether it is reusable and laundered or single session, (disposable), and describe how this is worn under a sterile gown when undertaking planned surgical procedures].

In our practice:

* Gowns are not needed for non-clinical (reception / front office) staff.
* Gowns for patient care are kept clean and in good condition.
* Gowns protect the street clothes of clinical staff during clinical procedures, during instrument reprocessing, during environmental cleaning, and when working in the laboratory. Gowns are not to be worn outside these working areas, including into the staff room for meal breaks. They are removed in the working area, before eating, drinking, or taking a meal break.
* Gowns for patient care are not worn outside the practice.
* Some procedures require different gowns [Specify which ones – include the protocol for gowns for surgical exodontia and other oral surgical procedures – because of the tasks being undertaken. Describe the protocols, e.g. disposable gowns are changed between patients].
* [Describe the process for clinical gown supply, usage, storage and disposal in the practice.]

Technique:

1. Wear a clinical gown that is appropriate to the task, for all patient procedures.
2. Change the gown if it becomes visibly soiled [describe how this is done, where they are disposed of and where new ones are located].
3. Sort used linen at the point of generation [describe how this is done, who does this, whether it is done within the practice or outsourced, where is dirty linen placed, etc.].
4. Dispose of used disposable gowns according to local waste/EPA regulations.
5. Check that sharps or other objects have not been left in the pockets of cloth gowns that are going to the laundry.
6. Wash soiled linen, such as reusable cloth gowns and clinical coats, in a separate washing cycle. [Describe how this laundering is done, who does it, whether it is done within the practice or outsourced. See linen reprocessing advice in the NHMRC guidelines and in AS/NZS4146—2000 Laundry Practice.]
7. [Describe uniform storage. Describe the process for reporting issues with gowns or uniforms.]

# 5.5 Footwear

The footwear that staff wear in our practice is enclosed to protect the feet of the wearer from injury caused by accidentally dropped sharps or spilt chemicals.

[If appropriate, add in additional practice rules for footwear (e.g. surgical covers for certain procedures), footwear supplier details, storage and disposal process of surgical covers, etc.]

C. Waste management

Dental practice waste can be divided into the following categories: general waste, recyclable (non-sharps) waste, sharps waste, and contaminated (medical and related) waste.

State and territory legislation regulates how waste is managed and defines what is classed as clinical waste. Regulations from the jurisdictional (state or territory) environmental protection authority (EPA) or its equivalent body will specify these aspects of waste. Please note that recyclable items may vary between local government areas (LGAs). For specific information on what items can be recycled in your area, please contact your local waste management authority (usually local Council). Please also note that what waste can be discharged into the sewer system is controlled by the local government water authority. If unsure what your state/territory requires for clinical waste handling and disposal, contact your local ADA branch for advice.

|  |  |  |  |
| --- | --- | --- | --- |
| **General waste** | **Recyclable items** | **Sharps waste** | **Contaminated waste** |
| **All waste other than sharps or infectious non-sharps,** including:   * firm plastics, which may be made of PVC and should not be incinerated * extracted human teeth * needle covers * mixing pads * paper towelling * [insert other items used] | **Dental items**:   * amalgam * used fixer and developer * unwanted radiographs * lead foil from radiographs * [insert other items used]   **Non-dental items**:   * paper, cardboard * glass, plastic * metal cans * drink containers * [insert other items used] | **All disposable items that could inflict a penetrating injury**, including:   * needles, sutures, scalpel blades, glass, burs, matrix bands, orthodontic wires, stainless steel crowns and offcuts, endodontic files and reamers * broken instruments * [insert other items used] | **All medical and related non-sharp waste,** including:   * all waste with free-flowing blood; human tissue, other than extracted teeth * [insert other items used. Check local waste regulations regarding items defined as medical waste] |

In our practice, staff are trained in the following waste management process:

[Insert details:

* Bin types and locations (include general waste, medical waste, sharps waste, and other types as appropriate)
* Contracted collectors / regular collection days
* Contractor contact details
* Insert other details for your practice as needed.]

1. Safe waste handling

In our practice, staff are expected to comply with the safe management of waste and take care to protect themselves while doing so.

Technique:

1. Apply standard precautions (good hygiene practices, use of protective barriers appropriate to the task, e.g. protective gloves, mask, protective eyewear).
2. Segregate waste at the point of generation into waste streams.
3. Contain waste in [describe bins and their locations in your practice] in the appropriate container (identified by colour and label) and dispose of according to the [enter practice waste management plan.]
4. Do not manually compress waste. Do not overfill waste containers or sharps bins.
5. Wash hands following waste handling.

2. Sharps waste

Inappropriate handling and disposal of sharps can cause penetrating injuries, resulting in exposure of our staff and patients to blood-borne diseases.

To minimise the risk of sharps injuries in our practice, the following technique is used:

1. A sharps bin is located in close proximity to the point of use [insert locations]. The sharps bin is a clearly labelled, rigid, puncture-resistant, approved yellow sharps container, conforming to the current version of AS 4031 *Non-reusable containers for the collection of sharp medical items*. Sharps containers are placed in safe positions within the treatment room to avoid accidental tipping over and are kept out of reach of children. Any sharps containers located within joinery (e.g. inside cupboards) must be able to be examined, and not be accessible to children.
2. Scalpel blade removal devices are fixed in place in surgical areas to allow for one-handed removal of scalpel blades. [Insert type/brand and locations in your practice].
3. Clinicians take care when using and handling sharps including hand endodontic files, injecting and irrigating syringes, probes and scalers.
4. Clinicians minimise the handling of sharp instruments, such as probes and files. Sharps are never passed directly between individuals. [Insert if a puncture-resistant transfer tray may be used to pass sharps in your practice].
5. Clinicians are the staff members responsible for the immediate safe management of sharps. Single-use sharps are placed into a sharps bin located at the chairside immediately after their use, or alternatively are placed in a specific puncture-proof dish before disposal.
6. Disposable sharp items such as hand endodontic files and needles are placed into a sharps bin immediately after their use.
7. At the end of the appointment, non-disposable sharps such as scalers and probes are transported between the surgery and the sterilisation area using a securely lidded, puncture-proof tub or container.
8. For rotary NiTi endodontic files that are to be reused, sponges are used to remove gross debris from files. For this purpose, the sponge is secured in a holder to avoid puncture wounds to the hands.
9. Clinicians always remove burs and scaler tips from handpieces before removing the handpieces. Burs to be reused are placed back into bur stands, and ultrasonic scaler tips are placed back into their stand or mandrel.
10. Clinicians never attempt to recap needles if they are bent. Needles are never recapped after use, unless an approved one-handed recapping method (the bayonet technique) or a specialised one-handed needle recapping device is used.
11. Only sharps waste is put into sharps containers (i.e. not clinical waste such as blood-soaked gauze).
12. Sharps containers are never filled above the marked fill line or above the three quarters full mark.
13. Sharps containers, once filled to the designated level, are sealed, and then are disposed of by a licensed contractor [insert the practice’s licensed sharps waste contractors, the collection schedule etc.].

D. Practice environment

Environmental controls inherent in a dental practice design and operation can reduce the risk of transmission of infection. Within our dental practice, there are clearly defined and segregated clean and contaminated zones within the dental surgery, the instrument reprocessing area, and the dental lab area. Our staff understand the purpose of and requirements for each zone.

Movement from clean to contaminated zones can occur without changing gloves, but never the reverse.

1. Contaminated zone/s

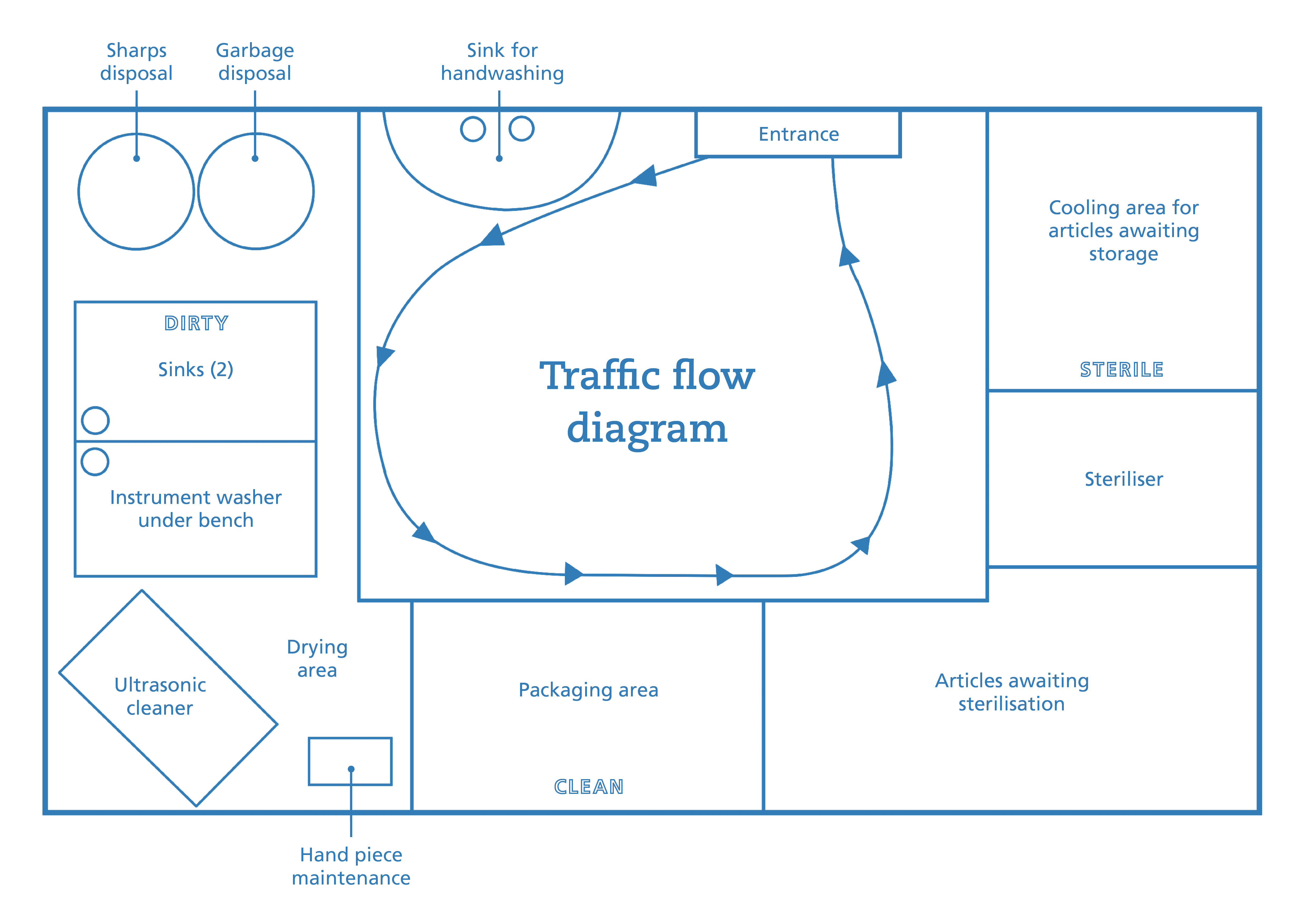
The contaminated zone is named as such because of the splashes and droplets that originate from the patient’s mouth and spread from there (typically forward of the patient’s mouth within a distance of 1 to 1.8 metres).

