Pav Dental

Infection Control Manual

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Practice Responsibilities

The Practice Manager or Registered Manager and the practice's appointed Infection Control Lead are responsible for infection control and decontamination.

Other team members will be involved as operators of decontamination equipment. It is their responsibility to ensure that they carry out daily and weekly monitoring of the equipment they use.

Our team follows the guidelines set out by the HSCA 2008 code of practice on the prevention and control of infection and the HTM 01-05 in accordance.

We conduct infection control audits every six months to help us assess the risk of infection and ensure we have measures in place to reduce cross-infection.

Guidelines for each region can be followed from:

- HTM 07 01 for safe and sustainable management of healthcare waste
- HTM 04 01 for safe water in healthcare premises
- National infection prevention and control manual (NIPCM) for England

- WHTM 01-05 (Wales)
- The Health and Social Care Act 2008 Code of Practice on the Prevention and Control of Infection

Staff Training

All new staff will receive training related to their job role during their induction process. New clinical staff also complete an additional IPC induction to ensure they have received training in the equipment and processed undertaken at the practice. Infection control training is then completed by all staff on a regular basis.

Practice Roles and Responsibilities

Job Role	Description of role	Name(s) of who is responsible
Registered Manager	Has overall responsibility for decontamination equipment ownership and the definition and appointment of the following staff	
Decontamination Lead	Has day-to-day responsibility for infection control and decontamination in the practice. They are accountable to the Registered Manager.	
Designated Person	Acts as the interface between the practice and support services. This could be the practice manager or the decontamination lead.	
User	Has day-to-day responsibility for decontamination equipment management and ensures operators are trained to carry out their duties.	
Operator(s)	Staff members who are authorised to operate decontamination equipment and carry out daily weekly, and monthly tests.	
Competent Person (Service Engineer) – equipment	Person/company responsible for servicing	

	and maintaining decontamination equipment	
Competent Person (Service Engineer) – pressure vessels	The person/company responsible for servicing and maintaining pressure vessels, they will provide a written scheme of examination	

New Equipment

Our practice takes patient safety very seriously. We believe it is important to ensure patient safety by following protocols on the choice, use, maintenance, and testing of equipment.

It is the responsibility of Hassan Bhojani to select and purchase appropriate equipment when required.

We will ensure that:

- Equipment has appropriate CE marking where necessary.
- Where possible, single-use items are introduced as an alternative to reusable items (for example, 3 in 1 tips).
- Where possible, equipment can withstand automated cleaning processes, such as ultrasonic and autoclave.
- Where the manufacturer recommends specific cleaning agents, these are adequately covered by our COSHH procedures and are compatible with other instruments already in use, such as ultrasonic baths, autoclaves, etc.
- When selecting new hand instruments, we avoid serrated handles and hinge mechanisms that are difficult to clean and where instruments need to be dismantled before cleaning; the manufacturer supplies instructions on how this is to be done.
- In the case of dental chairs and work surface coverings, these can be regularly decontaminated without deterioration.
- Where relevant, the new equipment is compatible with existing equipment.
- The equipment is easy to use and maintain.
- When routine maintenance is required for a device, this is added to the Maintenance Matrix.
- Where training is required, this will be provided by the supplier or manufacturer where it cannot be satisfactorily carried out within the practice.
- That commissioning and validation requirements, where necessary, are complied with.
- Where specialist repair, servicing and testing are required, response times are acceptable.

Records of equipment purchased (in the form of invoices, delivery notes, and other purchase documents) are kept according to retention timeframes.

Hassan Bhojani must review the instructions that accompany new equipment, ensure that important matters are drawn to the attention of the team members who will be using the equipment, ensure that training is provided (if necessary) and that, where appropriate, the equipment is installed by suitably qualified persons.

Decontamination of Instruments and Equipment

Decontaminating New Instruments

All new dental instruments should be fully decontaminated before being used according to the manufacturer's instructions. Where possible, the practice will purchase instruments that can

withstand automated cleaning processes using a washer-disinfector or an ultrasonic cleaner.

The following policy should be followed for all new instruments.

- Identify instruments that can withstand cleaning in a washer-disinfector or ultrasonic cleaner and those that require manual cleaning.
- Instruments and equipment that cannot be immersed in water (for example, electrical equipment) should be cleaned according to the manufacturer's instructions.
- Those instruments that consist of more than one component should be dismantled before cleaning, following the manufacturer's instructions for dismantling.
- Training will be provided to ensure that all staff involved in decontamination are competent to decontaminate new instruments introduced into the practice as well as instruments currently in use.

Transfer of Instruments

At the end of each patient treatment, instruments should be placed in a lidded, sealed, rigid box and transported to the decontamination room as soon as possible. If instruments cannot be taken directly to the decontamination room, they should be kept moist with suspension foam or liquid; water alone is not sufficient.

Once transported, the box should be cleaned/disinfected and dried using a lint-free cloth. The transportation boxes should be clearly identifiable to show if they carry clean or dirty instruments.

Staff will be appropriately trained to ensure their competence to decontaminate existing and new reusable dental instruments. Records of this training will be kept.

Personal Protective Equipment

The staff induction programmes include training on the correct use of PPE. All staff receive updates on using PPE and when new PPE is introduced into the practice.

PPE includes protective clothing, disposable clinical gloves, plastic disposable aprons, face masks, and eye protection. In addition, household gloves must be worn when handling and manually cleaning contaminated instruments. Footwear must be fully enclosed and in good order.

Gloves

- The disposable clinical gloves used in the practice are CE-marked and low in extractable proteins (<50 µg/g), low in residual chemicals and powder-free. Anyone developing a reaction to protective gloves or a chemical must inform Hassan Bhojani immediately.
- Clinical gloves are single-use items and must be disposed of in accordance with HTM 07-01.
- Long or false nails may damage clinical gloves, so nails should be kept short. Alcohol rubs/gels must not be used on gloved hands, and gloves should not be washed.
- Domestic household gloves should be worn for all decontamination procedures (along with plastic disposable aprons and protective eyewear). After each use, they should be washed with detergent and hot water to remove visible soil and left to dry. These gloves should be replaced weekly and more frequently if worn or torn or if it becomes difficult to remove soil. A log of glove changes should be kept.

