Infection Prevention Policy and Procedures

Table of Contents

1. **Purpose**

   For the safety of our patients, visitors, and team, this practice follows the latest guidelines and research on infection prevention. We comply with HTM 01-05 'essential quality requirements' and have a written assessment and plan to move towards 'best practice'. We take Universal Precautions, referred to as Standard Infection Control Precautions (SICPs), for all patients, as outlined throughout this policy, to minimise all known and unknown risks of cross-infection, and reduce the risk of transmission of infectious agents.

2. **Responsibilities**

   2.1. The Principle Dentist Sarah Swales and decontamination lead, Tanya Clark are responsible for overseeing and implementing this policy.

   2.2. All clinical team members are responsible for following the procedures set out in this policy, and for reporting any acts of non-compliance to the practice manager or decontamination lead.

   2.3. All non-clinical team members are responsible for maintaining cleanliness and assisting with maintaining infection prevention standards in line with their roles and responsibilities. Any acts of non-compliance need to be reported to the practice manager or decontamination lead immediately.

3. **Definitions**

   3.1. *Aerosol generating procedure (AGP)*

   AGPs are dental procedures that have a high risk of releasing aerosols from the respiratory tract e.g., treatments that involve the use of high-speed handpiece or ultrasonic scaler. Aerosols have the potential to increase infection transmission from patients with a known or suspected respiratory tract infection.

   3.2. *Non-respiratory pathway*

   Patients who attend without symptoms or a positive test result of a respiratory tract infection e.g., COVID-19, influenza (flu), tonsillitis, measles, etc., are treated following the SICPs outlined in this policy.

   3.3. *Respiratory pathway*

   Patients who attend with a known or suspected respiratory tract infection e.g. COVID-19, influenza (flu), tonsillitis, measles, etc., are treated with transmission-based precautions in addition to the SICPs outlined in this policy.

   3.4. *Transmission based precautions (TBPs)*

   These are supplementary control measures that are required in addition to the SICPs outlined in this policy when treating patients with a cross-infection risk on the respiratory pathway e.g., those suffering from diarrhoea, vomiting, or a respiratory tract infection.

   3.5. *Single-use devices*

   Single-use devices (those identified by the symbol ②) cannot be used for more than one

patient.

3.6. *Single-patient instruments*
Single-patient instruments such as endodontic reamers and files can be reused, but only on the same patient.

4. **Hand and respiratory hygiene**

4.1. *Hand hygiene*
It is the responsibility of all team members to ensure good hand hygiene standards are maintained to minimise the risk of contaminating equipment and/or devices.

Arms need to be bare below the elbow, with rings, bracelets, and wristwatches removed when carrying out clinical procedures (rings can be worn on a neck chain for convenience). A single plain wedding band can be worn but needs to be moved to clean underneath it when performing hand hygiene.

Fingernails are to be kept short, smooth, and clean (when viewed from the palm side, no nail is visible). False nails, nail art, or nail varnish are to be avoided when carrying out clinical procedures. All cuts or abrasions need to be covered with a waterproof dressing.

Hand washing needs to be performed before and after each treatment session, before and after the removal of PPE, following the washing of dental instruments, before contact with sterilised instruments (wrapped or unwrapped), after cleaning or maintaining decontamination devices used on dental instruments, after decontamination work, and if hands become visibly soiled. The use of gloves does not replace the need for carrying out hand hygiene.

Bar soap and nail brushes are not to be used for washing hands, instead, mild liquid soap is available, as well as a blunt “orange” stick for cleaning nails. Hands require washing under running water for at least 15 seconds, or until visibly clean, and then dried fully using a disposable paper towel.

An antimicrobial hand rub conforming BS EN 1500 can be used on visibly clean hands as an alternative to washing. Alcohol wipes are not to be used as a substitute for hand rubs.

Before carrying out aseptic surgical procedures, a medicated hand soap such as chlorhexidine gluconate 4%, or povidone iodine 7.5%/10% is required when washing hands. Where there is a sensitivity to antiseptic cleaners, hands are to be washed with plain liquid soap followed by two applications of antibacterial-based hand rub conforming to BS EN 1500.