In our practice the contaminated zone/s are [the treatment zone/the treatment periphery zone/other] which are contaminated with material from the current patient, as well as the instrument-cleaning area. The contaminated zone includes [the patient’s mouth, dental light handles, triple syringe and holder, the headrest, suction apparatus, handpieces and couplings, the bracket table, insert additional information].

Contamination can spread if items from this zone are moved beyond its boundaries.

Only items required for each patient’s treatment are kept in the treatment zone. Staff cannot bring personal items, clothing or bags into the contaminated zone of the dental practice.

[Insert a diagram of the contaminated and clean zones in the instrument reprocessing area, using the diagram below as an example].



Reproduced from *Cleaning, Disinfection, Sterilisation. A Guide for Office-Based Practice* Lochead, L (2004).

2. Clean zone/s

In our practice, the clean zones include: [the office areas, staff room, waiting room, reception areas, and designated storage areas for consumable supplies and for sterilised instruments].

The eating and common room staff areas in our practice conform to work health and safety regulations and are separate from patient treatment areas. The lunchroom area is maintained in a hygienic way. Crockery is washed in a dedicated sink, and not in the hand washing sinks or in instrument washing basins.

Food is stored in a dedicated food refrigerator. Dental materials and medicines that require cold storage are stored in a separate refrigerator.

3. Practice design

Within the dental practice, work areas should be well lit and ventilated, with adequate uncluttered and easily cleaned bench space. Adequate lighting, both natural and artificial, is provided directly over work and treatment areas.

The floor coverings in our dental surgery are non-slip and impervious, with sealed joins for safety and ease of cleaning. For more information on facility design aspects for infection control, consult the *Australian Health Facility Guidelines, Part D Infection Prevention and Control* (version 7.0, 2016) available at [www.healthfacilityguidelines.com.au/part/part-d-infection-prevention-and-control-0](http://www.healthfacilityguidelines.com.au/part/part-d-infection-prevention-and-control-0). These provide advice on the planning, design and construction of healthcare facilities, and information about the physical environment including surfaces and finishes.

In our practice, equipment design features include:

* Smooth external surfaces of joinery and equipment, to facilitate effective environmental cleaning.
* The use of surfaces that are resistant to degradation by detergents and disinfectants.
* Dental chairs with upholstery that is non-absorbent and resistant to cleaning and disinfection solutions.
* Either [no spittoon or a one-piece spittoon].
* Dental unit waterline management system [insert details].
* Foot operated or sensor/automatic controls on some items [insert details].
* Bracket table to hold modular trays.
* Removable equipment such as headpieces that can withstand steam sterilisation.

4. Ventilation

Dental practices use ventilation, preferably air conditioning, to de-humidify the air and filter out airborne particles. Our practice has [describe the heating/cooling/ventilation system, and the way it is maintained].

* Regularly replace filters (in accordance with manufacturer’s instructions) [insert title or name of person within the practice who is responsible for ensuring this task is completed].
* Annual servicing of the system/s is completed by [insert professional servicing details].
* [Insert any other information to ensure maintenance and function of our heating/cooling/ventilation system. This could include a maintenance or cleaning schedule/audit].

5. Routine environmental cleaning

Our practice is kept clean and hygienic, with a documented cleaning strategy and schedule [located]. Instructions for use and safety data sheets (SDS) for the products that we use are [located] and are accessible by all staff.

General surfaces and fittings are cleaned when visibly soiled, and immediately after spillage or after contamination. Less frequently touched surfaces (including floors, windowsills, door handles, solid surfaces in the waiting room and telephone handsets) are cleaned weekly, or as required. Frequently touched surfaces (inanimate objects, such as waiting room toys, and hard surfaces in the clean zones) are cleaned with detergent solution, at least daily.

The carpet in our practice waiting room (if appropriate) is maintained with daily vacuum cleaning using well maintained equipment fitted with suitable filters to minimise dust dispersion [insert title or name of person within the practice who completes this task or ensures it is completed, how often the vacuum cleaner is emptied, and how often filters are checked/replaced].

In our practice, patient notes are written [by hand/electronically; describe your record keeping system]. To prevent environmental contamination of the hard copy notes or computer keyboard [insert prevention and cleaning process].

General work surfaces in our surgery outside the contaminated zone are cleaned after each session, or when they become visibly soiled, according to our practice’s environmental cleaning schedule:

* [Who does this
* How often
* What equipment/solutions/s do they use
* Where is the cleaning equipment/solution kept
* How is the cleaning equipment cared for and cleaned
* Insert any other cleaning procedures or information].

Use Appendix 6 of the 2019 NHMRC guidelines as an example of suggested cleaning frequencies for various types of surfaces, and for how to prepare a schedule for environmental cleaning.

Note that during the COVID-19 pandemic, due to elevated risks associated with contact and droplet transmission, all inanimate objects were removed from waiting room areas, and increased environmental cleaning is undertaken of areas that are frequently touched by patients (3–4 times/day) using products with established cleaning and disinfection abilities that are active against enveloped viruses.

6. Cleaning treatment areas

In our practice, cleaning the contaminated zone and dental instruments involves more rigorous methods than those used for routine environmental cleaning. This is required for staff and patient safety.

Contamination with any blood, tissue or bodily fluid increases the risk of infection and must be cleaned promptly and effectively. Staff always put on new gloves for cleaning working surfaces during the changeover between patients, rather than using contaminated gloves from assisting with the previous patient.

All surfaces and items within the contaminated zone are considered contaminated by the treatment in progress, even if unused.

Our staff always follow manufacturers’ instructions regarding surface management for surfaces of dental chairs and items of dental equipment in the contaminated zone. This may include using specified types of barriers on dental chairs and other items of dental equipment.

Surface cleaning between patients is performed systematically, addressing all relevant areas. Our practice has documented processes for cleaning the treatment zone at the start of the day, between patients and at the finish of the day.

Technique for environmental cleaning:

1. Apply standard precautions and personal protective equipment for all patient treatment procedures and while in the contaminated zone.
2. All clinical contact surfaces in the contaminated zone are cleaned after each patient by wiping surfaces between patients with neutral detergent [who does this, and what products do they use, e.g. using a neutral or mildly alkaline detergent and a lint-free cloth or paper towel, according to the manufacturers’ instructions. Neutral detergents may be used in regions where corrosion or degradation of surfaces is an issue. Check that cleaning agents used on the upholstery of dental chairs are compatible with that upholstery under conditions of repeated daily use].
3. Surface cleaning is performed systematically, addressing all relevant treatment areas and equipment including [list all that are appropriate e.g. operating light handle, controls on amalgamators, curing lights, triple syringe, handpiece hangers, ends of suction hoses, impression material dispensers, others. Consult the instruction manual of the dental chair for the manufacturer’s advice on how to handle the different parts of a dental chair and what types of products should be used].
4. Sinks and wash basins are cleaned [at least daily, or more frequently as appropriate, by whom, and in the following way, using the following products, which are stored where].
5. Large items are covered with a disposable or sterilisable barrier if they may become contaminated but cannot be sterilised and changed between patients [in our practice these include]. These are cleaned with detergent as per manufacturers’ instructions at the beginning of each day in the following way [describe your process].
6. Materials are prepared prior to the commencement of treatment and dispensed into the working area [insert pre-prepared items, e.g. cotton rolls, mixing pads, minor consumables and who does this task].
7. Containers of medicaments are kept [in drawers or cupboards] so that they are free from aerosols and splatter contamination during treatments.
8. Spittoons are cleaned after each patient [in the following way, e.g. by disposing/wiping with neutral detergent using disposable paper towels, insert your process].
9. Stainless steel surfaces are cleaned using a stainless-steel cleaner [describe the process and who does this].
10. Instruments are wiped using a one-handed method to remove gross soil, cements, saliva and blood [describe this process].
11. Dental chair surfaces that are not covered may become contaminated (for example the bracket arm, upholstery). These are cleaned with a detergent [insert which detergent, the process, and by whom].
12. All single-use items in the contaminated zone are disposed of [insert details of who does this, and how]. [Note – Follow your local EPA waste regulations. In most jurisdictions, EPA regulations allow film packets, barrier envelopes and other items contaminated with traces of saliva or blood to be disposed of into the general waste stream. Items soaked with blood or saliva are, however, discarded as medical waste. If you are unsure please contact your local ADA branch]. Medical waste is placed into appropriately marked containers or plastic bags (marked with the biohazard symbol) and collected and disposed of by a licensed operator.
13. After cleaning, ensure that all cleaned surfaces are dry. Use a low lint disposable cloth to wipe surfaces, if needed.

Following environmental cleaning, remove gloves, perform hand hygiene and don new gloves before replacing barriers.

# 6.1 Barrier wraps

The outermost surfaces of most items of modern dental equipment are designed to be cleaned, reducing the need to use barriers. In our practice, specific routines are used to ensure that working surfaces are treated according to manufacturers’ instructions in line with the TGA Essential Principles. This means that some items that may potentially become contaminated but cannot be sterilised are covered with a specific barrier that is changed between patients. Where required, custom-made barriers are used as specified by the manufacturer. Dental practitioners and clinical support staff always consult the manufacturers’ instructions as to the appropriate barrier and cleaning or sterilisation procedures required for these items.

We use [Insert which barriers are used and on which equipment, list all such items, including intra-oral camera, intra-oral scanners, curing lights, operating light handle and its hand-operated switch, the x-ray head, fibre optic illuminator, the bracket table and its handle, etc.].

Any surface barriers used on such surfaces should be disposed of after each patient treatment, and a new barrier placed.

Barrier replacement technique:

1. Apply standard precautions (including gloves) to remove the contaminated barrier/covering and dispose of the barrier [insert details of which waste stream is used].
2. Remove gloves and perform hand hygiene. Don new gloves.
3. If there is any chance of saliva or blood contamination of the item, it is cleaned by wiping with a neutral detergent before a new barrier is placed [insert details of how this occurs in the practice].
4. Remove gloves and perform hand hygiene. Don new gloves.
5. Apply a new barrier before the next patient.

# 6.2 Start-of-day cleaning

In this practice, our start-of-day treatment area cleaning involves the following: [insert details of who, what and how the cleaning process is conducted. Where the equipment and solutions are kept, how the cleaning equipment is cared for and cleaned].

[The following are cleaned at the start of the day:

* Light handles and operating light switches
* Drawer and cupboard handles
* Hand (foot preferred) operated switches or controls on the dental chair
* Bracket tables
* Suction hoses
* Couplings and hoses for handpieces
* Couplings and hoses for ultrasonic handpieces
* Couplings and hoses for triple syringes
* X-ray head
* Curing light
* Microscope handle
* Headrests
* Coupling cradles
* Digital x-ray sensor
* Sinks and taps
* Insert any other items].

# 6.3 Between-patient cleaning

In our practice, working surfaces in the contaminated zone are cleaned after every patient by wiping each surface with a neutral detergent-based product. Standard precautions (including wearing of personal protective equipment) are followed when cleaning these surfaces.

In our practice, our between-treatment cleaning involves [insert details of who, what and how the cleaning process is conducted. Where the equipment and solutions are kept, how the cleaning equipment is cared for and cleaned].

