



**Southern
Cross Dental**

**Infection Control Policy
Southern Cross Dental**

Version 3: February 2019

Introduction

Southern Cross Dental (SCD) plays a role within delivery of healthcare services in Australia and New Zealand via:

- General Laboratory services.
- Operations - logistics of case management between customers and SCD.
- Clinical and Technical support services, case management, customised advice.
- Education and Training – e.g. Invisalign® aligner therapy (Invisalign®) and/or other clinical sessions in a dental surgery setting.

SCD acknowledges that some staff and contractors (personnel) as part of their work may be at increased risk of exposure to infectious diseases.

Infectious diseases are caused by pathogenic microorganisms, such as bacteria, viruses, parasites or fungi. Most clinical procedures in dentistry are characterised by contact between objects (such as instruments, impressions, bite records, appliances and dentures) with saliva, which may or may not also contain blood. This poses the risk of transfer of an infectious disease to personnel handling these objects and/or between objects.

Items or materials that have been in a patient's mouth then removed and transferred elsewhere can be considered as biologically contaminated until they are decontaminated, and therefore must be handled in a safe manner.

It is therefore essential that SCD understands and minimises the risk of cross infection in the delivery of its services.

SCD has developed an Infection Control Management Plan that includes the following elements:

- Compliance with Commonwealth, State and Territory legislation, regulations and obligations under National Law, including regular review and updates.
- Compliance with Dental Board of Australia, Australian Dental Association Guidelines and Australian/New Zealand Standards, including regular review and updates.
- Recognition by SCD of its duty of care to minimise the risk of its staff and customers acquiring a healthcare-related or occupational infection.
- Coordination of the Infection Control Management Plan by suitably experienced and qualified personnel.
- Implementation of the Infection Control Management Plan, to include regular education, training, monitoring, reviewing and updating of policy.
- Implementation of the SCD Infection Control Policy.
- Strategies to review and modify procedures, equipment and policy to reflect changes in risk of cross infection.

Personal Protection

A. HAND HYGIENE (HAND WASH / HAND RUB)

Effective hand hygiene is the single most important step in preventing the spread of infection.

Effective hand hygiene removes transient bacterial flora acquired from touching objects in the general work environment and from touching another person's skin (e.g. hand shaking, transferring objects from one person to another).

The protocols outlined by the World Health Organisation for hand washing and for using hand rubs are displayed throughout SCD, and all staff are always expected to follow these protocols (see posters at all hand hygiene locations).

Hand hygiene facilities are available throughout SCD premises and are easily accessible to all staff. Hands should not be washed in a sink that is nominated as a “work” sink (e.g. in the laboratory) or a sink that is nominated for food preparation. Hand hygiene means either handwashing or use of alcohol-based hand rubs (ABHR). Hands should be washed in a designated hand-washing basin. Alternatively, when hands are not visibly contaminated, ABHR should be used. Dispensers are located throughout the facility. Intact skin is a natural defence against infection. Any cuts or abrasions should be covered with a waterproof dressing. Gloves should be worn if appropriate.

Routine hand hygiene should be undertaken frequently throughout the day. Some guidelines are:

- After person-to-person contact (as appropriate),
- Before commencing work (handwashing is recommended),
- After hands are visibly soiled (handwashing is essential),
- After blowing or wiping of the nose,
- Before putting on gloves,
- After removing gloves,
- After touching objects / items likely to be contaminated,
- After using the toilet (handwashing is essential),
- Before leaving the work area,
- Before and after meals, eating, tea/coffee (handwashing is recommended),
- After smoking.

B. PERSONAL HYGIENE

Hair must be clean, and long hair secured back away from the face.

Fingernails should be maintained to no more than a medium length and must be clean.

In the laboratory and when working in a clinical situation, nail polish, rings, bracelets, etc should not be worn.

Cuts or lesions on the hands or arms should be covered with an adhesive dressing. This dressing should be changed if it becomes wet or soiled.

C. GLOVES

Gloves (powder-free and, if required, non-latex) are worn as a barrier to protect hands from contamination and the transfer of organisms.