Designated hand-wash basins fitted with a wall-mounted soap dispenser are available for carrying out hand hygiene, these are clearly identified via the display of a hand hygiene poster for persons to follow when cleaning hands. These sinks are not intended for any purpose other than hand hygiene; where possible, they have been fitted with either a sensor or lever-operated mixer tap that does not discharge directly into the drain, and

they do not have an overflow or plug.

A water-based hand cream is available in the decontamination room, and staff toilet that can be applied at the end of each clinical session to minimise the risk of chapped or cracked skin.

4.2. *Respiratory hygiene*
To minimise the risk of cross-contamination of respiratory illnesses, all team members are required to maintain good respiratory hygiene standards and encourage patients to do the same.

Covering the nose and mouth with a disposable tissue when coughing, sneezing, wiping, and/or blowing the nose is important to reduce the spread of viruses. All used tissues then need to be disposed of promptly, and hand hygiene performed immediately.
Contaminated hands should be kept away from the eyes, nose, and mouth to minimise cross-infection.

5. **Personal Protective Equipment (PPE)**

5.1. *Clinical gloves*
Non-sterile clinical gloves are required for clinical treatments and sterile surgical gloves for invasive (surgical) procedures e.g., implant placement, surgical extractions, and gum surgery.

Gloves are single-use only and need to be discarded after use on one patient or if damaged during treatment, and are to be removed before retrieving any item from a cupboard or drawer. Gloves are not to be worn outside of the treatment room.

5.2. *Oversleeves*
Single-use disposable oversleeves can be supplied for clinical team members who cannot expose their forearms e.g., for religious reasons. When used they are to be worn in conjunction with gloves, removed after each patient, and when performing hand hygiene.

5.3. *Plastic aprons*
Single-use disposable plastic aprons are required to protect the uniform when contamination is likely, e.g. during treatments that may produce splatter of blood and bodily fluids, cleaning activities, decontamination procedures, when handling chemicals, and whilst clearing up a spillage of a hazardous material. Changing aprons is necessary when one of the tasks above is completed, as well as between patients.

5.4. *Full-body gowns*
Single-use disposable or reusable full-body gowns are required to protect the uniform when performing an AGP on a respiratory pathway patient and need to be changed after each patient, however, they can also be worn during other procedures if team members feel that an apron may not adequately protect the uniform from a significant amount of splatter.

Single-use disposable sterile gowns are required for invasive (surgical) procedures e.g., implant placement, surgical extractions, and gum surgery.

5.5. *Household gloves*

Thick household gloves are required for cleaning activities, decontamination procedures, or for clearing up a spillage of a hazardous material. After each use, they need to be washed with detergent and hot water and left to dry. They also need to be replaced weekly, or more frequently if damaged, or if soil cannot be removed.

5.6. *Protective eyewear*

Protective eyewear is required where there is a risk of a splash to the eyes, this includes during the treatment of patients, cleaning activities, decontamination procedures, when handling chemicals, and whilst clearing up a spillage of hazardous material. As spectacles do not provide sufficient protection, a visor or face shield is required to be worn over them. Protective eyewear can be reused if cleaned according to manufacturers' instructions, when it becomes visibly dirty, after treating a patient, or at the end of each session.

Protective eyewear is to be worn by patients during treatment. If patients' protective eyewear is reused, it needs to be cleaned according to manufacturers' instructions.

5.7. *Face masks*

Fluid-resistant surgical face masks (FRSM) are required whilst treating patients, cleaning instruments, and clearing up a spillage of hazardous material. Face masks are single-use items and need to be changed after each patient, each decontamination procedure, and if they become wet or soiled.

Filtering face piece (FFP3) respirators or powered air purifying respirator hoods (PAPR) are required when performing an AGP on a respiratory pathway patient to prevent exposure to the hazard following the practice and personal risk assessments. All team members who are required to wear an FFP3 respirator are fit-tested and records are retained. Manufacturer's instructions are available and need to be followed for decontamination after each use.

5.8. *Clinical clothing/workwear*

Although not classified as PPE, fresh clinical clothing needs to be worn each day in the treatment room and changed if soiled. Clinical clothing is not to be worn outside of the practice, and outdoor clothes are not to be worn whilst treating patients or carrying out decontamination procedures. Footwear needs to be fully enclosed, slip-resistant, and in good order.