[The following are cleaned between patients:

* Light handles and operating light switches
* Drawer and cupboard handles
* Hand (foot preferred) operated switches or controls on the dental chair
* Bracket tables
* Suction hoses
* Couplings and hoses for handpieces
* Couplings and hoses for ultrasonic handpieces
* Couplings and hoses for triple syringes
* X-ray head
* Curing light
* Microscope handle
* Headrests
* Coupling cradles
* Digital x-ray sensor
* Sinks and taps
* Insert any other items].

# 6.4 End-of-day cleaning

In our practice, our end-of-day treatment area cleaning process involves:

[Insert details of who, what and how the cleaning process is conducted. Where the equipment and solutions are kept, how the cleaning equipment is cared for and cleaned]

The following are cleaned at the end of the day:

* [Light handles and operating light switches
* Drawer and cupboard handles
* Hand (foot preferred) operated switches or controls on the dental chair
* Bracket tables
* Suction hoses
* Couplings and hoses for handpieces
* Couplings and hoses for ultrasonic handpieces
* Couplings and hoses for triple syringes
* X-ray head
* Curing light
* Microscope handle
* Headrests
* Coupling cradles
* Digital x-ray sensor
* Sinks and taps
* Insert any other items].

7. Water quality management

In our practice, waterlines are well maintained (cleaned and disinfected) according to the dental chair manufacturer’s instructions.

In accordance with the 2021 4th edition ADA *Infection Prevention and Control Guidelines,* the number of bacteria in water used as a coolant/irrigant for non-surgical dental procedures must be less than 200 CFU/mL since this is a widely used international limit for safe water for medical applications.

In our practice:

* Waterlines are flushed daily, at the start of the day or after any period of non-use [insert for how long and describe this process in the practice and who is responsible]. They are also flushed briefly again between patients [insert for how long].
* Sterile water or sterile saline irrigant solutions are used for irrigation during surgical procedures, such as dentoalveolar surgery, endodontic surgery, and dental implant placement.
* We use a chemical treatment system to reduce the accumulation of microorganisms in dental unit waterlines. [Describe what system is used for chemical treatment – this could be tablets, liquid additives, dosing systems, iodine slow-release straws, ozonation, etc.; and who does this, and how often. Also describe how and when shock treatments of the waterlines (also termed sanitising cycles) are done. Also describe if a hibernation or mothballing chemical agent is used for extended periods of non-use or shutdown.]

Bacterial levels are tested [If the practice undertakes such tests, describe how often it is done and what types of tests are used (it could be done using commercially available test strips, e.g. Millipore MHPC, R2A Dipslide, ATP filter test, or through commercial laboratory testing). Include a description of what happens / what action is taken when test levels are high and the waterlines need shock (sanitising) treatments, and what type of agents are used for these special treatments. Ensure that the agents chosen for shock treatments are compatible with the dental unit control blocks and are used exactly as specified. Describe the interval after shock treatment until further testing is undertaken].

E. Single-use items and instrument reprocessing

The dental instruments used in our practice for surgical procedures are always sterile at the time of use. These instruments are either ‘single-use disposable instruments’ or they are safely and effectively reprocessed using steam sterilisation to protect patients and staff from infection.

1. Aseptic technique

In our practice, oral surgical procedures are conducted using aseptic technique.

Aseptic technique:

1. Maintain excellent general hygiene. Hair is tied back and covered.
2. Conduct surgical hand preparation.
3. Clinician and assisting staff wear sterile surgical gloves, gown and other appropriate PPE.
4. Clinicians and assisting staff use sterile instruments that are packaged and sterilised prior to use.
5. Sterile supplies are used during oral surgery (such as sterile dressings and gauze). Sterile drapes are also used [insert details if the drapes are single-use disposable; include supplier details if pre-sterilised gauze is purchased].

2. Single-use items

In our practice, a range of single-use items are used, which are discarded after use and never reprocessed or reused on another patient. These items include [Insert each item including disposable triple syringe tips, plastic low speed evacuator tips, high velocity evacuator tips, prophylaxis cups, micro-brushes, plastic Dappen dishes, disposable impression trays – and describe how these are disposed of].

Very small and/or sharp instruments are considered single-use, including local anaesthetic needles, cartridges, sutures and scalpel blades, hand endodontic files, small endodontic instruments and [insert other items used, e.g. single-use burs]. These are disposed of in the following way [describe disposal process].

3. Instrument reprocessing

In our practice, instrument reprocessing is carried out in accordance with the NHMRC *Australian Guidelines for the Prevention and Control of Infection in Healthcare* and current reprocessing standards (e.g. *AS/NZS 4815* and/or *AS/NZS 4187)* and in line with the current version of the ADA *Infection Prevention and Control Guidelines.*

Instrument reprocessing is a multistep process that includes cleaning, disinfection (if applicable), inspection and assembly, testing (if applicable), and then packaging and sterilisation (if applicable). All instruments are classified according to the Spaulding classification system (critical, semi-critical and non-critical).

|  |  |
| --- | --- |
| **Classification** | **Reprocessing** |
| Critical: Sterile site | Item is wrapped, then sterilised |
| Semi-critical: Mucosal contact | Sterilise if possible, otherwise thermal disinfection (instrument washer) or high-level disinfection |
| Non-critical: Intact skin | Cleaning with detergent |

Manufacturers’ instructions are always followed for instrument reprocessing, and for details of the appropriate barrier required, if any.

Instruments that are corroded, damaged, no longer function as intended or cannot be properly cleaned and disinfected or sterilised are sent for repair or discarded. In our practice [insert name or title of the person] is responsible for instrument reprocessing.

[Add any other details as relevant to the practice].

# 3.1 Critical instruments

Critical reusable instruments are used for penetration into sterile tissue, cavity or blood stream and pose the highest risk of transmission of infection.

[Provide examples of procedures performed in the practice that require critical instruments, e.g. surgical extractions such as the removal of a fully impacted tooth or a retained root, implant placement, endodontic or periodontal surgical procedures; insert others].

Technique:

1. During use, reduce the build-up of blood, cement and debris on instruments by wiping them with sterile gauze using a one-handed method.
2. At the completion of the procedure, if the instruments cannot be cleaned immediately, they should be soaked in a pre-cleaning or ‘holding’ solution of water and detergent [describe the procedure used/what detergent/where this is stored].
3. Clean the items using mechanical cleaning (ultrasonic cleaner or instrument washer, as specified by the manufacturer). If using an ultrasonic cleaner, items must be rinsed thoroughly and then examined.
4. Once dry, inspect the item for integrity and damage, using good lighting. Discard damaged items or sterilise them and then send for repair.
5. Place into an appropriately sized pouch or wrap. Wrapped items are appropriately sealed prior to sterilisation with steriliser tape or by heat sealing.
6. Apply batch control identification (BCI) for all packages containing critical items [describe the procedure used].
7. Sterilise packages using a steam steriliser with a ‘wrapped’ cycle using validated parameters.
8. Keep critical items in their packages until used. Store the packages in a way that prevents damage to the item, or exposure to moisture.
9. When setting up, check packages for damage and for proper colour changes of the external Class 1 chemical indicator and any internal class 4, 5 or 6 indicator before using the contents of the package.
10. Record BCI details for all critical instruments used in the patient’s treatment records.

When considering critical instruments for endodontic treatment, it is necessary to ensure that files and other instruments that are placed into the root canal system are sterile at the time of use. When purchasing hand files and rotary files, check the product information as to whether the items have been cleaned, packaged and sterilised. If not, package and sterilise them on site in the dental clinic before using them in patient care.

# 3.2 Semi-critical instruments

Semi-critical reusable instruments come into contact with intact non-sterile mucosa or non-intact skin. Examples of procedures performed in our practice that require semi-critical instruments include [impression taking, intra-oral examination, restorative dentistry; insert others]. Semi-critical instruments used in the practice include [mouth mirrors, restorative hand instruments, dental tweezers and probes, metal impression trays; insert others].

Semi-critical instruments are not required to be sterile *at the point of use* and they do not need batch control identification.

Semi-critical instruments are either ‘single-use disposable’ or they are cleaned and sterilised between patients. When heat sterilisation is not possible (as in the case of optical devices such as curing light tips, [intra-oral cameras, intra-oral scanners; list others]) the manufacturer’s advice is followed and a disposable barrier may be used.

Technique:

1. Using a one-handed method, wipe the working ends of instruments periodically during use, using an adhesive-backed sponge to prevent cement, blood and other material hardening on the instruments.
2. Clean instruments thoroughly as soon as possible after using them. [If a pre-cleaning or ‘holding’ solution is used, describe this. Also describe the procedure used for cleaning, with details of how ultrasonic cleaners or instrument washers are used for mechanical cleaning].
3. If the instrument/equipment will not tolerate steam, use an instrument washer with a thermal disinfection cycle. For the rare situation where thermal disinfection is not available or appropriate, use a TGA-approved high-level (instrument-grade) disinfectant (e.g. Ortho-phthalaldehyde (OPA) based high-level disinfectant [specify details of how and when this is used]).
4. Store semi-critical instruments (including instruments in unwrapped cassettes) in a cleanable, dedicated container in dedicated closed drawers or cupboards away from the contaminated zone and away from splashing and aerosols produced during equipment washing, ultrasonic cleaning and reprocessing, or from clinical procedures and handwashing [describe storage].

# 3.3 Non-critical instruments

Non-critical reusable instruments come into contact with intact skin. They pose the lowest risk of transmission of infection. Examples of items used in our practice that are non-critical instruments include [prosthetic gauges and measuring devices, face bows, protective eyewear, bib chain; insert others].

Technique:

1. Clean non-critical items thoroughly as soon as possible after using them [describe the procedure used/what detergent/where this is stored].
2. If decontamination is necessary, disinfect them using heat (thermal disinfection) or a chemical disinfectant [describe the procedure used/ which disinfectant/where this is stored].