Gloves must be used in situations where staff are, or potentially can be, exposed to contaminated items and/ or substances:

- When handling incoming work stages from dentists, laboratories (impressions, models, dentures, appliances, aligners, etc) that may not yet have been decontaminated.
- When working in a clinical situation (e.g. Invisalign clinical days).

Gloves worn should be appropriate to the purpose and reflect the risk of the procedure.

Gloves should be of the correct size, powder free to minimise risk of skin irritation and, where appropriate, latex-free to minimise risk of allergic reaction.

Gloves should only be worn in the general work area.

For those treating patients in clinical situations, gloves must be changed between patients and the hand hygiene performed immediately. Gloves must be discarded if they are damaged. Dispose of soiled or contaminated gloves as instructed.

D. PROTECTIVE CLOTHING

The appropriate protective clothing is provided for Operations, Laboratory, and Education & Training staff and this must be worn during work procedures that place staff at risk.

Protective clothing includes, but is not limited to, uniforms, coats, disposable gowns, work polo-shirts, eyewear, face-masks and gloves.

Protective items must be removed when leaving laboratory and clinical areas where it is practicable to do so. Disposable items should be changed after each patient (mask, gloves), whenever visibly soiled or at the end of a workday.

E. FOOTWEAR

Closed-in, non-slip flat shoes must always be worn when in Operations or Laboratory areas, and in the dental clinical area (Education & Training staff).

Generally, sensible footwear must be worn to minimise risk of falls or slips, e.g. on stairs.

Immunisation

One of the frontline means of managing infection control is the immunisation of SCD personnel at risk of exposure to pathogens to protect them against vaccine preventable diseases. This includes not only people working directly in clinical situations, but also those in support services where they are handling items that could be contaminated. The Australian Immunisation Handbook 10th Ed 2016 states “Immunisation protects people against harmful infection before they come into contact with them...” and “(immunisation) not only protects individuals but also protects others in the community...”

Therefore, it is highly recommended that all SCD personnel should be immunised against Hepatitis A and B, tetanus, and these will be provided by SCD at SCD’s cost for all exposure-prone staff. Immunisation against other pathogens can be wise especially for susceptible individuals (e.g. elderly) but these are the responsibility of the individual concerned. An employee’s immunisation status will be recorded as part of the confidential personnel records with Human Resources.

Immunised staff should advise Human Resources of their status and have this recorded in their personnel records. For those staff members who are not yet immunised, SCD will facilitate this process at a mutually convenient time.

These measures will help ensure the safety of employees as well as the safety of others with whom they are in contact.

SCD OPERATIONS

Management of Incoming and Outgoing Jobs

INFECTION CONTROL

Decontamination procedures must be carried out for the transfer of any work / jobs between external clinics or external / internal laboratories and our Operations service area. Even though a job may be marked on the packaging and/or laboratory work sheet as having been decontaminated this cannot be guaranteed. Therefore, to protect all of our personnel, SCD will follow Standard Precautions and the following protocol will be followed:

Incoming jobs must be decontaminated in accordance with procedures in Appendix A prior to any laboratory procedures. Due to the risk of contamination in transit, job received by SCD labs which are to be forwarded to another workplace will not be decontaminated upon receipt but will be labelled as requiring decontamination. The workplace receiving the forwarded job will be responsible for all decontamination. All such items must be handled while wearing protective clothing.

Exceptions to this include where an incoming job needs to be evaluated or otherwise handled by laboratory, technical or operations personnel. In the first instance these items will be examined by staff wearing PPE, within the contaminated zone in the Despatch area. If it required to transfer these items to other areas of the workplace, they will need to be decontaminated prior to further handling.

Outgoing jobs may be decontaminated as above prior to despatch to the customer and labelled as such, subject to business requirements and those of the customer as may apply from time to time. Labelling will indicate any procedures that may need to be performed by the customer prior to a device being suitable for insertion into a patient's mouth. This outbound decontamination is to minimise the cross-infection risk associated from non-sterile laboratory equipment being used across multiple jobs.

Decontamination Process

A. RECEIVING/DESPATCH AREA

(Identified by yellow/black striped tape on the floor)

STAFF

All personnel working in the receiving area are to be educated and trained in the principles of infection control and the specifics of working in this area. They must comply fully with the infection control protocols outlined below.