5.9. *Donning/Doffing*

5.9.1. *Donning*

The following procedure is to be followed when putting on PPE, and this performed in a clean zone to reduce the risk of cross-infection:

a. An apron/gown is put on first and tied at the waist
b. A suitable face mask is then put on covering the mouth and nose, and moulded to the bridge of the nose
c. Protective eyewear is put on next
d. Gloves are put on last, covering gown cuffs if worn

5.9.2. *Doffing*

The following procedure is to be followed when taking off PPE, and this performed close to hand washing facilities, as well as an appropriate waste bin:

a. Gloves are removed first by rolling them inside out
b. Aprons are removed by breaking the ties, and gathered by handling the insides only
c. Eye protection is removed next by holding both arms of the eyewear and pulling away from the face
d. Taking care not to touch the outer surface, FRSMs are removed last by breaking the ties/lifting elastic over the ears, or, FFP3 respirators are removed by untying/lifting the straps. When performing a respiratory pathway AGP, face masks are removed outside of the treatment room

5.10. *Laundry arrangements*

It is the responsibility of all clinical team members to ensure that clinical clothing, including any reusable PPE, is laundered effectively to kill or remove any microbial contamination.

Providing team members wear the correct PPE when carrying out clinical treatments, decontamination procedures, and/or cleaning activities, the level of soiling and overall risk will be reduced for uniforms, therefore, the practice adopts a standard approach with no segregation. Items of clothing awaiting to be laundered need to be stored securely and separate from clean uniforms to avoid cross-contamination.

5.10.1. *Laundering uniform offsite*

When taking clinical clothing home, or to a launderette, for cleaning, the items need to be placed and transported in either a disposable plastic bag or a reusable cloth bag that is suitable to be washed with the clothing in a domestic type washing machine.

5.10.2. *General laundering principles when using a washing machine*

Clinical clothing is to be washed separately from other linens, avoiding overloading the washing machine (no more than half capacity). Once the washing machine has been loaded, hand hygiene procedures need to be followed.

Clinical clothing requires washing with detergent at the highest temperature suitable for the fabric, followed by a 10-minute wash at 60°C to remove any micro-organisms. The clothing is then tumble dried at the hottest temperature suitable for the fabric , air dried thoroughly and ironed using the hottest setting, again

where this is suitable for the fabric.

5.10.3. *Storing laundered uniform*
Clean clinical clothing needs to be stored above floor level, in a secure, dry, and cool environment, and away from direct sunlight and water.

6. **Latex**

Due to the health risks associated with natural rubber latex (NRL), the practice is phasing out the use of latex gloves, and other NRL products, with Nitrile or vinyl gloves, and non-latex 'rubber' dams considered in the first instance to protect users and patients from the adverse health effects of NRL.

Any team member who suspects they are suffering from a latex allergy needs to inform the practice manager, to enable occupational health to be consulted, and if it is confirmed that the employee has an allergy, their working conditions will be monitored for the duration of their employment and the use of NRL products avoided.

7. **Staff protection**

It is necessary for all new team members to undergo a pre-employment health assessment and be offered the immunisations as appropriate for their role. This assessment is carried out by the practice , in conjunction with advice from occupational health.

All clinical team members are required to keep up to date with their routine vaccinations (tetanus, diphtheria, polio, and MMR) and have had chickenpox (Varicella) or been vaccinated against it. Team members are also required to be immunised against Hepatitis B with proof of seroconversion, unless they are a non-responder, in which case a risk assessment will be undertaken by the practice.

Any team member who is likely to have face-to-face contact with a confirmed or suspected case of a respiratory tract infection, such as COVID-19, and measles, will be required to wear the appropriate PPE as set out in the Respiratory Tract Infections SOP. Any team member who believes they have been a direct contact of a confirmed or suspected case of an RTI, and were not wearing PPE at the time, needs to inform the Practice Manager, Sarah Swales, or Decontamination Lead, Tanya Clark, immediately and follow the procedures outlined in Section 9 of the Respiratory Tract Infections SOP.