4. Instrument reprocessing area and workflow

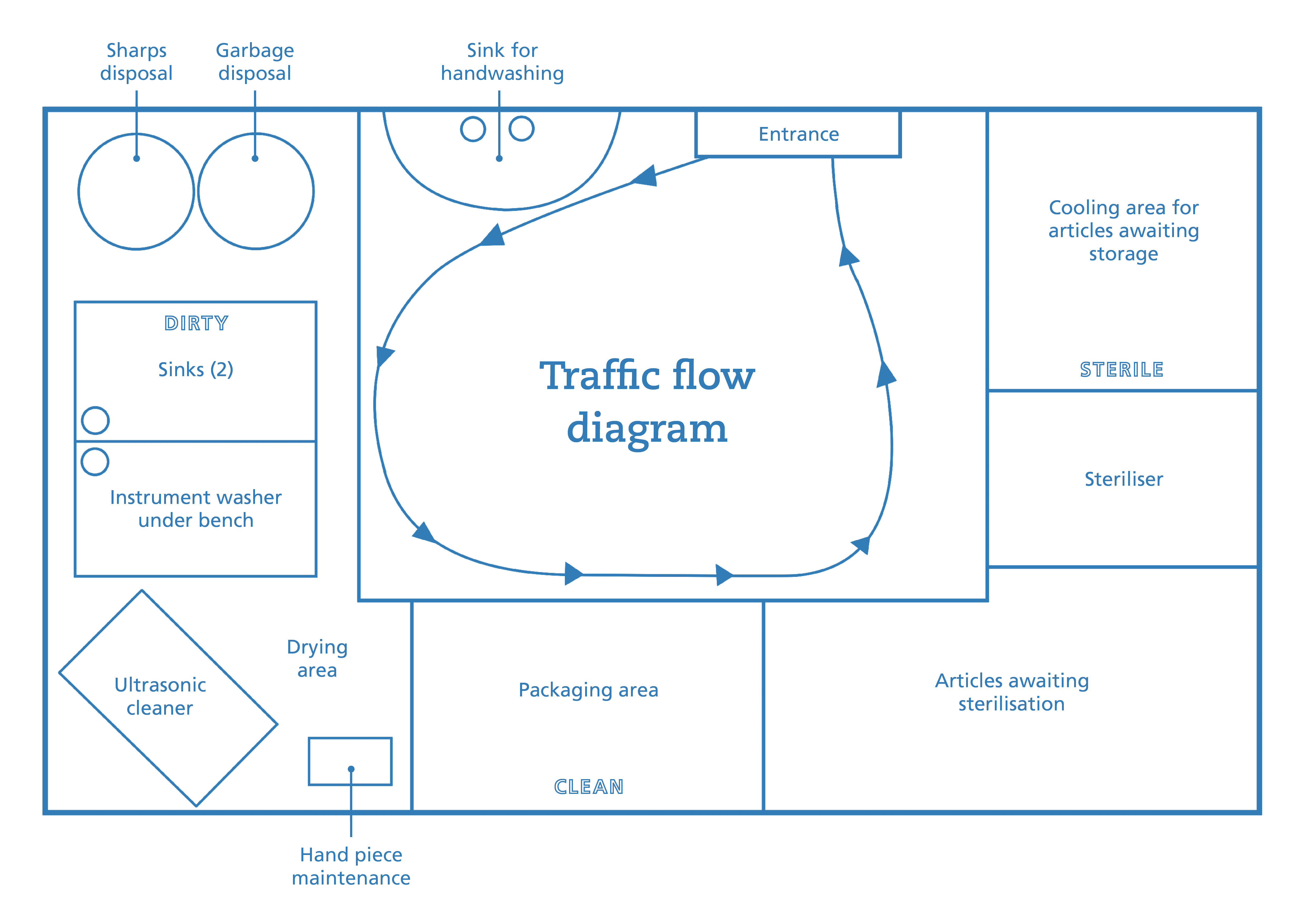
The instrument reprocessing area requires: aseptic techniques, instrument flow from contaminated to clean, good lighting and ventilation, hygienic and cleaned work surfaces, adequate storage space, separate handwashing and contaminated instruments sinks and a cooling area for sterile items awaiting storage.

In our practice, the instrument reprocessing area is divided into dirty and clean areas. Careful transport of contaminated instruments in closed lidded containers is undertaken to reduce cross-contamination and prevent sharps injury.

Technique:

1. Using gloved hands, carry contaminated instruments from the surgery to the instrument reprocessing area using a suitable container [e.g. locked into an instrument cassette, or in trays that are placed in a lidded container; describe your system].
2. Place the instruments on the bench in the contaminated zone of the sterilising room.
3. If using an instrument washer, load them into the instrument washer directly.
4. If using an ultrasonic cleaner, first rinse the instruments briefly with warm water, then place them into the ultrasonic cleaner and activate the cycle.
5. If placing the instruments into a pre-cleaning or holding solution, [include details of how that is done and what is used].
6. Remove gloves and perform hand hygiene.

Instrument reprocessing workflow pattern



[Using the example above, create a flow diagram for the instrument reprocessing process specific to your practice.]

5. Mechanical cleaning

Critical and semi-critical instruments (other than handpieces and other specialised items) are cleaned mechanically. In our practice we use [instrument washer/s and/or ultrasonic cleaner] to mechanically clean instruments. Instruments are then sterilised using steam.

**Ultrasonic cleaners**

In our practice, ultrasonic cleaners are used for cleaning the following: [jointed instruments such as scissors, stainless steel syringes or those with serrated beaks such as artery and extraction forceps; insert others].

In our practice, the use, maintenance and testing of the ultrasonic cleaner is carried out and recorded according to the following protocol:

Technique:

1. Operate the ultrasonic cleaner according to manufacturer’s instructions, in a ventilated area, keeping the lid on whenever the cleaner is in operation.
2. At the start of the day, add water to the chamber to the required level.
3. Add the specified low foaming detergent additive to the ratio specified by the manufacturer [describe the additive used, the dilution ratio, where the additive is stored].
4. Degas the solution in the chamber ultrasonic by running the unit for [the specified period in minutes] with no instruments.
5. Pre-clean instruments at the chairside by wiping using a one-handed method.
6. If required, pre-soak instruments in a solution of either ultrasonic solution or a diluted (e.g. 5%) neutral detergent solution.
7. If not pre-cleaned in the surgery, rinse instruments to remove blood and debris using warm running water [describe how this is done in the practice], before placing them in the ultrasonic cleaner.
8. Place the opened instruments [in a basket or in an instrument cassette] that is submerged in the water.
9. Close the lid, and then commence the cycle.
10. On completion of the cycle, remove the instruments, rinse them well in warm to hot running water, and allow the water to evaporate so the instruments are free of water.
11. Examine each instrument visually under good lighting to ensure that each one is clean, and free from any biological residues. Discard damaged or rusted instruments [describe how this is done in the practice, e.g. contain them and put aside, then inform management of the need to arrange replacement]. If items are clean, progress to the packaging and sterilising phases of reprocessing.
12. Instruments with visible residue debris are quarantined for further cleaning cycles through an ultrasonic cleaner, or by manual cleaning. [Describe your process]
13. Change the cleaning solution at least daily, and also during the day when it appears cloudy or visibly contaminated. New solution needs to be degassed [describe what solution is used, when it is filled, emptied and changed – e.g. at the end of each day, half way through the day and when heavily contaminated].
14. Once each day, perform an approved performance test for the transducers and record the result. [Describe which test is performed, e.g. aluminium foil test, pencil test, test strips with artificial soils, or other performance test. How and when it is performed in your practice, where results and faults are recorded and how faults are escalated/followed up].

*(Note for guidance –* *Performance tests are described under AS 2773: 2019 Ultrasonic cleaners for health service organisations. They can be done at the start of the day with fresh solution and additive, but the test is more rigorous when done at the end of the day when the solution in the chamber has been used several times. If using the aluminium foil test, after 30 seconds there should be uniform pitting and indentation on the foil, since ‘blind spots’ where there is no marking of the foil indicate that one or more transducers are faulty. For more information on performance tests, refer to AS 2773:2019, to the ADA Practical Guide to Infection Control, and to the ADA Guidelines on Infection Prevention and Control*.*)*

1. At the end of each day the ultrasonic cleaner is emptied, and the tank is cleaned by rinsing tap water through it and wiping it out so the chamber is left to dry overnight. This prevents biofilm accumulating. Take out any baskets or strainers, rinse them, and leave them to dry overnight [describe how this is done in your practice and by whom, add any additional relevant information].

**Instrument washers**

Washers/disinfectors are well maintained and the chamber is cleaned regularly [describe when, how and by whom] to prevent the formation of biofilms.

In our practice, the use, maintenance and testing of the instrument washer is carried out and recorded, according to the following protocol:

Technique:

1. Operate the instrument washer according to manufacturer’s instructions.
2. Ensure that there is a sufficient amount of working solutions in the reservoirs to operate the instrument washer (alkaline detergent, acid wash) [describe who checks and refills these reservoirs, where the extra supplies are kept, who is the supplier and reordering details].
3. Check that the mesh on the floor drains is not blocked with debris.
4. Load the items into the chamber. Position them to stop water pooling. Ensure that the movement of the spray arms is not blocked.
5. Place one or more soil test strips in locations in the chamber that are difficult to reach. [Describe the type of soil test, who supplies it, where extra supplies are kept and any additional information].
6. Close the door, select the appropriate cycle, and then commence the cycle. Note the start time in the record book for the instrument washer.
7. On completion of the cycle, remove the instruments for inspection, and check the soil test result. Record the soil test result in the record book.
8. Examine each instrument visually under good lighting to ensure that each one is clean and free from any biological residues. If items are clean, progress to the packaging and sterilising phases of reprocessing.
9. Discard damaged or rusted instruments [Describe how this is done in the practice, e.g. contain them and put aside, then inform management of the need to arrange replacement].

*(For more information on instrument washers, refer to the ADA Practical Guide to Infection Control, and the ADA Infection Control Guidelines)*.

1. At the end of each day, check that the drain mesh is clear, the door seals are clean and the chamber is free of residues [describe how this is done and by whom].

6. Manual cleaning of contaminated instruments

Manual cleaning is avoided, as most items are designed to be cleaned using mechanical/automated cleaning (ultrasonic cleaner or instrument washer). The only items that need manual cleaning are [list each instrument, consider including photographs].

Manual cleaning is performed in a manner that minimises the risk of sharps injuries and splashes. During manual cleaning, items are held one at a time deep in the designated sink. Any splashes of cleaning agents onto the skin are washed quickly away with clean water, and then treated in accordance with the manufacturer’s instructions. Any exposure to cleaning agents is reported to [insert title of the person who incidents are to be reported to]. The procedure below is followed to comply with workplace health and safety principles.

Technique:

1. Apply standard precautions including heavy-duty utility gloves, eye protection/face shield, a mask, an appropriate gown/apron, and suitable footwear.
2. Clean/remove soiling and other contaminants from item as soon as practical after use (preferably chairside) by wiping onto an adhesive-backed sponge [describe exactly how this is done, which sponges, where they are stored and what process occurs after their use] or placing in a pre-cleaning or ‘holding’ solution containing detergent [describe exactly how this is done, which detergent, and where it is stored] to prevent residues drying onto the surface.
3. Immerse the item in the dedicated instrument-cleaning sink. Apply lukewarm tap water and an approved instrument-grade detergent [describe exactly how this is done, which detergent, and where it is stored].
4. Use a long-handled instrument brush or wire bur brush [describe or insert photographs of the types of brushes used in your practice] to remove debris and continue the process until the item is visibly clean.
5. Thoroughly rinse the item with warm water and then hot running water, to remove all traces of detergent.
6. Inspect the item under good lighting for remaining residues. Discard the item if it is found to be damaged beyond repair or rusted.
7. Quarantine the item if it still has visible debris, as it will need further cleaning. Remove remaining debris by thorough scrubbing with detergent and water [describe exactly how this is done, which detergent is used and where it is stored].
8. Cleaning brushes used for manual cleaning are washed, rinsed and stored to dry [describe how and where this is done, e.g. steam sterilisable brushes are washed and steam sterilised after use; special bur brushes are used for burs].

7. Drying instruments

In our practice, instruments are dried after ultrasonic cleaning or manual cleaning, to ensure they can be inspected properly. Instrument washers have a drying cycle, and produce dry instruments, which eliminates the need for a separate drying step. In our practice, instruments are dried in the following way/s:

* [If appropriate, the cleaned items are given a short rinse in very hot water, after which the surface water will evaporate, leaving them dry and able to be inspected]
* [If appropriate, the cleaned items are placed into a drying cabinet]
* [If appropriate, the cleaned items are dried using lint-free towels, using a method that avoid sharps injury from sharp instrument ends. The towels or cloths are regarded as contaminated, and are placed with the used linen, or disposed of.]

8. Disinfection

Disinfection inactivates non-sporing infectious agents, using either thermal (moist or dry heat) or chemical means. Disinfection does not destroy all pathogens (e.g. microbial spores) and is therefore not sterilisation.