Plastic aprons

- Plastic aprons should be worn during all decontamination processes. Aprons are single-use and should be disposed of in accordance with HTM 07-01. Plastic aprons are removed by breaking the neck straps and gathering the apron together by touching the inside surfaces only.

Face and eye protection

- Face and eye protection must be worn during all operative procedures. Face masks can be removed by breaking the straps or lifting them over the ears. They are single-use items and must be disposed of in accordance with HTM 07-01 guidelines.
- A visor or face shield should be worn to protect the eyes; spectacles do not provide sufficient protection. Eye protection should be cleaned according to the manufacturer's instructions when it becomes visibly dirty and/or at the end of each session. Disposable visors should be used wherever possible.

Protective clothing

- Protective clothing worn in the surgery must not be worn outside the practice premises. Adequate changing and storage facilities are provided.
- Protective clothing becomes contaminated during operative and decontamination procedures. Surgery clothing should always be clean, and freshly laundered clothing should be worn every day. Machine washing at 60^{O}C with a suitable detergent is advised.

Cleaning Protocols

Where an ultrasonic is used

Used instruments must be cleaned using the ultrasonic (unless this is incompatible with the instrument(s) to be cleaned), following the manufacturer's instructions for use. When placing instruments in the ultrasonic:

- Open the instrument hinges and joints fully and disassemble them where appropriate.
- Place instruments in the cleaner basket in a single layer and avoid overloading or overlapping instruments.
- Replace the lid and run the specified cycle. If the manufacturer does not specify a cycle length, a generic cycle length can be determined, which is usually between 6 and 11 minutes.
- Do not remove the lid, add or remove instruments, or put your hands in the water while the cycle is running.
- Fully drain instruments before rinsing with suitable potable (drinkable) water in a separate clean rinsing sink.
- Record parameters in the ultrasonic cleaning log
- The cleaning solution must be replaced every session or when visibly soiled.

Records

Ultrasonic logbooks and records should be kept, and cycle parameters should be recorded together with details of routine testing and maintenance of the equipment used. The records obtained will be in accordance with the manufacturer's instructions and HTM 01-05.

Where a washer disinfector is used

A washer-disinfector is the preferred method for cleaning dental instruments because it offers the best option for controlling and reproducing cleaning.

Used instruments must be cleaned using the washer disinfector (unless this is incompatible with the instrument(s) to be cleaned), following the manufacturer's instructions for use.

A typical washer-disinfector cycle for instruments includes the following five stages:

- **Flush** – removes "difficult" gross contamination, including blood, tissue debris, bone fragments and other fluid and solid debris.
- **Wash** – removes any remaining soil.
- **Rinse** – removes detergent used during the cleaning process.

- **Thermal disinfection:** The load's temperature is raised and held at the pre-set disinfection temperature for the required disinfection holding time.
- **Drying** – Purges the load and chamber with heated air to remove residual moisture.

It is crucial to load a washer-disinfector correctly, as incorrectly loaded instruments will not be cleaned effectively. Therefore, follow an instrument-loading procedure that has been shown to achieve effective cleaning in the washer-disinfector used in the practice.

When placing instruments in the washer-disinfector:

- Do not overload instrument carriers or overlap instruments.
- Open instrument hinges and joints fully
- Attach instruments that require irrigation to the irrigation system correctly, ensuring filters are in place if required (for example, for handpieces, if specified by the manufacturer).

After cleaning, inspect instruments for cleanliness and check for any wear or damage before sterilisation.

The satisfactory completion of these steps means that these instruments may be clearly designated as ready for sterilisation.

Records

Washer-disinfector logbooks and records should be kept, and cycle parameters should be recorded together with details of routine testing and maintenance of the equipment used.

The use of automated data loggers or interfaced small computer-based recording systems is acceptable, provided the records are kept securely and replicated.

It is recommended that records be maintained for not less than two years.

Service and maintenance of Infection control equipment

The table below identifies the key pieces of equipment required to be in a service and maintenance external programme in Practice. The frequency of this maintenance should always be confirmed via the manufacturer of your product. The responsible person/s for ensuring this is followed through should be the Owner, Practice Manager, and/or the Infection Control Lead.

Equipment or System	**Frequency**	**By Whom**
Infection Control		
Autoclaves	Annually - some new models are now six monthly	Engineer
Ultrasonic Baths	Annually, where applicable.	Engineer
Washer Disinfectors	Annually	Engineer
Reverse Osmosis	As per manufacturer's guidance	Engineer
Air Conditioning	Annually	Engineer

Manual Cleaning of instruments

Manual cleaning is acceptable within the essential quality requirements framework. It is not the preferred method as it carries a greater risk of inoculation injury to staff, and it is not possible to fully validate the process.

Manual cleaning should only be considered where an ultrasonic or washer disinfector is not available or compatible with the instruments.

Where instruments cannot be placed in an ultrasonic cleaner or a washer disinfector, the following process should be followed:

- Ensure you are wearing the appropriate PPE - Heavy Duty Gloves, Apron, Mask and Eye Protection.
- Prepare sinks, equipment, and setting-down areas.
- Fill the clean wash sink (NOT wash-hand basin) with the appropriate amount of water and detergent.
- Follow the manufacturer's instructions regarding the temperature and ratio of cleaning fluid. The temperature should not exceed 45 degrees Celsius, as a higher temperature will coagulate protein and inhibit its removal (always check this with your manufacturer's instructions, as some products may vary).
- Fully immerse the instruments in the water to prevent aerosols.
- Agitate/scrub the instruments using autoclavable long-handled brushes with soft plastic bristles.
- **DO NOT USE BUR BRUSHES**
- Rinse the instruments in a second sink using potable, distilled or RO water.
- After rinsing, drain and dry if instruments are to be wrapped.
- Visually inspect all items under an illuminated magnifier, ensuring they are clean, functional and in good condition.
- Instruments that remain dirty must undergo another cycle of the cleaning process and instruments that are damaged should be repaired or disposed of.
- Lubricate any relevant items prior to sterilisation (for example, with Kavo spray).
- Replace the cleaning solution and the rinse water after each use.
- Complete the manual cleaning log.