Where possible, it is highly recommended that team members get immunised against Tuberculosis (TB). Team members who are unvaccinated and had a negative tuberculin skin test are advised where possible to get vaccinated with BCG (Bacillus Calmette-Guerin) to further protect them when working in close contact with infectious TB patients.

New healthcare workers (defined as a worker new to dental healthcare, such as a trainee dental nurse and clinical team members who are 'returning to work) who will be involved in performing exposure-prone procedures (EPPs), as well as existing workers moving to a role that involves EPPs for the first time in their career, need to be tested and cleared for hepatitis B, hepatitis C, and HIV beforehand. If a team member knows or suspects that they are infected with a blood-borne virus

such as hepatitis B, hepatitis C, or HIV when performing EPPs, they need to inform the practice manager, Sarah Swales, and cease working until advice has been taken from the practice in conjunction with occupational health . Any advice, including any requirements for ongoing monitoring, change in the scope of work, or periods off work, will be considered and managed appropriately by the practice.

A record of the immunisation status for all team members is maintained by the practice, with the practice also covering the costs of any required vaccination for employed personnel, however, self-employed team members are responsible for any costs related to assessments and immunisations.

It is the responsibility of all team members to maintain an awareness of their health. Should a person consider that they have contracted an infectious disease or may have been exposed to one, the Practice Manager, Sarah Swales, or Decontamination Lead, Tanya Clark, needs to be informed before any further work is carried out. It may be necessary to modify working patterns, avoid certain procedures, or even stay at home. In the case of major disease, an expert opinion will be obtained.

8. **Infection Prevention and Control (IPC)**

8.1. *Accepting patients*

We accept all patients for assessment for treatment, regardless of any disclosed diseases, ensuring that we always follow current government guidelines related to any outbreaks.

8.1.1. *Patient assessment*

When visiting the practice, all patients need to be assessed and screened for a potential cross-infection transmission risk. Where a patient is identified as a risk, the clinician is responsible for triaging the patient to decide on the additional precautions required. Routine appointments are deferred until the patient feels better, whereas emergency appointments and those that cannot be delayed can continue, providing TBPs are in place. In the event a patient is identified as a respiratory tract infection risk e.g., COVID-19, measles (Rubeola), they are to be treated on the respiratory pathway, following the procedures outlined in the practices' respiratory tract infection SOP.

When assessing whether a patient poses a potential cross-infection risk, the following symptoms need to be considered:

a. Diarrhoea, nausea and/or vomiting
b. A new continuous cough
c. High temperature, fever, or chills
d. Loss of, or change in sense of taste or smell
e. Unexplained tiredness, lack of energy or appetite
f. Muscle aches or pains that are not due to exercise
g. A headache that is unusual or longer lasting than usual
h. A sore throat, stuffy or runny nose
i. Conjunctivitis
j. The presence of small grey/white spots inside the mouth (e.g., Koplick spots)
k. A brown/red/blotchy skin rash]

8.1.2. *Communication*

The practice actively communicates that patients should not attend if they are feeling unwell or experiencing respiratory tract infection symptoms. This is achieved through the following methods:

a. At the time of booking or 24 hours before the appointment the reception team will ask the patient if they feel unwell, have any of the symptoms outlined above, have recently travelled to an area with a known outbreak, or have had contact with a confirmed or suspected case of a known infection
b. Text message appointment reminders will be sent to patients and will include instructions to contact the practice before attending if the patient feels unwell or develops any symptoms
c. Information is available on the practice website, online booking forms, and appointment reminders sent by email, text, and telephone, as well as our answerphone message, are kept up to date in line with public advice

8.1.3. *Cold sores*

The practice recognises that cold sores can be highly contagious, can easily spread to other areas until they are fully healed, and that providing dental treatment when they are present can be painful for the patient, as it may crack and bleed.

Clinical team members are therefore trained to identify the signs and symptoms of cold sores which include an initial tingling, itching, or burning sensation followed by small fluid-filled blisters which can burst and form a scab, and usually last around 10-14 days.