Personal Protective Equipment must be worn at all times while working in this area as required for the task being undertaken – protective clothing, and gloves.

- All incoming items are to be brought to the specified **receiving area** by couriers and/or SCD staff and left there unopened.
- Courier bags, boxes, delivered items are opened by receiving area staff at the receiving area bench only and using equipment that is dedicated to this work area only.
- Once opened, items will be separated into categories:
 - those to be processed without decontamination and repacked for transfer to one of our group laboratories.
 - those to be decontaminated and managed within SCD lab/Clinical-Technical team/Education & Training services.
- Items for repacking to our group laboratories will be processed as per Operations protocols:
 - Work sheet scanned,
 - items unpacked and labelled,
 - items placed into SCD boxes,
 - SCD boxes placed into transfer cartons for pickup by courier,
 - All equipment, computer keyboards, stationery items and work surfaces are to be cleaned at the end of the workday. (See Appendix B).
- Items to be managed within SCD will be processed as per Operations protocols prior to being transferred into the decontamination area:
 - Work sheet scanned,
 - items unpacked and labelled,
 - items placed into transfer boxes,
 - transfer boxes delivered to decontamination area for processing.

- NOTE: No food or drink are to be consumed in the marked receiving area.

B. DECONTAMINATION ROOM

(Identified by yellow/black striped tape on the floor).

STAFF

All staff working in the decontamination area are to be educated and trained in the principles on infection control and the specifics of working in this area. They must comply fully with the infection control protocols outlined below.

Personal Protective Equipment must be worn at all times while working in this area as required for the task being undertaken – protective clothing, gloves, mask, eyewear.

Standard Precaution Protocol:

- All items for decontamination are to be delivered to dedicated **decontamination area** for management by staff trained for this process:
 - Items will be placed into the designated processing containers depending on type of decontamination required. This may vary by item type:
 - impression / bite registration / model / wax rims / denture try-in / metal casting / acrylic denture / metal and acrylic denture / appliance / bite splint.
 - Procedure as outlined in Appendix A is to be followed, in accordance with displayed instructions. In principle - Rinse / decontaminate / rinse / dry.
 - Any of the following products may be used as appropriate: Cavex / Printosept / Optim Blue / ImpreSafe / neutral detergent / Milton's 5% / Isopropyl alcohol 70%. Alternate products may be used as appropriate.
 - Specific instructions on the process to be used for a job are to be clearly denoted on laminated cards within the decontamination area and must be adhered to.
 - Procedure to be one of the following: immersion bath / spray, as appropriate to the item being decontaminated.
 - Processed item is placed into transfer tray/container and labelled as decontaminated. (See Appendix A)
 - At the end of the day, or sooner if required, all surfaces and transfer containers to be cleaned using a neutral detergent and or product such as Optim Blue. (See appendix 1).

Additional Precaution Protocol:

- Items received that exhibit visible contamination with blood or other body fluids may require additional precautions in order to achieve successful decontamination. Similarly, incoming jobs which have not been labelled as having been decontaminated by the customer may require additional precautions. (See Appendix A).
- These items are to be placed in specially marked transfer trays.
- These items will be managed in accordance with the additional precautions protocols that may be in place from time to time in the decontamination area.
- Where an incoming job is considered by personnel to be possibly contaminated, it will be managed as requiring additional precautions.

- Decontaminated items can now be handled safely by all staff within SCD.

- NOTE: No food or drink are to be consumed in the decontamination room.

GENERAL STAFF MOVEMENT IN THE OPERATIONS AREA

Staff should only walk along designated pathways and must not enter marked zones unless wearing the appropriate Personal Protective Equipment. These zones are identified by yellow/black striped tape on the floor.

To minimise the risk of pathogens to other workplace areas, PPE must be removed before personnel leave designated areas.

SCD Laboratory

Only items that have been decontaminated within the SCD decontamination room or by one of our group laboratories, and are labelled as having been decontaminated, are to be handled in this department.

Where necessary, items to be delivered to customers should be decontaminated prior to despatch and marked as such.