An instrument washer can achieve thermal disinfection. Thermal disinfection is commonly used for the following items in our practice [insert details of the instruments, e.g. some prosthetic instruments, polishing buffs and brushes, others].

Chemical agents used for disinfection of instruments and other items have limited use in dentistry. Chemical disinfection is only used in our practice when thermal disinfection is unsuitable [insert details of these instruments, e.g. for some prosthetic items] using [insert details of instrument disinfectants used] and conducted according to manufacturers’ directions.

Commercial chemical disinfection formulations must be registered with the TGA. Each product is typically designed for a specific purpose and staff in our practice check labels carefully to ensure the correct product is selected for the intended use and applied correctly. Ortho-phthalaldehyde (OPA) is a high-level disinfectant approved for use with medical instruments by the TGA, for items that cannot withstand heat.

Instruments must never be stored in disinfectant solutions.

9. Packaging prior to sterilisation

In our practice, instruments are packaged into [cassettes/pouches/packages/ bags] prior to steam sterilisation.

In our practice, we use the following for instrument packaging:

* [Insert size, type and brand of bags, pouches and wraps if applicable]
* [Insert brand of cassettes if applicable]
* [Insert storage location of wrapped items, if applicable]
* [Insert type and brand of Class 1 chemical indicator tape and storage location]
* Product issues are reported to [Insert title of responsible person and reporting process]
* [Insert any other pictures or instructions relevant to this process].

Technique:

1. Place instruments into cassettes or bags. Consider the positioning, so that the handle end is in the correct position for use. Consider the need to protect the working edges of delicate instruments. Ensure that, if the item has been lubricated, excess lubricant has been drained off so it does not remain on the item.
2. Label all wrapped *semi-critical* items with the date of processing, and steriliser identification using [insert your process, e.g. a labelling gun, a non-toxic, solvent-based felt tipped permanent marker].
3. Label all wrapped *critical* items (e.g. those intended to be used for oral surgery) with the date of processing, the steriliser identification and include a batch identification code, using [insert your process, e.g. a labelling gun, a non-toxic, solvent-based felt tipped permanent marker].
4. Seal all pouches, bags and wraps [describe how this is done and if pouches are self-sealing, or if steriliser tape or a heat sealer is used].
5. Take care not to damage or perforate the bags during handling, transport, storage and labelling.

10. Batch control identification (BCI)

BCI is performed for all packages of critical instruments. BCI has two key parts.

The first part of BCI occurs in the instrument reprocessing room, where a batch control number is assigned to the items in one particular cycle, and data relating to that cycle is collected when the cycle has been completed. All wrapped/bagged items are labelled with the date of processing, steriliser identification and load number or batch code.

Our practice’s BCI procedure involves the following considerations for staff working in instrument reprocessing:

* A permanent labelling process for wrapped/bagged items [insert details e.g. indelible pen/labelling gun with a piggy back sticker system/stickers with bar coding/other BCI system]
* Sterilising cycle information for each load is recorded in the sterilising room at the end of each cycle by the unloading operator [insert where the records are kept and how they are completed].

Each critical pack is labelled with:

1. Steriliser identification number or code (if there is more than one steriliser within the practice).
2. Date of sterilisation.
3. Cycle/load/batch number.

In addition to surgical instruments, batch numbers are used for any other items that are reprocessed that are intended to be utilised for surgical procedures (e.g. sterile surgical drapes).

The batch control numbers recorded in the notes link the steriliser cycle batch information of each package of items that has been sterilised to the treatment of the relevant patient. This documentation is a legal written record that confirms our practice’s sterilising processes.

The second part of BCI involves the clinicians, who record the batch codes for packages of instruments that they have used in critical procedures, in the records of the patient’s treatment. This is a medicolegal requirement of the Code of Conduct or Accreditation standards from the Dental Board of Australia. It is the responsibility of the clinical operator to ensure that BCI information is transferred to the patient’s treatment records when they are written up.

11. Steam sterilisation

Sterilisation is the process of destroying all microorganisms, including spores, on the surface of an item. The sterilising requirements for each instrument are specified by its manufacturer, and this information is followed at all times by our staff.

In our practice, the steam sterilisers used are TGA-approved. They are operated according to their manufacturer’s instructions. The operating manuals are stored [describe where to access these manuals].

Steam steriliser details:

* [Insert the total number of steam sterilisers
* Brand
* Identifying or serial number, date of purchase, warranty period, service and repair contact, any other information].

All wrapped loads containing hollow items are processed in our practice using a pre-vacuum cycle that includes a drying cycle (B cycle).

[Note – If your practice has an ‘S cycle’ (specified load) steriliser, describe what the specified load configurations are].

The sterilisers are run using water that is free of ions (dissolved solids). In our practice, this water is [state if demineralised water is purchased, if water is distilled on site or purchased, if water is deionised on site, or if there is a reverse osmosis unit. If the water is produced on site, describe how the system that generates it is maintained, who does this, what items need to be replaced at what service intervals, etc.].

[Describe if water is reused from successive cycles or used once and then dumped. If water is reused, describe the weekly process to empty the water reservoir, flush it, and refill it].

Daily steriliser maintenance performed in our practice includes the following checks:

* Floor of the steriliser is free of debris.
* Chamber drain filter is clear.
* Thermal printers and ink printers are functioning correctly, and have paper loaded into them.
* All gauges and timers are functioning correctly.
* If visible, the door gasket is undamaged.

[Describe the normal sequence for cleaning the chamber, checking the door seals – who does this, and how often]

[Describe who does the regular servicing of the steam steriliser, and handles any repairs – who does this, their contact details]

A record of mechanical testing, repairs and preventative maintenance must be kept for each steriliser. This information is kept for a minimum of seven years.

Steam steriliser maintenance logs and operating manuals are readily accessible by staff and stored [where].

12. Steam steriliser loading

Steam sterilisers work effectively if steam can circulate freely and touch each surface of every instrument. The correct load content and positioning of instruments also reduces damage to packs and their contents. In our practice, staff ensure that the steam steriliser trays are not crowded, and items are spread out and not overlapping, by using the following loading devices [provide details of loading devices].

Technique:

1. Load hollow items according to the manufacturers’ instructions, e.g. tilted on their edge in a draining position.
2. Position hollow items packed in pouches with their opening against the paper and not the plastic.
3. Load laminate (paper-plastic) pouches on the edge of the paper.
4. Utilise racks for adequate separation of packs.
5. If not in racks, laminate pouches are positioned in single layers with the paper surface downwards, and never stacked on top of each other.
6. Load items within the chamber so that they do not touch the chamber walls at any point.
7. [Insert any other information that describes the practice’s technique].

13. Steam steriliser testing

The regulations for steam steriliser performance testing are set out in the NHMRC *Australian Guidelines for the Prevention and Control of Infection in Healthcare*, AS/NZS 4815:2006, AS/NZS 4187:2014 and the ADA’s *Guidelines for Infection Prevention and Control*.

In our practice, staff performing sterilisation are trained in the correct operation of the steam steriliser. Each steam steriliser has a steam steriliser record book, which is filled in when each cycle is loaded and at the end of each cycle. All protocols and procedures for all required tests for steam sterilisers are documented.

**Installation Qualification (IQ)**

[Describe the results of the installation qualification (IQ) or commissioning of the steam steriliser – who did it, when it was done, where the report is kept].

**Annual Calibration**

[Describe the annual process of calibrating the thermocouple sensors – who does this, their contact details, when it was last done].

**Cycle Data**

[Describe how cycle data from every cycle is captured – permanent ink printout, thermal printout, or electronic data capture.

Describe how thermal printouts are recorded (scanned, photographed) so that data is still readable – as these fade over time.

Describe how data from memory cards is periodically downloaded and regularly backed up].

14. Validation of the sterilisation process

Validation of the sterilisation process is required to ensure the appropriate sterilisation of items in our practice and includes commissioning and a commissioning report performed by a qualified technician.

Validation is necessary whenever new or repaired sterilisers are installed, when there is a change in the type of packaging material used, or annually, at a minimum.

Validation of cycle parameters involves using multiple biological indicators (endospores).

The records for Installation Qualification, Operational Qualification and Performance Qualification are accessible in the practice, and are located [where].

15. Steam steriliser monitoring tests

Regular monitoring of the sterilisation cycle ensures the sterility of reprocessed instruments. The performance of each steam steriliser is monitored by daily and weekly tests as stipulated in *AS/NZS 4815:2006 (Table 7.1)* and *AS/NZS* *4187:2014 (Table 8.1).* Time, temperature and, where applicable, pressure parameters are measured with continuous, automatic and permanent monitoring. A separate record book is kept for each steriliser with an entry made for each steriliser cycle. For more information, refer to the ADA’s *Practical Guide to Infection Control.*

For the steam sterilisers in our practice that operate pre-vacuum cycles, the following monitoring for air removal is undertaken:

* Chamber/door seal air leakage test [describe whether this is done daily or weekly].
* The brand of air removal test for a porous load challenge [e.g. Bowie-Dick type test or emulator of that. Describe the testing process, frequency and documentation, and test supplier].
* Air removal test for a hollow load challenge: [brand and type, e.g. Helix PCD, or dental load challenge device].
* [Describe the testing process, frequency and documentation, and the test supplier].

# 15.1 Chemical indicators

In our practice, chemical indicators certified to international (ISO) standards are used according to manufacturers’ instructions to show that certain temperatures, times and pressures have been reached during the sterilising process.

Every load of a steam steriliser includes a Class 1 process indicator included in the load to indicate the load has been heated. [Most bags used to pack instruments will include a Class 1 indicator on their outer surface. If so, insert here a photograph of the colour change that occurs during steam sterilisation – by showing before and after].

Class 1 chemical indicators are placed in each load if non-bagged items are processed.

Class 1 indicators are included on the outside of each wrapped package as a visual check following sterilisation.

Where instruments are intended to be sterile at the point of use, and full verification of cycle parameters has not occurred (e.g. a steriliser being used is a loaner unit), Class 4–6 indicators are included within each package. [Insert images of the required colour change before and after processing].

All staff in our practice are trained in how to interpret chemical indicators for the required colour change at the end of a cycle. Chemical indicators have a defined shelf life and we manage this in our practice by ensuring that stocks of these indicators are never used past their expiry dates. [Describe your process, who checks this and marks the use by date for the box of indicators in a prominent place].

# 15.2 Biological indicators

Our practice performs an annual verification of lethality (killing of microorganisms) using endospores as biological indicators. This shows that endospores of heat-resistant bacteria are killed by the cycle parameters that are used in our steam sterilisers. The process for this involves three sequential cycles with biological indicators (‘endospore tests’) placed in a package of the most difficult size/shape that is located in the ‘cold spot’ of the chamber. [Describe how the test is done. Refer *to the ADA Infection Control Guidelines* for more information.]

Testing of each steam steriliser using biological indicators is done at least once per year, and whenever there is a change in the type of packaging material used.

16. Checking the completed load

Regular monitoring of the sterilisation cycle is necessary to ensure the sterility of reprocessed instruments.

On completion of each sterilisation cycle in our practice, staff remove the load from the steriliser and perform a visual inspection in the following way [describe how this is done, e.g. ensure that the load is dry, that any sterilising indicators have made the required colour change and that packaging is intact before being transferred to storage areas.] Damaged packs are removed from circulation and considered contaminated.