Records

Although the least validated method of pre-cleaning, records of all manual cleaning sessions are to be recorded by the team, including the batch/expiry number of the detergent used, the temperature recording of the water, the name of the person conducting the cleaning and whether visually the instruments passed standards.

Remember: Maintaining a dirty-to-clean workflow procedure will assist in the cleaning process.

All personnel involved in the decontamination of dental instruments should be trained in the content and application of this protocol and associated guidance.

Inspection of Instruments

- Inspect all instruments that have undergone any cleaning procedure to ensure they are clean, functional, and in good condition.
- Dispose of any instruments that are blunt, bent, or damaged and are irreparable or show any signs of pitting or other corrosion.
- Visually inspect all instruments under an illuminated magnifying light.
- Ensure that all parts are free to move and that joints do not stick.
- Ensure that the edges of clamping instruments meet with no overlap and that teeth mesh together.

- Ensure scissor edges meet the tip and move freely across each other.
- Ensure all screws on jointed instruments are tight and have not become loose during use.
- Inspect instruments for any visible soiling. If residual contamination is found, reject the instrument and ensure it undergoes another cycle of the cleaning process.
- Occasional use of a lubricant may be required – use a non-oil-based lubricant to avoid interference with the sterilisation process.

Instruments may become damaged during use – if devices are found to be faulty or damaged, they should be taken out of use and either repaired or replaced. Instruments for repair should be decontaminated, labelled to identify they have been decontaminated and sent to a repair company.

Loading of Instruments

Air removal might be impeded if instruments are not loaded correctly, and steam may not contact every surface of every instrument. This steam contact is essential for sterilisation to occur.

- Load the steriliser according to the manufacturer's instructions and as specified at validation.
- Ensure instruments do not overlap.
- Open hinged instruments to expose all of the surface area to the steam.
- Place instruments on perforated trays, cassettes or racks that have been validated for use with the selected sterilization cycle.
- Do not overload the steriliser chamber or individual trays or containers with instruments.

Cleaning Handpieces Protocol

- **Remove dental bur from handpiece –** this should be completed by the clinician once the treatment has finished.
- **Clean handpiece—**PPE and heavy-duty gloves must be worn. A long-handled brush must be used, and the handpiece must be lightly washed in distilled or reverse osmosis water to remove any organic matter (DO NOT IMMERSE IN WATER). In hard water areas, limescale can clog the handpieces, causing them to break down.
- Inspect the handpiece for any visible debris using the magnifier and light.
- **Handpiece Lubrication—**Following external cleaning, connect the handpiece to the handpiece lubricant spray using the appropriate nozzle for the handpiece you are cleaning. (You will know if the connection is right if you stand the can of spray upright and attach the handpiece, and it does not fall off.) Spray for approximately 1 second.
- A cloth or paper towel wrapped around the handpiece is recommended to contain the spray. It is okay if some excess lubrication remains in the handpiece. If any debris (usually black or red) comes out on the tissue, then continue spraying the oil through the handpiece until it becomes clear or oil-coloured.
- Stand the handpiece head up for a couple of seconds to ensure any excess oil comes out. Otherwise, it can damage autoclaves or make handling difficult for dentists.
- **If handpieces are cleaned using a washer disinfector -** they should be oiled before and after cleaning as the washer disinfector may remove oils. Separate cans of oil should be clearly marked for use before and after cleaning.
- **Sterilisation of Handpiece for Vacuum Autoclave—**Place the handpiece in a sterilisation pouch and place it in the autoclave. Sterilise for 134 degrees at 2.2 atmospheres of pressure for 3 minutes. After removing the pouch from the steriliser, leave it to cool. Once cold, add an expiry date of one year to the pouch and store it in an appropriate cupboard.
- **Sterilisation of Handpiece for Non-Vacuum Autoclave -** Place handpiece on a metal autoclavable tray and place in the autoclave. Sterilise for 3 minutes at 134 degrees at 2.2 atmospheres of pressure. After removal from the steriliser, leave to cool. Once cold, place it in a pouch, add the expiration date of one year, and store it in an appropriate cupboard.

Caution:

- Do not use chemical disinfectants, abrasive cleaners, or antibacterial soaps as a cleaning agent.
- Do not submerge into liquids.
- Do not clean in an ultrasonic cleaning bath.
- Do not exceed 135 degrees when sterilising.
- Do not re-lubricate after sterilisation.

Some practices may have a handpiece oiling machine. If this is the case, the handpieces should be cleaned as above and then put into the machine to lubricate (there are lots of different machines, so how to use this will depend on the manufacturer's instructions). Then, continue with the rest of the process of putting them in the autoclave.

Sterilisation

Where a non-vacuum (Type N) is used

Instruments should be loaded to allow steam to contact all surfaces. Do not overload or overlap instruments, and follow the manufacturer's instructions for use. Once sterilised, instruments should be dried with a lint-free cloth, placed into pouches, dated, and labelled to allow easy identification.

Where a vacuum (Type B) is used include

Instruments should be bagged and loaded to allow for air removal, which is critical to enabling steam to condense on instruments and effect sterilisation. In a Type B steriliser, air removal is active due to vacuum assistance, allowing appropriately wrapped items, lumen devices, and hand pieces to be processed. The air is actively removed, and the steam is forced into any lumens, allowing for the sterilisation of hollow devices.