Team members are required to take all reasonable steps to identify whether a patient has, or suffers from cold sores prior to attending the practice, this can be achieved through a review of the medical history, or during discussions with the patient when arranging their appointment. Patients also need to be made aware that if they develop a cold sore, and are due an appointment, they must contact the practice before attending, so that the appointment can be rescheduled until the cold sore has fully healed.

Team members need to discuss and reschedule routine appointments for patients who attend with cold sores. Where this is not practical, for example where emergency dental care is required, a clinical assessment needs to be undertaken by the clinician to determine whether treatment can commence.

8.1.4. *Vulnerable patients*

Patients considered to be at higher risk of becoming seriously ill if they were to contract an infection, such as those diagnosed with Down syndrome, Cancers, HIV, an impaired immune system, or anything affecting the nervous system, can be treated following the same precautions as other patients, however, additional control measures are available to protect these persons and need to be considered on a case by case basis by discussing the options below and agreeing on the preferred method(s) with the person, their carer, or guardian:

a. Vulnerable patients have appointment priority at the start of a session
b. Upon arrival, the patient is immediately directed into the treatment room
c. Upon arrival, the patient is asked to wait in their car until directed by a team member to enter the practice
d. Face masks to be worn by team members and the patient where tolerated
e. When providing treatment, higher tier PPE (e.g., non-valved FFP3 respirator) to be worn by the clinical team

8.2. *Additional Standard Infection Control Precautions (SICPs)*
In addition to the procedures outlined in this document, the below SICPs are also required when treating all patients:

a. Rubber dam to be used whenever required by current guidance
b. Four-handed dentistry technique to be used whenever possible
c. High-volume aspiration of 250L/min or greater to be used when performing AGPs to keep aerosol to a minimum. The aspirator needs to vent externally and not in a direction where it could be inhaled by someone

d. Treatment rooms to be sufficiently ventilated (open windows if required) Alternatively, a mechanical ventilation system e.g., the powered fan in the external wall can be used to refresh the air in the surgery / an air conditioning system has been installed that avoids recirculating air into other rooms / portable air conditioning units (that do not incorporate humidifiers) are available, but when used these need to avoid directing air towards any door to prevent driving contaminated air into other rooms, and the reservoir needs to be emptied daily.]
e. The air cleaning devices need to be switched on when the surgery is in use.

8.3. *Transmission Bases Precautions (TBPs)*
The clinical team needs to identify when a patient accepted for treatment represents an increased cross-infection control risk (e.g. when they have respiratory tract infection symptoms) and follow the appropriate precautions as applicable:

a. Where there is potential for infections to spread through direct patient contact or indirectly through contact with the patient's environment, enhanced decontamination is to be performed following the practices' cleaning schedule e.g., norovirus and conjunctivitis
b. Where there is potential for infections to spread through droplets over short distances, e.g., influenza, measles, and other respiratory tract infections, patients are to be distanced from others by at least 1 metre. If the patient is considered infectious at the time of treatment or this status is unknown, the respiratory tract infections SOP to be followed in addition to this document
c. Where there is potential for infections to spread over a distance through the generation of an aerosol e.g., COVID-19, measles, and other respiratory tract infections, the practices' respiratory tract infections SOP to be followed in addition to this document

9. **Decontamination**

9.1. *Zoning of surfaces*
Areas that could be contaminated during treatment procedures need to be identified, planning carried out to keep these areas to a minimum, and these decontaminated in between patients. Zoned surfaces are marked as either clean or dirty to minimise the risk of infection.

9.2. *Decontamination of treatment areas*
Equipment and surfaces need to be cleaned and dried in between patients, using simple techniques such as disinfectant wipes or spray, or disposable cloths wetted with the appropriate ratio of clean water and detergent as directed by the product instructions. Where spray bottles are used these are not to be reused or refilled once empty as bacteria can contaminate the bottle, but instead discarded of as appropriate. Where single-use covers are used, these need to be removed, and the surfaces cleaned after each patient

contact. Alcohol spray or wipes are not to be used on stainless steel surfaces or on dental instruments.

9.3. *Contaminated instruments*

Cements and other hard materials need to be removed from instruments before setting, and instruments dismantled where recommended by manufacturer's instructions. Instruments are then required to be immersed in water, foam spray, or gel, within a clearly labelled 'dirty' transport container which is rigid, leak-proof, and has a tight-fitting lid. Cleaning of these instruments is required as soon as possible after use.