Technique:

1. Ensure that the door of the steam steriliser remains closed during the drying cycle. Items are not to be cooled by fans or boosted air conditioning.
2. Prior to the removal of the load, the operating staff member [insert responsible role, e.g. dental assistant / sterilisation assistant] checks the recording charts, data display or printouts.
3. They then check the Class 1 chemical indicator in the chamber.
4. As they remove each package, the staff member checks each package for dampness and for damage to the seals or to the packaging itself. Packaged items that are wet, and packages that are torn or have broken seals, which are inadvertently dropped and therefore are contaminated, are non-conforming. The instruments must be removed, and re-packaged, for later sterilisation. [Describe how this is performed].
5. Immediately upon removal from the chamber, place the hot sterilised packages on racks, not on flat surfaces such as benchtops where condensation can occur. For the same reason, do not cover items with plastic dust covers while they are still hot.
6. The operator signs the designated record sheet, or otherwise notifies [insert the title of the person to notify] if a failure of any parameter is detected. In this case the entire contents of the load is to be re-sterilised.
7. If any variation from standard performance occurs, or equipment failure is observed:

* [Who is notified of the problem
* Where and how are these issues documented
* Who will instigate repairs
* Insert any other information that describes the practice’s technique].

**Recall process**

[The practice should document here a ‘recall process’ to be followed in case of non-sterilised packages that have been released back into clinical circulation. This should include aspects such as:

* Identification of the relevant batch of suspect packages of instruments – where are they, have they been used, and if so, on whom?
* Withdrawal of packages from circulation, with the contents being re-packaged and re-sterilised.
* Documentation around how the incident was noted or detected, and what actions were followed after it. Root cause analysis can be used to identify responsible factors and contributing factors, and determine preventative actions to stop recurrence of such events].

17. Storage of processed instruments

In our practice, sterile packaged instruments are stored in a clearly designated clean and dry area, protected from contamination. The storage of sterilised items occurs in [specify locations] in our practice.

Technique:

1. Wrapped loads are carefully stored away from contamination and the integrity of the packaging wrap maintained during storage. Items stored on open shelving are to be stored above floor level by at least 250 mm and away from ceiling fixtures by at least 400 mm, and protected from direct sunlight and winds from open windows.
2. The integrity of bagged/wrapped packs of instruments is checked in the clinic before use. [Describe this process in the practice, e.g. user checking includes checks for the integrity of the outer wrap, the integrity of seals on all sides of packaging, the correct labelling including date of sterilisation and batch number and the correct colour change of the external chemical indicator]. Packages showing damage are not used.

F. Dental areas and equipment

Particular dental care procedures and items of equipment require specific infection control processes.

1. Curing light

Curing light tips are semi-critical pieces of equipment. In our practice, these are [heat sterilised/have an appropriate barrier placed over the tip for each patient]. The handle of the curing light and its tips are cleaned prior to having the barriers placed, and a new barrier is used for each patient.

2. Air abrasion, electrosurgery units and lasers

Air abrasion devices create alumina dust, which is an aerosol biohazard, while lasers and electrosurgery units used for tissue ablation generate plume. In our practice, staff wear high filtration surgical masks, and high-volume suction is used to remove particles, so they are not inhaled when electrosurgery units, dental lasers and air abrasion / particle beam units are being used.

3. Dental radiology and photography

Radiographic films, phosphor plates and direct imaging sensors that have been placed in a patient’s mouth to record radiographic images need to be protected with custom-made barriers, to prevent them becoming contaminated with saliva.

Technique:

1. Wear gloves and other protective equipment when handling contaminated film packets or sensors.
2. Clean the parts of radiography equipment that touch patients or are touched with contaminated gloves at the end of the appointment (e.g. radiograph tube head and control panel). [Describe the cleaning process, or whether they are covered with a barrier that is then replaced].
3. Clean and cover over digital radiography sensors between patients. In our practice we [describe the process].
4. Clean film-holding and positioning devices between patients. [Describe the cleaning process, include whether the device is then heat-sterilised or barrier-protected.]
5. Transport exposed film radiographs and handle them carefully to avoid contamination of the developing equipment. [Describe this process.]
6. Dispose of film packets and barrier envelopes that are contaminated with saliva or blood. [Describe this process.]

4. Implants

Staff use full aseptic procedures during surgical implant placement in our practice. This includes:

* surgical hand preparation
* sterile gloves
* sterile gowns
* sterile drapes
* sterile instruments
* surgical motors that can be sterilised or draped
* sterile irrigation and coolant solutions
* hair covers, in addition to other items of PPE such as masks and protective eyewear.

All packages of instruments are checked for integrity and correct sterilisation before being used.

Surgical handpieces are sterilised using a pre-vacuum (B type) cycle in a pre-vacuum steriliser or in an approved S cycle steriliser.

Surgical guides used for implant surgery are treated with an instrument level disinfectant to decontaminate them. [Describe how this is done, e.g. immersion in OPA solution.] They are then rinsed thoroughly to remove all traces of disinfectant prior to use.

All batch numbers for instrument packages are recorded. Batch information for all dental implants is recorded in patient notes, as well as the size and type of implant used. Any explanted devices are discarded [describe how this is done].

Implant drills are either discarded or are reprocessed, according to the manufacturer’s instructions [describe how this occurs in the practice].

5. Impressions

Impressions are decontaminated using the following method.

Technique:

1. Rinse thoroughly with cold running water to remove saliva and any traces of blood.
2. Apply diluted neutral detergent (using a spray to cover all the surfaces). Spray the impression liberally with detergent while it is enclosed within a bag. Seal the bag to saturate the atmosphere.
3. Wait several minutes, then remove the impression and rinse it again in running water. All visible contamination must be removed at this stage, otherwise repeat the two preceding steps again.
4. If appropriate (e.g. the patient has been colonised with multi-resistant organisms), additional chemical agents (e.g. 0.5% hypochlorite solution for up to 15 minutes, or other approved disinfectants) can be used [describe how this is done].
5. Place the impressions into a sealed container or bag and label them as decontaminated [describe how this is done and where these are kept].
6. If they are being transported to an off-site laboratory [describe how this is done].

6. Dental prosthetics

Technique:

1. Apply standard precautions at all stages of handling of the appliance or prosthesis.
2. Appliances, prostheses and impressions are cleaned [describe this process] and then transported to and from dental laboratories in a sealed bag or container.
3. Thoroughly clean all dental prostheses, appliances and items that have come from the laboratory and will be placed into the mouth (such as wax contour rims and set-ups) before insertion and adjustment [describe this process].
4. Ensure that laboratory areas of the practice that are used for grinding or cutting plaster or making study models or laboratory items are well separated from areas that are used for instrument reprocessing.
5. Ensure that instruments, equipment, attachments and materials used at the chairside or in the mouth on contaminated prostheses or stages of prosthetic work are either single-use, or able to be cleaned and preferably heat sterilised after each patient use [describe how this is done, which items require heat sterilisation, and which require thermal disinfection].
6. Polishing pumice is dispensed for each patient’s use, and the pumice tray is cleaned after each use [describe this process].

7. Matrix bands

Matrix bands are considered single-use items and are discarded after use into the sharps container.

In our practice, we use [insert type of matrix bands]. They are disposed of [describe how and where this is done].

8. Dental handpiece and bur management

All dental handpieces are cleaned, lubricated and sterilised in accordance with the manufacturer’s instructions. In our practice, dental handpieces, ultrasonic scalers and scaler inserts are sterilised between patients.

Technique:

1. Flush handpieces for 30 seconds before detaching them from their couplings.
2. Wipe external surfaces of handpiece with a detergent-impregnated wipe.
3. Clean and lubricate internal aspects of the handpiece as directed by the manufacturer [describe how this happens, brand of handpieces, supplier, where the handpieces are stored, where the lubricant solutions are stored, where instructions for handpiece lubrication are kept, etc.].
4. Take care to ensure that excessive lubricant does not remain, as it could compromise the sterilisation process [Describe how is this done, e.g. using automatic lubricate and flush-through systems that run the handpiece to remove excess lubricant, draining the handpieces vertically, running the handpiece briefly before use to clear excess lubricant, etc.].

Sterilise handpieces in a steam steriliser using a B cycle, or in an S cycle unit which is specified as being suitable for handpieces.

For the management of burs and ultrasonic scalers in our practice:

* Burs are cleaned and reprocessed between patients, or are disposed of after use [describe how this occurs, including which sizes and types of burs are discarded after single use, if this is done].
* Ultrasonic scaler tips are packaged so that they are sterile at the point of use. [Describe how this occurs, brand of ultrasonic, supplier, where the tips are stored, etc. Describe if the entire piezoelectric ultrasonic scaler unit is designed to be steam sterilised.]
* Bur brushes are cleaned thoroughly, and then sterilised daily [describe how this occurs in the practice].

9. Specimens

Gloves are worn when handling pathology specimens and specimen containers. Each biopsy specimen is placed in a sturdy, leak-proof container labelled with the biohazard symbol before dispatch.

If a biopsy specimen container is visibly contaminated, staff clean and disinfect the outside of the container before placing it into the transport bag or container [describe how this process is conducted and who is responsible].

10. Endodontic irrigants

TGA-certified sodium hypochlorite endodontic irrigant solutions are intended to assist debridement, cleaning and chemical breakdown of pulpal soft tissues of the root canal. In our practice we use [describe the brands of irrigant solutions that are used, supplier, where they are stored, etc.].

11. Gutta percha points

Gutta percha points are disinfected before use in canal obturation [describe how this happens, e.g. 0.5–5% sodium hypochlorite solution for 2 minutes, brand, supplier, where the solution is stored, etc.]. Sterile tweezers are used to handle disinfected gutta percha points.

12. Hand-operated endodontic files

Stainless steel endodontic hand files are treated as single-use items in our practice and are disposed of after use [describe this process].

13. Rotary nickel-titanium (NiTi) endodontic files

In our practice, rotary nickel-titanium files are [single-use, or are reprocessed as specified in the ADA 4th edition *Guidelines for Infection Prevention and Control*].

Technique:

1. Remove stoppers immediately after use and insert the files into a scouring sponge soaked with chlorhexidine gluconate aqueous solution [describe this process].
2. Clean the files by using 10 vigorous in-and-out strokes in the sponge.
3. Place the files in a glass beaker and cover with a suitable enzymatic cleaning solution (e.g. Empower for 30 minutes) [Describe the enzymatic cleaner used in the practice, the process for cleaning, the product supplier and where the solution is stored].
4. Perform 15 minutes of ultrasonic cleaning with the files in the beaker still covered with the enzymatic solution.
5. Drain and rinse the files in hot running water for 20 seconds. Discard the enzymatic solution, being careful to avoid any splashing onto the skin.
6. Allow to dry then examine for debris, separations or distortions, and discard if these are found.
7. Package appropriately, label and sterilise.
8. Do not use the same rotary NiTi file if it has been through more than three cycles of reprocessing due to elevated chance of fracture in the root canal.

14. Relative analgesia equipment

In our practice, the nosepieces are [single patient use, or disinfected and reused], in accordance with the manufacturer’s instructions.

*(Note – Given the time that is required to clean and sterilise a nasal hood, a single-use nasal hood is very cost efficient. Multi-use nasal hoods are designed to withstand steam sterilisation, for a limited number of cycles.)*

Other analgesia circuit components that come into contact with a patient, such as tubing, may be steam sterilised or may undergo thermal disinfection using an instrument washer, or undergo chemical disinfection, following the manufacturer’s instructions. They are then stored appropriately [describe this process].