Education & Training Courses/Clinical Training

Invisalign® Training Courses and/or any other clinical training courses conducted by SCD require attention to additional elements of infection control as these courses include direct patient care and treatment. Staff involved in such courses will be provided with necessary training and equipment so as to be able to comply with clinical standards of infection control.

SCD may at its discretion audit compliance with these standards for quality assurance purposes.

MANAGEMENT OF SHARPS AND INSTRUMENTS

The potential for transmission of blood borne infections is greatest when sharps are handled therefore they must always be handled with due care. Procedures must be followed to minimise risk of injury during clinical sessions and when transporting sharps between SCD and Course clinical venues.

Wherever possible, sharps should be provided at the Course clinical venue and used and disposed of at that clinic following local Infection Control policy and procedures. If sharps must be transported between locations, they must be secured in hard, puncture-resistant and leak-proof containers that are appropriately labelled.

Instruments used during Invisalign® Training Courses are classified as semi-critical and must be sterilised by autoclaving following use, either at the clinical venue or by SCD using a recognised service to do so that is compliant with AS/NZS 4187 and/or 4815. Items being returned to SCD for autoclaving must be transported in puncture-resistant and leak-proof containers that are appropriately labelled, and then immediately stored in the dedicated Infection Control cupboard until delivered to the external sterilising service for processing.

All sterilised instruments used during Invisalign® Training Courses must be tracked for each patient on which they are used. Run sheets will be provided so that sterilisation tracking stickers can be attached for each patient treated. These run sheets will be retained by SCD as part of each Training Course documentation.

Sterilised items returned to SCD must be stored in a dedicated closed cupboard to protect the integrity of the autoclave pouches and keep them clean and dry. Evidence of autoclaving is to be provided to SCD and records of steam sterilisation cycles are to be maintained.

Impressions taken at Course venues should be rinsed and bagged on site then transported to SCD in a safe and secure manner. They should then be managed within SCD as per protocol for all incoming jobs. Intraoral scanners, laptops and other items used for digital impressions need to be decontaminated and/or autoclaved in accordance with manufacturer's instructions (noting different brands of scanners have different protocols for management of scanner heads/tips). Where possible, protective barriers must be used to minimise contamination of these items, with barriers being changed and items wiped down between use on each patient.

REPORTING SKIN PENETRATING INJURIES

All sharps injuries that occur within SCD must be reported to the team manager, department head and Human Resources immediately after the incident has occurred. An incident report form must be completed.

The injured person should be referred for medical examination and the appropriate management. Their risk will be assessed and the relevant care provided.

All sharps injuries that occur at external locations (e.g. Invisalign courses in external clinics) must be reported to the local Infection Control nominated person according to the local Policy/Manual requirements, as well as to the SCD Course Coordinator. The cases are to be managed locally.

Clinical & Technical

Only items that have been decontaminated within the SCD decontamination area or by the MDL process are to be handled in this department.

Compliance and Quality Assurance

To ensure compliance with this policy and associated procedures:

1. Managers of sections will be required to oversee induction of all new staff and contractors prior to such personnel working in any at risk areas and organise for immunisation if required
2. HR will provide the executive team with an annual report on the (de identified) immunisation status of personnel and the measures in place to achieve full compliance
3. The WH&S committee will be invited to attend infection control meetings and provide input to policy and procedure development
4. The Operations Manager will oversee auditing of compliance with policies and procedures at least once every six months and communicate this to the executive in a timely manner
5. This policy will be reviewed every 2 years or sooner where the Operations Manager deems there to have been a major health policy change or where circumstances or incidents require it etc.

Appendix A

Incoming & Outgoing Decontamination Procedure

The following procedure is to be followed for items received for on-site laboratory procedures, technical evaluation and so on. Decontamination must also occur upon completion of laboratory procedures for items to be despatched to the customer.

To enable easy visual identification of contaminated and decontaminated items, a colour coded system of trays/bins (“tray”) is used as described in the decontamination room.

A numbering system can also be used where multiple jobs are to be decontaminated at the one time. This process is explained on posters in the decontamination room.