Where used, single-patient instruments need to be decontaminated separately from other contaminated instruments, and following sterilisation they need to be stored separately from other instruments in a view pack, affixed with a label detailing the patient's name, date of birth, staff name, cycle number, and expiry date.

On the few occasions when there is insufficient time to complete the full decontamination of instruments, ensure the following procedure is followed:

a. Instruments are pre-cleaned and dried
b. Instruments are placed in containers clearly marked 'contaminated instruments'
c. The full reprocessing cycle of the dental instruments is carried out as soon as possible, as micro-organisms can accumulate during storage

9.4. *Cleaning instruments*

When cleaning instruments, ensure the processes below are followed:

9.4.1. *Manual cleaning*

Check that the appropriate decontamination equipment is available such as gloves, brushes, and a mercury-free thermometer, and that these are in good condition with no signs of defect or soiling.

Set the contaminated instruments down in the 'dirty zone' and prepare the 'cleaning' sink by measuring out the appropriate amount of cool water and instrument cleaning detergent, 980ml of warm water 30-40 degrees with one 20g scoop of powder, stir for 60 seconds until solution turns red. Rinse using distilled water. Ensure the water temperature does not exceed 45°C.

Fully immerse the instruments (where permitted by their manufacturer's instructions) and scrub using the long-handled brush with soft plastic bristles. Once cleaned, wash the brush in hot water to remove any visible soil, store head up and dry. If the brush is heavily soiled, dispose of it and replace.

9.4.2. *Ultrasonic cleaning*

Briefly immerse the instruments (where permitted by their manufacturer's instructions) in cool water and instrument cleaning detergent (not exceeding 45°C) to remove some of the blood and visible soil, taking care not to create an aerosol. The purposely designed container with sealing lid is to be used for this.

Set up and fill the ultrasonic cleaner with instrument cleaning detergent , 40ml Sonozyme to 8 l of water, and dissemble the instruments, including the opening of joints or hinges, where applicable. The manufacturer's instructions need to be referred to before cleaning instruments as some delicate items may not be suitable for ultrasonic cleaning or will require modified baskets. Items unsuitable for ultrasonic cleaning need to be cleaned manually as per above.

Place the instruments in the suspended basket, taking care not to overload it, and fully immerse the basket in the ultrasonic bath's cleaning solution. Instruments are not to be placed on the floor of the ultrasonic cleaner.

Close the lid and set the timer for 6 minutes. Do not open the lid until the cycle is complete. Once complete, drain the basket and rinse the instruments.

Maintenance - Where required as per manufacturer's instructions, ultrasonic cleaners are validated at installation and annually thereafter, or sooner following any major repairs when advised by the engineer. Validation is carried out by competent service engineers in line with the manufacturer's instructions, or where these are not available, HTM 01-05.

It is the operator's responsibility to complete the daily periodic tests including, the removal and cleaning of the strainers and filters, and ensuring the machine is drained at the end of the day.

On a weekly basis, operators also need to ensure that the condition of the lid/door seal is checked, and that a protein residue test is undertaken.
Annual tests are carried out by a competent service engineer, in line with the manufacturer's instructions, or where these are not available, HTM 01-05.

All periodic tests are recorded on the ultrasonic cleaner checklist in the decontamination room.

9.4.3. *Rinsing instruments*

Following cleaning, and in the separate 'rinse' sink / bowl, apply a final rinse using only potable / RO / distilled water to remove any residual soil and detergents, and then dry the instruments using a disposable non-linting cloth.

Cleaning solutions and rinse water need to be replaced after each use, or when they become heavily contaminated e.g. when the water is visibly discoloured, or when debris is present.

9.4.4. *Inspecting instruments*

Before sterilising, all instruments need to be visually inspected under an illuminated magnifier for cleanliness and functionality, to ensure they are in good

condition. Lubricate any relevant items with the dedicated non-oil-based lubricant following the manufacturer's instructions. A separate, clearly labelled canister is required for lubricating instruments before sterilisation ("dirty can"), and those requiring lubrication after sterilisation ("clean can").