Protocol for the breakdown of a singular autoclave

It is recommended that all practices should have at least two autoclaves in case of a breakdown. If a practice has only one autoclave and it does break down, the following procedure should be followed:

- Upon discovery of a breakdown, please call **<Insert engineer name/number>** immediately
- Ensure all contaminated instruments are placed in a suitable secure lidded box with a suitable moisture solution.
- The practice has enough spare instruments to continue with full function for **<Insert hours/days>**
- Instruments can be transported to **<Insert Practice address>** to be decontaminated whilst awaiting the engineer.
- Ensure the incident is recorded as a significant event and learnings are discussed at team meetings.

Storage of Instruments

Guidance for England

Instruments which will be used on the same day can be stored unwrapped but covered in the surgery via a lidded box or dedicated drawer for the use of unwrapped instruments only. These items must be re-processed at the end of the day if unused.

Instruments stored unwrapped in a **non-clinical setting** (such as a dedicated storeroom or clean side of a separate decon room) can be kept for up to one week. Instruments not used within a week must be reprocessed. You must have clear and concise training and protocols in place to ensure this process is strictly followed.

Instruments which have been stored in pouches can be kept for up to 1 year. There should be processes in place to ensure the expiry dates of infrequently used items don't exceed 12 months.

Guidance for Wales

Wrapped instruments can be stored for one year. If using a non-vacuum steriliser though, it is recommended that wrapped instruments should be stored for no longer than one month before being reprocessed.

The use of colour-coded rings and tape

The use of colour-coded rings and tape is not the preferred method for identifying instruments, as effective cleaning cannot be obtained, and tapes can leave a sticky residue that is hard to remove.

It is recommended to use an easy and effective method, such as the use of colour-coded perforated trays, Instrument cassette holders, or a colour indicator in the corner of the perforated tray for identification.

Single Use Devices

Single-use items such as needles, aspirator tips, and mouthwash cups are utilised whenever possible. They are never used for more than one patient and are discarded after use in an appropriate manner, e.g., sharps waste, special waste, or clinical waste.


This symbol identifies single use items.

Single use instruments and equipment must be identified and disposed of safely, never reused. Gloves and eye protection must be worn when handling and disposing of single use items.

Dental Burs

In dentistry, there is a huge range of burs available, all with different materials, shapes, and sizes to suit different situations and procedures. Both disposable and reusable dental burs are available.

The cost of burs varies. Disposable burs are less costly because they do not need to be designed with reuse in mind, while reusable burs can be more expensive, as they need to withstand multiple uses, high heat associated with sterilization, and harsh chemicals used to remove infectious material.

Storage of burs

Careful consideration should be sought to a risk-averse storage system for burs in practice. Studies have shown that certain types of bur stands cannot be decontaminated and harbour pathogens and bacteria, which can be dangerous to the patient. It is recommended to store burs in small autoclavable stands, which are stored with the corresponding treatment trays or pouched.

Sterilisation of burs

A reusable dental bur is intended for multiple uses. After each use, it needs to be cleaned to remove debris and sterilised so it will be safe for use on another patient. Disposable burs are used once and then discarded. There are several advantages to using disposable products including the assurance of always working with a sharp drill, the reduction of infection risks, and the limitation of sharps injuries caused by coming into contact with the sharp edges of the drill while handling and sterilizing it. Methods of cold disinfection should be avoided; all reusable burs must be sterilised after each use.

Standard protocols for using Composite Capsules and dispensers

When using composite capsules with dispenser guns on a patient, there are two main ways of working:

1. The composite capsule is attached to the dispenser and handed to the clinician to place directly into the patient's mouth.
2. The nurse dispenses the correct amount of composite required onto a pad and hands the pad – NOT the dispenser to the clinician.

Both are standard ways of working, but there appears to be some confusion about cross-infection, and we would like to confirm the correct processes around the above.

- If a clinician uses a composite capsule with dispenser to **directly place the composite** in the patient's mouth, the used capsule (regardless if empty or not) must be disposed of, it should not go back into storage. The dispenser gun should go through the sterilisation process as per the manufacturer's instructions – Most are Autoclave friendly but not washer disinfector friendly.
- If the nurse is **dispensing the composite onto a pad first** for the clinician, care must be taken, and a new pad sheet must be used if the clinician requires more product from the same capsule. The capsule can then be kept as it is not cross-contaminated. The dispensing gun is still required to go through the decontamination process.

Anything that touches the patient's mouth and cannot be sterilised needs to be treated as single-use and disposed of.

Wiping dispensing guns in between use on patients is not acceptable when they have come into contact with a patient's mouth.

Composite capsules that can be used again, provided the above protocols have been followed, must have their caps/lids returned. If the cap/Lid is lost, the capsule must be discarded.

Impressions and laboratory work

Dental impressions must be rinsed until visibly clean and disinfected by soaking them using a specialist dental impression decontaminant (as recommended by the manufacturer) and labelled as 'disinfected' before being sent to the laboratory. Technical work being returned to or received from the laboratory must also be disinfected and labelled.

All lab work returning from the laboratory needs to be disinfected prior to patient contact.

Protocols for Decontamination of Impressions, Prostheses and Appliances

- The responsibility for ensuring these devices have been cleaned and disinfected prior to dispatch to the laboratory lies solely with the dentist. For impressions, this responsibility lies with dental professionals taking the impression.
- PPE must always be worn.
- Once the impression or device has been removed from the mouth, it should be rinsed under running water immediately until it is visibly clean. This will remove any saliva, blood, or debris. Where appliances or prostheses are grossly contaminated, they may be cleaned in an ultrasonic bath containing a detergent and then rinsed.
- Products suitable for disinfecting impressions, prostheses, or appliances are CE marked to verify that they conform to European Directives. These products must always be used in accordance with the manufacturer's instructions and will generally require a COSHH assessment to be completed prior to their use.
- There are three methods of disinfection. These are immersion, dipping and spraying. Spraying is not recommended due to the creation of an inhalation risk. The guidance below on immersion and dipping is general and recommended, but as materials are developed and new materials become available, there may be some variation to the guidance given below. The device manufacturer's recommendations should be read and followed.
- Immersion in a disinfectant (following the manufacturer's recommendations for dilution and duration) can be effective but may be compromised by the limited working life of the disinfectant, which can affect the frequency of use and the presence of biological debris. Alternatively, the impression can be soaked in a 1% sodium hypochlorite solution for 10