Incoming Items

Apply PPE (if not already in place) including a clean facemask and clean gloves, then:

1. Place items into a dirty tray (in accordance with colour coding on site) with numbering if required.
2. Remove bubble wrap, plastic bags, paper towel and other packaging and dispose of them in bins.
3. Decontaminate items in accordance with displayed procedures.
4. Upon completion of decontamination, change gloves and transfer items into a clean tray (in accordance with colour coding on site).
5. Place lab sheet and any other associated job items into the clean tray.
6. Forward the tray to the distribution area or directly to the intended recipient.

Note any items requiring Additional Precautions (e.g. those with visible contamination) may require additional processing as outlined on laminated posters in the decontamination area.

Outgoing Items

1. Decontaminate items in accordance with displayed procedures, packaging and labelling items as required.
2. Decontaminate tray.
3. Return decontamination sprays/products and trays to their storage location.
4. Remove gloves and PPE.
5. Wash hands with soap and water.
6. Forward outgoing items to despatch team members.

Appendix B – Receiving/Despatch Area Decontamination Procedures

Decontamination of items and surfaces used in the workplace during the management of incoming or outgoing jobs is an essential aspect of daily housekeeping/workplace cleanliness.

At the end of the workday (or sooner in the event of known contamination of a surface or item with blood, saliva or other suspected contaminant) the following procedures should be performed by SCD personnel working in the area:

Apply PPE (if not already in place) including a clean facemask and clean gloves, then:

1. Spray a cleared work surface with diluted neutral detergent solution or other prescribed cleaning agent e.g. Viraclean (detergent), wipe with paper towel and allow to dry. Dispose of this paper towel.
2. Spray another clean paper towel with detergent until damp (but not dripping wet) and wipe down all contaminated/ potentially contaminated items, commencing with those least likely to be contaminated e.g. staplers & trimming knives and finishing with those items touched often throughout the day e.g. keyboard covers (if used), mousemats, pens. As items are wiped clean, place them in the cleared work surface area and allow them to dry. Change the paper towel frequently and whenever visible contamination is evident. Dispose of this paper towel.
3. Wipe immovable objects such as computer monitor screens, bar code scanners, label printers and other connected devices as above, taking care to avoid excessively wetting switches, sensors or other delicate components. Ensure that both a device (e.g. bar code scanner) and its holder are wiped clean, not just the device itself. Exercise care when wiping near leads to avoid disconnecting items. Avoid contact with electrical switches and power cables.
4. Wipe remaining work surfaces and allow to dry.
5. Return cleaning products to their storage location.
6. Remove gloves and PPE.
7. Return any moved wiped items to their usual locations in the workplace.
8. Wash hands with soap and water.
9. Initial the logbook to indicate completion of this procedure.

Appendix C

Use of PPE

Personal protective equipment, or PPE, as defined by the Occupational Safety and Health Administration, or OSHA, is “specialized clothing or equipment, worn by an employee for protection against infectious materials. PPE is fourth in a hierarchy of prevention following (Ref CDC <https://www.cdc.gov/hai/pdfs/ppe/ppeslides6-29-04.pdf>)

For PPE to be effective, it must fit correctly to protect eyes, skin, airways and so on from exposure to infectious materials or agents. Minimise risk by minimising contact with sources of contamination. Try to touch as few items as possible and avoid contact with aerosols or sprays which may contain infectious agents. Avoiding exposure in the first instance is the wisest means of infection control. The following is a guideline to assist in the correct use of PPE:

1. Wear PPE comfortably but snugly. Masks when worn need to cover both the nose and mouth and seal well at the peripheries (edges). A loose mask is of minimal use in preventing exposure to airborne infections.
2. Change PPE regularly. Once PPE becomes contaminated, it becomes a potential vector (vehicle) to spread contamination to other items. Masks and gloves should be changed regularly and whenever they show evidence of contamination or wetness. Punctures or other damage to PPE render them almost totally ineffective, hence such items must be changed as soon as practicable. PPE should be removed when leaving a contamination zone to minimise the risk of spreading infectious agents to other areas of the workplace.
3. PPE is no substitute for other hygiene practices. It is essential that hands are washed before and after wearing gloves (or ABHR is used) as gloves are not a guaranteed barrier to infection.
4. Avoid contact of PPE with your eyes, nose and mouth. Gloves need to be removed before touching your body.