*(Note – Special protocols to clean the interior of the tubing may be specified by the manufacturer, involving soaking and rinsing. Depending upon the degree of contamination, the use of an intermediate-level or low-level disinfectant on the tubing after it has been cleaned properly should be sufficient.)*

15. Domiciliary and nursing home visits

Dental patients requiring treatment in their own home or in a residential aged care facility (nursing home) pose some challenges for infection control that necessitate variations in the techniques used. It is not uncommon to encounter norovirus, *Clostridium difficile* and VRE (vancomycin-resistant enterococci) in nursing homes. These require contact precautions (see the following section). In the absence of such pathogens, a key concern is the common presence of microorganisms that are not readily inactivated by alcohols in hand rubs.

Technique:

1. Apply standard precautions for all patient treatments and check with the patient or nursing home to determine if additional transmission-based precautions are required.
2. Use physical handwashing with liquid detergent, rather than alcohol-based hand rub, when hand hygiene is required.
3. [Consider the use of kits of fully disposable instruments. Dispose of these into sharps containers. If this is applicable insert details here].
4. Transport all instruments and materials to and from the facility in lidded metal or rigid plastic clean containers to prevent damage [describe how this happens].
5. Where possible, clean instruments as soon as possible after use with instrument-grade detergent and water or apply a TGA-approved pre-cleaning foam, then pack them back into a securely lidded puncture-proof container for transport to the clinic’s instrument reprocessing area.
6. Dispose of general waste in the general waste of the nursing/private home or hospital.
7. Dispose of medical waste in appropriate medical waste containers at the nursing home or hospital.
8. For a private home, bring a sharps container to the site of treatment for disposal of sharp items.

G. Transmission-based precautions

Transmission-based precautions are applied in our practice where there is suspected or

confirmed infection. Such precautions are tailored to the infectious agent to prevent its mode of transmission (airborne, droplet or contact).

Information on the requirements for transmission-based precautions is given in the current edition of the NHMRC *Australian Guidelines for the Prevention and Control of Infection in Healthcare* and in the [ADA Risk Management Principles for Dentistry during the COVID-19 Pandemic (2021)](https://www.ada.org.au/Risk-Management-Principles).

The application of transmission-based precautions is particularly important in containing multi-resistant organisms (MROs) and in the management of highly contagious infections that cause outbreaks, for example viral influenza, coronaviruses, monkeypox virus, multiple-resistant *Staphylococcus aureus* (MRSA), vancomycin-resistant enterococci (VRE), norovirus or other forms of gastroenteritis in institutions (such as hospitals and nursing homes).

1. Contact precautions

Contact precautions are applied in our practice when there is a known or suspected risk of direct or indirect contact transmission of infectious agents that are not effectively contained by standard precautions alone. Infectious agents for which droplet precautions are indicated include MRSA, VRE, *Clostridium difficile* and highly contagious skin infections or infestations.

The additional steps include the following:

* Use a detergent product with added disinfectant for cleaning surfaces and perform the wiping down procedure twice rather than just once.
* Use disposable items where it is practical to do so.
* For impressions, use a disinfectant as well as detergent for decontamination.

2. Droplet precautions

Droplet precautions are applied in our practice when patients are known or suspected to be infected with agents transmitted by large respiratory droplets produced by coughing and sneezing. Such infectious agents may also require contact precautions. Infectious agents for which droplet precautions are indicated include SARS-CoV-2, monkeypox virus, human influenza virus, respiratory syncytial virus (RSV) and meningococcus infections.

In our practice, staff explain the importance of respiratory hygiene and cough etiquette to patients on droplet precautions. Our practice waiting room has [describe signage, patient information and the availability of tissues and/or ABHR and/or a waste bin] so that patients can practice respiratory hygiene and cough etiquette.

Technique:

* Triage patients prior to the appointment by telephone for symptoms of active respiratory viral infection. Unless fully set up for appropriate transmission-based precautions, defer treatment, and refer urgent cases.
* Ensure that for vaccine-preventable diseases (VPDs), the staff who are in the clinic providing care have current immunity (e.g. they have had the current influenza vaccine, if treating a patient who is unwell with viral influenza).
* Schedule the patient as the last patient of the day.
* Use appropriate personal protective equipment, including protective eyewear and high filtration surgical masks that are adapted closely to the face.
* Minimise the generation of aerosols by using:
  + Pre-procedural antimicrobial mouth rinse
  + Proper patient positioning
  + High velocity suction with a wide bore tip (8–10 mm).
* Use techniques that avoid the generation of aerosols (e.g. hand scaling rather than ultrasonic scaling, reducing coolant spray flow rates).
* Place infected patients away from other patients.

3. Airborne precautions

Airborne precautions are applied in our practice when patients are known or suspected to be infected with agents that are transmitted person-to-person by the airborne route. These airborne droplets are highly contagious, and include measles (rubeola), SARS-CoV-2, chickenpox (varicella) and tuberculosis (TB).

See the *ADA Risk Management Principles for Dentistry during the COVID-19 Pandemic* for specific advice for aerosol precautions for COVID-19. Note that full airborne precautions as per the 2019 NHMRC guidelines will not be possible in many practice settings due to the absence of negative pressure rooms and because not all staff have been through a formal fit testing procedure for the wearing of P2/N95 respirators.

Technique:

* Triage patients prior to the appointment by telephone for symptoms of active respiratory viral infection. Unless fully set up for airborne transmission-based precautions, defer treatment, and refer urgent cases.
* Patients are to follow respiratory hygiene and cough etiquette.
* Coughing patients are given a correctly fitted surgical mask.
* Staff are to use appropriate personal protective equipment including surgical masks that meet AS 4381, or correctly fitted P2/N95 surgical respirators that meet AS 1716, to prevent the inhalation of small infectious particles (less than 1 micron in size).
* Staff are to minimise the exposure of other patients and staff members to the airborne infectious agent, by undertaking the following additional measures:
* Schedule the patient as the last patient of the day.
* Ensure that for vaccine-preventable diseases, staff providing care have current immunity (e.g. current influenza immunisation if treating a patient who has influenza, tuberculosis immunity if treating a patient who has active tuberculosis).
* Minimise the generation of aerosols by using:
* pre-procedural antimicrobial mouth rinse
* proper patient positioning
* high velocity suction with a wide bore (8–10mm) tip
* techniques that avoid the generation of aerosols (e.g. hand scaling rather than ultrasonic scaling).

4. Transmission of blood-borne viruses (BBVs)

Blood-borne viruses (BBVs) include hepatitis B, hepatitis C and HIV. These viruses are transmitted primarily by blood-to-blood contact. All patients treated in our practice are treated as potentially infectious, and standard precautions are applied at all times. These protect all our staff and patients from spreading these infections in the clinical workplace.

Patients with confirmed hepatitis B, C or human immunodeficiency virus (HIV) are treated using standard precautions, and we use the same cleaning and sterilisation techniques as for other patients.

5. Transmission of Creutzfeldt-Jakob disease (CJD)

Creutzfeldt-Jakob disease (CJD) is a fatal human prion disease belonging to the Transmissible Spongiform Encephalopathies (TSEs).

No special precautions are needed for routine dentistry, since prions are not found in oral soft tissues, bone or teeth, or in saliva. Patients with suspected or confirmed prion diseases can undergo dental treatment, including dentoalveolar surgery, in the normal manner.

Instruments used in routine dental and endodontic procedures can be routinely reprocessed for all patients with potential Creutzfeldt-Jakob disease (CJD) infection.

Only oral and maxillofacial surgery involving the central nervous system requires additional measures, including instrument tracing that relates a patient to an instrument rather than just an instrument to a sterilisation cycle.

For more information see the [NHMRC CJD Infection Control Guidelines](https://www.health.gov.au/resources/publications/cjd-infection-control-guidelines), 2013 at [www.health.gov.au](http://www.health.gov.au) or contact the ADA for additional advice on infection control procedures.

1. Transmission of methicillin-resistant *Staphylococcus aureus* (MRSA)

MRSA bacterium is resistant to common antibiotics and its ensuing infections are very difficult to treat.

If a patient in our practice is identified as an MRSA carrier, contact precautions are applied. These include double wiping of all surfaces touched by the patient (with a detergent as well as a disinfectant) and ensuring minimal contamination of surfaces during treatment of the patient and resulting waste disposal.

If a staff member in our practice becomes an MRSA carrier, they seek medical advice and undergo treatment. They will not undertake or assist with major surgical procedures in hospitals until cleared of MRSA.

7. Transmission of respiratory viruses

In recent years, respiratory viruses have been very prevalent in the community, with a high number of infections, including severe infections and death.

Respiratory viruses can be spread via airborne, contact or droplet transmission.

# 7.1 Influenza virus

In our practice, we encourage patients with influenza to delay dental treatment until they are no longer infectious (i.e. 2–3 weeks after becoming ill). We strongly encourage all staff to have annual vaccinations for common respiratory viruses including influenza, which is in line with national policies that recommend this for all health care workers.

# 7.2 Avian influenza infections

While avian influenza viruses usually only infect birds, they can cross species and infect people. When this happens, a global pandemic occurs and widespread severe illness is likely. Some avian influenza viruses, such as H5N1 and H7N9, are highly pathogenic, and can cause severe and fatal infections in humans. Like human viral influenza, avian influenza can spread rapidly from the point of origin within the community and particularly within healthcare settings.

Transmission-based precautions will be essential should any avian influenza enter Australia as a human-to-human transmitted virus. These are the same precautions as used for patients suffering from viral influenza who need urgent dental treatment that cannot be postponed.

**7.3 Coronavirus infections**

Since early 2020, SARS-CoV-2 has been very prevalent in the community, with a high number of infections, including severe infections and death. COVID-19 is spread by airborne, droplet and contact transmission. People can inhale infectious droplets produced when infected people breathe, talk, sing, shout, cough and sneeze. Transmission may also occur through direct and indirect contact with material that is on surfaces. The virus may persist on hard surfaces such as benchtops for several days.

In our practice, we follow local public health advice and we triage patients to avoid having those with active (symptomatic) infection in the clinic. We delay dental treatment until they are no longer infectious. We strongly encourage all staff to have recommended COVID-19 vaccinations (including boosters), in line with national health advice for health care workers. We expect that staff who contract COVID-19 will self-isolate for 7 days after becoming ill, but return to work when free of symptoms.

**7.4 Other pandemics**

Each jurisdiction will have a specific plan for handling pandemics at the public health level. Likewise, each practice needs to have a plan to ensure ongoing service provision during pandemics. Such plans may include limiting operation, and screening and exclusion periods. Given that some common dental procedures (including using the triplex spray) generate considerable amounts of aerosols, it is important to follow the ADA *Infection Prevention and Control Guidelines* and any other pandemic-specific guidance offered by the ADA or State, Territorial or Federal jurisdictions at the time.

H. Immune system considerations

Immune system considerations can cause increased disease-susceptibility to acquiring infection in the workplace, or increase the likelihood of an allergic response occurring in patients or staff.

1. Immunisation

Dental practitioner/s and staff in our practice are at increased risk of exposure to vaccine-preventable diseases because of their close contact with patients, compared to a person who works in the general community. Our practice has an immunisation education program for staff to understand the risks posed by patients with active infections of conditions such as tuberculosis, measles, chickenpox, COVID-19 and viral influenza, which can be prevented by immunisation.