minutes. Generally, this method is not recommended for hydrocolloids and polyether-based impressions due to the potential imbibition distortion risk.
- Dipping avoids the prolonged immersion that has the potential to distort hydrocolloid and polyether impression materials. Disinfection of impressions relies upon disinfection of their surface which requires a minimum contact time.
- On completion of disinfection, the device must be rinsed thoroughly in running water before packaging and sending to the dental laboratory. The laboratory ticket is to be signed and dated to confirm that the device or impression has been disinfected.
- Devices that have been received from the dental laboratory should also be disinfected once received in the practice. You should have 2 disinfection boxes one for impressions and one for prostheses & appliances returning from the laboratory.

Custom Made Medical Devices

Practices that manufacture internal medical devices for Orthodontics, whitening, sports guards, etc., are required to ensure that the lab work is processed under strict disinfection procedures in line with standard lab work disinfection.

Practices are required to ensure appropriate staff training before using the medical device, registration of the device appropriately in line with the Medical Devices Regulation Policy, and maintenance and service of equipment as per the manufacturer's instructions.

Patient placement and assessment for infection risk

Patients should be assessed for infection risk on/before arrival at the dental practice.

- Patients who may present a cross-infection risk include those:
  - with diarrhoea, vomiting, an unexplained rash, fever, or respiratory symptoms (including COVID-19).
  - known to have been previously positive with a Multi-drug Resistant Organism (MDRO), e.g., MRSA, CPE
  - who have been an inpatient in any hospital in the UK or abroad or are a known epidemiological link to a carrier of CPE

Respiratory and Cough Hygiene

Respiratory and cough hygiene minimises the risk of cross-transmission of known or suspected respiratory illness.

- Cover the nose and mouth with a disposable tissue when sneezing, coughing, wiping, and blowing the nose, if unavailable, use the crook of the arm
- Dispose of all used tissues promptly into a waste bin
- Clean hands after coughing, sneezing, using tissues, or after contact with respiratory secretions or objects contaminated by these secretions.
- Keep contaminated hands away from the eyes, nose, and mouth.

COVID-19

Formal guidance regarding COVID-19 was withdrawn in 2022. However, COVID is an ongoing concern. PPE is readily available for staff to use, and mask-wearing by all staff can be re-introduced during times of high case rates. Patients are still asked not to attend appointments if they are suffering from symptoms associated with COVID. If patients have symptoms and need to be seen in an emergency, we will try to arrange for their appointment to be at the end of the session to allow for fallow time and enhanced cleaning if required.

Staff are asked to follow the government's guidance on managing healthcare staff with symptoms of a respiratory infection or positive COVID-19 test result.

Hand Hygiene

The practice policy on hand hygiene must be followed routinely.

- Wash hands between each patient treatment and before donning and after removal of gloves.
- Bar soap must not be used or made available in the practice.
- Do not use scrub or nail brushes because these can cause abrasion of the skin where microorganisms can reside.
- Nails must be short and clean, free of nail art, permanent or temporary enhancements (false nails), or varnish.
- Nails should be cleaned.
- Use good-quality soft paper hand towels.
- Ensure that paper towels and drying techniques do not damage the skin.
- Use a hand cream following handwashing at the end of a session to counteract dryness, but do not use hand cream under gloves because this can encourage the growth of microorganisms.
- Antibacterial-based hand rubs/gels formulated for use without water can be used on visibly clean hands in conjunction with a good hand-washing technique for invasive dental procedures.
- Antibacterial-based hand rubs/gels can also be used instead of handwashing between patients during surgery sessions.
- Follow local infection control guidance or manufacturers' instructions on the maximum number of applications of antibacterial-based hand rubs/gels that can be used on physically clean hands before handwashing is required. Be aware that product build-up on the hands occurs with repeated application. If hands become "sticky," they must be washed as normal using a proper hand hygiene technique.
- Alcohol-impregnated wipes used for cleaning surfaces should not be used in place of hand rubs/gels, as they are not effective for hand decontamination.
- Use of foot-operated sensor-operated waste bin.

The below hand washing techniques should be used between each patient. Please use the designated hand wash basins provided. Always ensure that areas are free from clutter.

With Alcohol Hand Rub

- Apply about 3ml of rub into a cupped hand.
- Rub your hands palm to palm.
- Then, rub the back of each hand with the opposite palm with fingers interlaced.
- Repeat the action in step 3, but palm to palm.
- Then, with the backs of the fingers, rub opposite palms with fingers interlocked.
- Once dry you are finished, the whole process should take approx. 20-30 sec.

With Soap and Water

- Wet hands with water and apply a generous amount of soap (enough to cover all hand surfaces).
- Clasp your thumb with opposite hand and rub using a rotational movement, repeat for other hand.
- Then, rub the tips of your fingers into opposite palms in a circular motion, and repeat for the other hand.
- Then, rub each wrist with the opposite hand.
- Rinse hands with water and use elbows to turn off the tap.
- Dry thoroughly with a paper towel.
- Your hands are now clean; the whole process should take approx. 30 sec.

Hand Hygiene Audits

Hand Hygiene audits are highly recommended for all dental practice team members, including non-clinical team members. They should be conducted at least annually. Templates are available on the DCME portal in the Audits file.

Aseptic Technique

Aseptic techniques should be introduced when procedures are performed under sterile conditions to prevent contamination from microorganisms. Using an aseptic technique in dentistry is commonly used for more invasive procedures such as implants and minor oral surgery. Practice can check if they are using aseptic techniques correctly by auditing themselves using the NHS Aseptic Technique Procedure Audit tool for dental practices, which can be found here.

Minimising blood-borne virus transmission

All staff must be immunised according to Public Health England's Green Book. General immunisation information for healthcare staff (including non-clinical staff) can be found in Chapter 12, whereas information specifically for Hep B can be found in Chapter 18 which was updated in April 2024. Records of immunisation plus titre levels for Hep B will be recorded within the staff personnel files where access is restricted to ensure confidentiality.

Where a staff member does not seroconvert or cannot be immunised, advice will be sought from occupational health on the appropriate course of action. A Hep-B non-responders risk assessment will be completed.

We will allow new clinical staff members to provide surgery assistance after their first Hep-B vaccination, provided a risk assessment has been completed. However, we will wait until the entire course and titre levels have been obtained before allowing staff members to perform decontamination duties.

'Safer Sharps' (which have a shield or cover that slides or pivots to cover the needle after use) are used where it is reasonably practicable to do so. Where it is not reasonably practicable to use safer sharps, traditional unprotected sharps are used in conjunction with procedures for safe use and disposal.

In the event of an inoculation injury, the wound should be allowed to bleed, washed thoroughly under running water, and covered with a waterproof dressing, in accordance with the practice policy. The practice policy for dealing with inoculation injuries can be found in the practice manual. Record the incident in the accident book.

All inoculation injuries must be reported to Hassan Bhojani, who will assess whether further action is needed (seeking advice as appropriate) and maintain confidential records of these injuries, as required under current health and safety legislation. Advice on post-exposure prophylaxis can be obtained from Occupational Health & Safety services.

Risk Assessments

In accordance with the Health and Social Care Act 2008 Code of Practice on the prevention and control of infections, practices should have systems to manage and monitor the prevention and control of infection by undertaking relevant risk assessments to consider the susceptibility of service users and any risks that the environment and other users may pose to them, this includes the following assessments:

- External and Internal Legionella Risk Assessments
- Regular medical history checks on patients
- Sharps Risk Assessments
- General Practice Health & Safety Risk Assessments

Sharps Management & Inoculation Injuries

Sharps/inoculation injuries include all incidences where a contaminated object or substance penetrates the skin or mucous membranes or meets the eyes. For example:

- Sticking or stabbing with a used needle or instrument

- Splashes with a contaminated substance to the eye or other open lesions
- Cuts with contaminated equipment
- Bites or scratches inflicted by patients.

An inoculation injury is the most likely route for transmitting blood-borne viral infections in dentistry. To minimise the risk of blood-borne viruses, all staff are trained in the avoidance and management of inoculation injuries. Postexposure prophylaxis (PEP) is available if necessary. Staff at risk of blood-borne virus exposure should have an occupational health examination.

A new EU directive came into force on the 11th of May 2013 – the European Council Directive 210/32/EU called "The Sharps Directive". The overriding emphasis is now on prevention of sharps injuries and risk assessment. Our practice reduces the risk of sharps injuries by following the below:

- Sharps must not be passed directly from hand to hand, and handling should be kept to a minimum.
- Needles must not be bent or broken prior to use.
- Always dispose of sharps at the point of use in a suitable container, and do not fill sharps containers above the manufacturer's marked line.
- Needles must not be re-sheathed by hand.
- Whenever possible, use completely disposable sharps. For example, use disposable scalpels to avoid changing the blade.
- Avoiding picking up many sharp instruments together in one handful
- Always use heavy-duty gloves when cleaning instruments and the appropriate PPE. Using an ultrasonic bath or washer-disinfector reduces the risk of sharps injury compared to manual cleaning.
- Ensuring all staff are trained in the correct and safe use of sharps. Keep records of training
- Syringes/cartridges and needles should be disposed of intact.
- Lock the used sharps container when ready for final disposal in accordance with the manufacturer's instructions.
- Sharp bins would normally be placed under a contract with a service provider that empties /replaces them on a regular basis. As part of the contract, a document describing the containers collected will usually be offered on collection. The practice must keep this record.
- Always carry used sharps containers by the handle.
- Do not dispose of sharps with other clinical waste.
- Place damaged used sharps containers into a large, secure, rigid container which is properly labelled.
- Dentists and Nurses on domiciliary visits must have proper sharp bins within their mobile kit when doing home visits. They should always ensure that the equipment is secure and away from other individuals—it MUST NEVER be left unattended. Caution must be taken when transporting sharps bins, and they must always be returned to the practice at the end of each domiciliary visit.

Employees now have a duty to notify the employer if they receive a needle stick injury as soon as possible. The employer has the responsibility to ensure that, if possible, they minimise the use of sharps and have protection mechanisms in place. The employer must offer effective training that clearly highlights the risk of injury and good practices, as well as encourage those healthcare workers at risk to be up to date with their vaccinations in the case of injury.

A follow-up procedure should monitor staff who have had such injuries, and the incident should be fully documented.

What to do

If a member of the dental team sustains an inoculation injury, it must be dealt with promptly and correctly; the incident should not be ignored.

- Allow the wound to bleed, and then wash thoroughly with running water.

- Assess the risks associated with the patient and the injury. If there is reason to be concerned about the possible transmission of infection, seek advice promptly from .
- Decide what follow-up action, including serological surveillance, is necessary and whether post-exposure prophylaxis is required.
- When local advice is not available, advice should be obtained from the Health Protection Agency Centre for Infections; you can find your nearest centre's details for England here
- Make a full record of the incident in the accident book, including.
    - Details of who was injured.
    - How the incident occurred
    - What action was taken?
    - Which dentists were informed and when?
    - The name of the patient being treated (if known)
- The record should be signed by the injured person and the dentist in charge.

Blood and Bodily Fluids Spillage Procedure

Spillages of blood and bodily fluids occur rarely in dentistry, although there might be occasions when a surface becomes grossly contaminated with blood or blood/saliva. In these situations, the area should be saturated with 1% sodium hypochlorite with a yield of at least 1000 ppm free chlorine. Allow contact for a minimum of five minutes before using disposable cloths to clean the area. The cloths used for cleaning should be disposed of appropriately.