Prior to commencing employment, all staff who work chairside or in instrument reprocessing are required to complete a statement of their past vaccination history, which includes their status for hepatitis B immunity, and whether or not they are positive for hepatitis C and HIV. Successful immunisation for hepatitis B and other relevant conditions is essential prior to commencing clinical work.

Our practice maintains regularly updated staff immunisation records which are located [……].

To ensure that their immunity is current, our staff are offered the vaccinations recommended by the current edition of the *Australian Immunisation Handbook* (available online from <https://immunisationhandbook.health.gov.au>). The current vaccination recommendations for dental clinical staff include hepatitis B, varicella (chicken pox), MMR (measles-mumps-rubella), pertussis dTpa (whooping cough), influenza (with annual immunisation), hepatitis A (for dental staff who work with remote indigenous communities and patients with intellectual disability), COVID-19 and BCG (for dental staff at high risk of exposure to drug-resistant cases of tuberculosis).

Each staff member has the right to refuse vaccination. Such refusal is documented with the reason for refusal noted and signed in that staff member’s immunisation record book.

Staff are advised of the potential consequences of non-immunisation. Refusal to be vaccinated for some diseases may see staff member/s not able to work in some settings or undertake some procedures. For example, a dental assistant who has not had the current vaccine for human influenza virus should not be assisting chairside when undertaking the urgent dental treatment of a patient who is known or suspected to be actively infected with influenza, as they are likely to contract the infection from inhaling the aerosols generated in the workplace from the procedure.

2. Immune-compromised patients

The dental practitioner/s in our practice take extra care in treating immune-compromised patients, as this group is more susceptible to infection.

Practitioners in our practice take each patient’s medical history to establish if they may be more susceptible to infection and require transmission-based precautions to prevent infection (e.g. patients with leukaemia or neutropenia may require antibiotic prophylaxis). A risk assessment specific to the patient and their situation is always made.

[Insert any other processes performed/information for the practice].

3. BBV transmission from staff or patients

The Dental Board of Australia requires dental practitioners to make a declaration on registration and re-registration that they are aware of their blood-borne virus status and that they will comply with the CDNA National Guidelines.

All registered dental practitioners who perform exposure-prone procedures have a legal, professional and ethical responsibility to know their infection status for BBVs and are tested at least once every 3 years for antibodies to hepatitis B, hepatitis C and HIV.

Other dental staff who work chairside or come into contact with items that have been used on patients (e.g. dental assistants and dental technicians) should know their infection status for BBVs.

In our practice, if a dental practitioner or staff member knows or suspects that they have been infected with a BBV, they will report their infective status to [insert title of responsible person] within the practice, seek expert medical advice and follow the CDNA guidelines that stipulate the pathways for treatment, and how they will be managed by an appropriately experienced medical practitioner or infectious disease specialist who is familiar with the requirements of dental practice. This includes seeking treatment, and modifying their clinical practice where appropriate, in accordance with the relevant policies and guidelines of the Dental Board and CDNA.

4. Allergy management

Our practice maintains an allergy record for each member of staff. [Who is responsible for ensuring staff allergy records are complete and up to date, where are the records stored, how are known staff allergies managed within the practice].

# 4.1 Chlorhexidine allergy

Chlorhexidine can cause anaphylaxis in allergic individuals. In our practice, staff using chlorhexidine products (e.g. mouth rinse) are aware of the potential risks of allergic responses. Accordingly, we do not apply chlorhexidine rinses, irrigants or gels directly onto bleeding sites, for example by subgingival irrigation during periodontal debridement or by irrigation into extraction sites. Likewise, chlorhexidine-based handwash is not used on a routine basis.

[Insert any other processes performed/information for the practice].

# 4.2 Latex allergy

Suspected natural latex allergy (NLA) in dental practitioners, staff or patients is treated as a serious medical issue in our practice. Staff are aware that reactions to gloves are most often irritant dermatitis (not an allergic response) or are a delayed allergic response to polymerising (crosslinking) chemicals that may be found in all types of glove materials, which are much more common than allergies to latex.

All patient medical histories and new staff employment forms include questions about NLA and/or sensitivity or allergy to latex/rubber products.

In our practice:

* Staff use moisturising agents and look after the health of the skin of their hands, to prevent problems such as irritant dermatitis.
* Our staff are aware that symptoms of delayed hypersensitivity include itching and a rash, which develops over several days.
* If a staff member has a proven or suspected delayed hypersensitivity allergy to a polymerising agent used in dental gloves, they are provided with hypo-allergenic gloves to use.
* If a staff member or patient has a proven or suspected allergy to latex, non-latex alternatives are used, and a latex-free dental environment is created through the use of non-natural rubber latex products that meet Australian Standards and are listed with the TGA.
* Practice staff with a proven history of anaphylactic reactions to latex wear a medical alert bracelet and carry self-injectable adrenaline.
* Our staff are aware that symptoms of an acute allergic anaphylactic reaction include flushing, swelling, and wheezing, which may progress if untreated to collapse and death.
* Our staff are aware of the correct first aid procedures to be followed in the event of an acute allergic reaction, including the use of self-injectable adrenaline.
* If the skin of staff or patients develops a reaction upon contact with or near latex, this will be brought to the attention of the [principal dentist or practice manager].
* [Insert any other processes performed/information for the practice].

Appendix: Preventing exposure incidents

An exposure incident refers to any instance where a contaminated item breaches the integrity of the skin or mucous membranes or comes into contact with the eyes.

An exposure-prone procedure (EPP) is a procedure where there is a risk of injury to the staff member resulting in exposure of the patient’s open tissues to the blood of the worker. These procedures include those where the worker’s hands (whether gloved or not) may be in contact with sharp instruments, needle tips or sharp tissues (spicules of bone or teeth) inside a patient’s open body cavity, wound or confined anatomical space where the hands or fingertips may not be completely visible at all times. This definition of an EPP in dentistry includes oral surgical procedures (including the surgical removal of teeth, periodontal surgery, implant surgical procedures, endodontic surgery).

To comply with work health and safety legislation, all exposure incidents in our practice are recorded and followed up. Our practice has a system of reporting, monitoring and rectifying breaches of infection control protocols [describe where, how, by whom, and where records of exposure incidents are stored].

All staff involved in an adverse incident will be provided feedback, education and training to reduce the possibility of future incidents [describe how this is done in the practice, e.g. using root cause analysis].

Blood and body fluid exposure protocol

To prevent the transmission of BBVs in our practice, our staff actively avoid exposure to patients’ blood via a penetrating injury or contact with blood, saliva or other body fluids, or tissues.

Technique:

1. Staff use standard precautions for all clinical work and when reprocessing instruments.
2. Staff use devices engineered to prevent sharps injuries.
3. Staff follow the CDNA guidelines for management of their own health after a workplace exposure incident and comply with instructions from the relevant medical professional.

Spill protocol:

1. Use artery forceps to pick up objects and then place them into a yellow infectious waste bag. Place single-use sharps that have been dropped directly into the sharps bin.
2. Blood spills: using examination gloves, remove blood with absorbent materials, and place these into the infectious waste.
3. A waste spill kit for large blood spills (>10 mL volume) is located [insert location and description of the kit].
4. Our practice’s waste spill kit is located [location and description].
5. Contain waste as sharps or clinical, as appropriate.

Should a staff member acquire an infection after an exposure incident, [Owner/Owners/Senior Management/Clinical Directors/Dentist/Registered practitioner] will comply with the CDNA Guidelines and the Dental Board of Australia’s *Code of Conduct for Registered Health Practitioners*. The following details will be documented in the practice’s incident register, with appropriate management personnel advised of:

* date of the incident
* patient details
* staff member details
* details of incident
* the outcome of the incident
* action required for patient care
* whether the incident occurred due to an error in any infection control procedures
* steps taken prior to the provision of care to reduce the possibility of cross-contamination
* action required to prevent recurrence of this type of event
* action required to improve the efficiency of the infection prevention and control process
* relevant authorities notified as required.

Follow-up tests are offered after a significant exposure incident, and blood samples for testing obtained from the source.

# 1. First aid technique

1. Immediately stop work, regardless of the situation.
2. For skin penetrating injuries, allow the wound to bleed and clean it thoroughly with soap and lukewarm water, then apply a waterproof dressing to the wound. Do not squeeze the wound. Do not apply disinfectants to the wound.
3. Flush mucous membranes/conjunctiva with normal saline or water. If contact lenses are worn, remove after flushing eye and clean as usual.
4. Further management of the wound is dependent on the injury [insert title of person to consult with].
5. If the source patient is HIV positive seek urgent expert medical advice from an infectious disease specialist regarding whether post-exposure prophylaxis (PEP) is warranted or not. This is important because PEP for HIV should be administered within 72 hours of the exposure event, and the sooner the better within this period of time. The specialist will be able to make an informed decision based on the patient’s known viral load and the characteristics of the exposure event. [Describe who the practice would contact].
6. Follow the CDNA guidelines at [www.health.gov.au](http://www.health.gov.au) for advice on follow-up tests after the exposure incident.

# 2. Testing

Baseline tests are requested from the injured staff member and the patient to establish their immune status as soon as possible after the injury.

If the source individual tests positive for hepatitis B, hepatitis C or HIV, an infectious diseases physician will conduct an assessment of the injured person to assess infectivity. Post-test counselling may also be required, particularly if the result is positive. If the source patient refuses testing, this is documented in their treatment records [insert any other information for completing this process in your practice].

It is then important to follow the CDNA guidelines and the relevant medical advice regarding the need for further testing, as this will be dictated by the nature of the exposure event and the characteristics of the source. A decision for a 3-month follow-up test may be made. Beyond that time point, no further follow-up of the exposed staff member is likely to be necessary if blood tests at baseline showed the source patient was negative for a BBV, unless the source patient was suspected or shown to be seroconverting one of these viruses or at high risk of BBV because of their behaviours.

Staff members who are commencing work in dentistry (either chairside or in instrument reprocessing) need to have, as a bare minimum, completed immunisation for hepatitis B (the first injection) before commencing work whether or not they may have been exposed to hepatitis B. Once the course of three injections is complete, the following month a test for antibodies to hepatitis B surface antigen is required to document immunity to hepatitis B. This immunity, once demonstrated, confers lifelong protection from infection with hepatitis B. After the full course of hepatitis B injections is complete, it is normal to see a drop in their level of antibodies over time. Information on correct protocols to handle staff who are low responders or non-responders is found in the *Australian Immunisation Handbook*. Normally, there is no need for further booster injections, however these will raise the level of antibody that is present.

# 3. Follow-up for the injured person

For exposures where there is a risk of transmission of either hepatitis C or HIV (e.g. the source patient is positive for either hepatitis C or HIV, and has a high viral load), the injured staff member is re-tested for antibodies to hepatitis C and antibodies to HIV over the next six months, typically at one, three and six months after the incident. These tests are in addition to their baseline test.

The responsible medical practitioner may request additional tests (e.g. liver function tests, for hepatitis C). Seek advice from an infectious diseases physician and/or gastroenterologist.

Only a very small proportion of occupational exposures to HIV or hepatitis C result in transmission of the virus. The injured person should seek advice from an infectious diseases physician, who will provide information and may recommend further counselling to support them.

Management pathways for infected healthcare workers are given in the CDNA guidelines.

1. [↑](#footnote-ref-2)