If blood or bodily fluid is spilt (either from a container or as a result of an operative procedure), the spillage should be dealt with as soon as possible. The spilt blood/bodily fluid should be completely covered either by disposable towels, which are then treated with sodium hypochlorite solution or sodium granules, both producing 10,000 ppm chlorine. Good ventilation is essential. At least 5 minutes must elapse before the towels, etc, are cleared and disposed of appropriately.

Appropriate protective clothing must be worn when dealing with a blood spillage: household gloves, protective eyewear, and a disposable apron. Care should be taken to avoid unnecessary contact with metal fittings, which can corrode in the presence of sodium hypochlorite. Alcohol should also be avoided in the same decontamination process.

Cleaning of Work Surfaces and Equipment

The patient treatment area should be cleaned after every session using disposable wipes, even if the area appears uncontaminated.

Between patient treatments, the local working area and equipment must be cleaned using disposable wipes. This will include work surfaces, the dental chair, inspection lights and handles, hand controls, delivery units, spittoons, aspirators, and if used, X-ray units and controls. Other equipment that may have become contaminated must also be cleaned.

Single-use protective sheaths should be used and replaced on light handles, light cure machines and also x-ray triggers.

In addition, cupboard doors, other exposed surfaces (such as dental inspection light fittings) and floor surfaces with the surgery should be cleaned daily.

There is a clear need to maximise the separation of decontamination work from clinical activity within the constraints of space and room availability. Where instruments are reprocessed in the same room as the patient treatment area, the reprocessing area should be as far from the dental chair as practicality allows. As dental practices progress towards higher standards, removing the decontamination process from the treatment room should be a priority. If decontamination has to be carried out in a patient treatment room, to minimise the risks both to the patient and of cross-contamination of instruments, appropriate controls should be in place.

Uncontrolled procedures that generate the risk of exposure to aerosol dispersion or splashes (such as manual washing, the use of an ultrasonic cleaner without a sealed chamber (or lid), or the

opening of decontamination equipment) should NOT be performed while the patient is present.

Regardless of the choice of location used for the reprocessing facilities, a dirty-to-clean workflow should be maintained so that used instruments are at a lower risk of coming into contact with decontaminated instruments. This requires a well-developed routine for surface cleaning/ decontamination within the facilities.

Environmental Cleaning

All healthcare organisations should adopt the colour code below for cleaning materials. All cleaning items, such as cloths (reusable and disposable), mops, buckets, aprons, and gloves, should be colour-coded. This also includes those items used to clean kitchen areas.

RED - Bathrooms, washrooms, showers, toilets, basins, and bathroom floors

BLUE - General areas offices, reception, waiting rooms, corridors.

YELLOW – Surgeries (clinical areas)

GREEN - Kitchen areas.

The non-clinical areas of the practice are cleaned in line with the practice cleaning log.

Cleaning equipment is stored outside patient care areas.

Records of cleaning protocols and audits/checks on its efficacy are retained. Audits are recommended but not mandatory; templates for auditing should be sourced from the National Cleanliness Standards 2021

Storage of Cleaning Products and Equipment

Cleaning products and equipment used in the dental practice should be kept away from public access and stored in a locked cupboard. This cupboard should be labelled to show that it contains cleaning products and COSHH materials.

Disinfectants and cleaning materials can be hazardous to health; many will have hazard symbols on their labels. Safety data sheets should be obtained for all cleaning products used in the practice, and COSHH assessments should be completed for any that have hazard labels. COSHH assessments and safety data sheets for cleaning products should be stored in the cleaning cupboard to enable quick access in case of a spillage or emergency.

Mops should be wall-mounted, with the mop heads at the top (inverted). Buckets should be stored on the floor, not stacked, and where possible, inverted.

To reduce the risk of spillages and injuries, disinfectants and cleaning products should not be stored high and should be easily accessible to staff.

Clinical Waste Disposal

Dental practices produce a wide range of waste, which can be divided into hazardous and non-hazardous categories. The table below outlines the common waste types produced in dental practices.

Container Type	Example Waste description	Contents	Classification and EWC codes	Disposal
Sharps box (yellow	Clinical waste:	Hypodermic	18 01 03 &	Incineration only

lid) (Note: orange lids must not be used)	mixed sharps and pharmaceutical waste for incineration only	needles, syringes and syringe barrels, including those contaminated with medicines (not cytotoxic and cytostatic) Used medicine vials. Other sharp instruments or items, including teeth without amalgam fillings	18 01 09 Hazardous	
Soft clinical waste (orange)	Clinical waste: known infectious	Infectious dressings Swabs Phlebotomy Needles/Syringes	18 01 03	Alternative treatment at a suitably permitted facility or incineration (legal but not recommended under the waste hierarchy)
Offensive waste (tiger stripe bags)	Unpleasant but not hazardous	Used non-infectious PPE, sanitary waste/ nappies Couch roll (paper used to cover exam tables) Non-infectious items contaminated with blood and other body fluids	18 01 04 or 20 01 99 18 02 03	EfW (can be incinerated at lower temperatures than infectious/known infectious streams) Landfill (legal, but not recommended under the hierarchy of waste)

Infectious /medicinal/anatomical waste requiring incineration. (Yellow)	IV bags Pharmaceutically contaminated sharps Chemically contaminated lab waste		18 01 03	Incineration or alternative treatment at a suitably permitted facility
Medicines (blue lid) (rigid leak-proof container)	Expired medicines (excluding cytotoxic and cytostatic drugs) Testing kits Medicines returned to healthcare facilities by the public	Non-cytotoxic and cytostatic medicines including used and out-of-date stock	18 01 09 Non-hazardous	Incineration only
Cytotoxic and cytostatic waste (Purple)	Chemotherapy drugs Other cytotoxic drugs		18 01 08	Hazardous/clinical Incineration
Amalgam waste	Dental amalgam: infectious, clinical waste, for recovery	Teeth with amalgam fillings	Hazardous 18 01 10	Metal recovery
	Dental amalgam and mercury: non-infectious, for recovery	Dental amalgam and mercury including spent and out-of-date capsules, excess mixed amalgam, and contents of amalgam separators		
Plaster cast waste (Gypsum Bin)	Plaster cast waste	Gypsum or calcium sulphate study or working models	18 01 04 or 18 01 03 (infectious Gypsum)	Gypsum recovery or landfill in a separate dedicated cell for gypsum

X-ray fixer (container type not specified)	Photographic fixer	Waste photographic fixer from X-ray (Must be kept separate from developer)	Hazardous 09 01 01	Recovery (various)
X-ray developer (container type not specified	Photographic developer	Waste photographic developer from X-ray (Must be kept separate from fixer)	Hazardous 09 01 04	
Lead foils (container type not specified)	X-ray lead foils	Lead foils from x-ray film packaging	Non-hazardous 15 01 04	Recovery (various)
Municipal waste (black bags)	Mixed municipal waste	Domestic type refuse: food packaging paper/magazines that cannot be recycled, paper towels (no hazardous wastes)	Non-hazardous 20 03 01	Landfill or municipal incineration/ energy from waste

- Clinical waste bins should be sensor or foot-operated.
- Clinical waste sacks must be no more than three-quarters full, have the air gently squeezed out to avoid bursting when handled by others, be labelled according to the type of waste, and be tied at the neck, not knotted.
- Sharps waste (needles, teeth (containing no amalgam), scalpel blades, drugs etc) must be disposed of in UN type approved puncture-proof containers (to BS 7320) and labelled to indicate the type of waste.
- Sharps containers should be dated and signed upon opening and closing. They must be disposed of when the fill line indicated has been reached (this should be no more than ¾ full).
- Sharps bins no longer need to be closed within 3 months of their opening date in accordance with the new HTM 07-01 guidance. They can continue to be utilised until the point of need for closure due to being filled.
- Sharps bins should be stored at waist height, at the point of use (by the clinician) and not stored in a cupboard or on the floor. Best practice would be to have the sharps bins wall mounted.
- All staff involved in handling clinical waste are vaccinated against hepatitis B, including the practice cleaners (but only if they handle clinical waste or are likely to come into contact with sharps).
- Clinical waste and sharps waste must be stored securely in the areas provided before collection for final disposal. The storage area should be away from public access.
- Clinical waste bins stored outside should be locked and chained to a wall to prevent theft.
- The waste carrier must hold a certificate of registration with the Environment Agency.

- Dental amalgam plus teeth containing amalgam, lead foil and developer and fixer solutions must be disposed of as hazardous waste by the registered waste carrier appointed by the practice.
- At each collection of waste, the waste carrier issues a consignment note, which is retained by the practice for three years. Consignment notes should be given to Hassan Bhojani
- All relevant staff will be trained in the handling, segregation, and storage of all healthcare waste generated in the practice.

Clinical Waste Audit

The Environmental Permitting (England and Wales) Regulations require that all wastes generated at a property that undertakes healthcare practices must be subject to a pre-acceptance audit prior to collection via a contractor. Failing to comply can result in the contractor being unable to collect our waste. Furthermore, undertaking the correct pre-acceptance audit procedure will enable us to ensure our wastes are transported in accordance with legislation and that suitable documentation and audit trail for managed wastes is available.

Waste pre-acceptance is the process of assessing a waste's characteristics to determine its appropriate disposal or recovery method.

Our waste contractors will provide templates for completing a pre-acceptance waste audit.

In addition to ensuring compliance with the Environmental Permitting (England & Wales) Regulations, following best practices and undertaking thorough pre-acceptance waste audits have several benefits.

Audits can help identify where potentially hazardous wastes are being wrongly assigned to a bin (e.g., medicinal sharps being placed in clinical waste bags). By identifying any potentially incorrect segregation, harm to employees and contractors can be prevented. The environmental benefits can also be significant, for example, by preventing inappropriate wastes from being sent for disposal when alternative recovery options are available.

The regulations also require that hazardous waste-generating sites maintain a site register. The register should contain quarterly producer returns provided by your waste management contractors, as well as the consignment note records. You should ensure that both types of documents are being retained, ideally in the same location.

Review

This policy and the policies referred to within it, will be reviewed at regular intervals to ensure it is current and amended as required by changes within the practice and legal and professional requirements.

Document Control

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Author/s:	DCME Team

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Approver:	DCME Team
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Change History				
Version	**Status**	**Date**	**Author / Editor**	**Details of Change** (Brief detailed summary of all updates/changes)
0.1	Draft	29/12/2021	HD	Initial Draft Policy created
0.2	Draft	05/07/2022	PG	Review of content checked, signed off
0.3	Draft	16/08/2022	HD	Removed Covid, replaced with Cough and Respiratory Hygiene
0.4	Draft	03/10/2022	PG	Added additional information on bodily fluid spillage
0.5	Final	12/12/2022	HD	Added additional information regarding waste disposal and storage of cleaning products
0.6	Final	05/01/2023	PG	Approved
0.7	Final	05/05/2023	PG/HD	Final Review. The clinical waste guidance table checked in line with recent changes to HTM 07-01 for disposal of waste
0.8	Final	21.5.24	HD	Updated the waste disposal table to include offensive waste
0.9	Final	05.07.24	HD	Expanded guidance on staff training
1.0	Final	15.07.24	HD	Added roles and responsibilities. Added COVID back in (in line with CQC expectations). Updated staff immunisation guidance.
1.1	Final	16.08.24	PG	Removed Scotland references as singular Scotland policy being created.

The latest approved version of this document supersedes all other versions, upon receipt of the latest approved version all other versions should be destroyed, unless specifically stated that previous version(s) are to remain extant. If in any doubt, please contact the document Author.

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