9.5. *Sterilisation*

Before using an autoclave at the start of the day, it is the operator's responsibility to clean the rubber door seal with a clean, damp, non-linting cloth, check the chamber and shelves for debris, fill the reservoir with distilled / RO water, and turn the power source on. Operators then need to complete the daily periodic tests including a steam penetration test (TST strips) to ensure that the machine is suitable for use. Operators need to visually observe and log the sterilisation parameters, or where the autoclave has either a printer or digital recorder, these can be used to verify whether each cycle has achieved the parameters below:

Sterilising temperature range		Approx. pressure (bar)	Min. hold time in mins
Minimum	Maximum		
134	137	2.25	3
126	129	1.5	10
121	124	1.15	15

A warm-up cycle is done before using the autoclaves.

On no account are any safety features to be interfered with, circumvented, or overridden. In case of a test failure, the equipment needs to be taken out of service and the Decontamination Lead, Tanya Clark, consulted. If necessary, a maintenance engineer will be contacted, and a 'do not use' sign affixed to the machine until it has been repaired or replaced. Do not use any instruments that have been processed in an unsuccessful cycle until they have been re-sterilised.

Using a vacuum (type B) and non-vacuum (type N) autoclave

After cleaning, place the dry instruments in the autoclave without overloading the trays. Perforated trays, cassettes, or racks to be used that have been validated for the selected sterilisation cycle. Lubricate handpieces before sterilisation using the oil / lubricant spray in line with the manufacturers' instructions.

Maintenance - Autoclaves are validated at installation and annually thereafter, or sooner following any major repairs when advised by the engineer. This is to ensure that the conditions required for sterilisation i.e., temperature, pressure, and time, are appropriate. Validation is carried out by competent service engineers in line with the manufacturer's instructions, or where these are not available, HTM 01-05.

On a weekly basis, operators also need to ensure that an air leakage test (type B autoclave), is undertaken.

Quarterly tests are carried out by a competent person in line with HTM 01-05.

All periodic tests need to be recorded on the autoclave checklist.

Autoclave 2 (Betty) has a digital recorder where the details are automatically saved to the memory card and daily backups taken. If the recorder is defective, the operator needs to ensure that the date, temperature, pressure, and satisfactory outcome of the cycle is manually recorded and signed off. Autoclave 1 (Bryan) has a digital recorder and paper print out, there must always be paper roll in the machine for it to save the information to the memory card. All print outs are to be kept and scanned into the computer at the beginning of the next day, then they can be disposed of.

Autoclaves are also classified as Pressure Vessels and are accompanied by a written scheme of examination (WSE) setting out their safe operating limits. It is the responsibility of all operators to ensure these are followed when using the equipment. They are routinely examined by a competent person daily and serviced yearly with records of maintenance kept by the practice.

9.6. *Instrument management*

All instruments need to be processed and managed appropriately to maintain them in good working order, and to ensure they are suitable for clinical use.

9.6.1. *Instrument wrapping*

Before wrapping instruments, the worktop needs to be cleared of clutter, cleaned with a pre-prepared or single-use disinfectant wipe, and allowed to dry.

For non-vacuum autoclaves, instruments require wrapping after sterilisation once they have been dried.

For vacuum autoclaves, instruments can be wrapped before sterilisation where this is recommended by the manufacturer, using one of the sterile barrier systems as detailed below:

Sterile barrier systems	
Option 1	A flexible peel pouch (sealed view pack). This is typically supplied sealed on three sides with the remaining side open for the insertion of dental instruments

Following sterilisation, and once dry, all wrapped instruments need to clearly detail an expiry date of up to one year in the future.

9.6.2. *Storage of sterilised instruments*

Ensure sterilised instruments are stored responsibly in line with the below:

a. They are stored in a dry environment to protect against excessive heat
b. Unwrapped instruments are not stored on open work surfaces and are protected from contamination
c. Instruments that were wrapped before, or directly after sterilisation, are not stored for more than one year

d. Unwrapped instruments being stored in a clinical area are reprocessed within 24 hours
e. Unwrapped instruments being stored in a non-clinical area (decontamination room) are not stored for more than one week. All handpieces are kept in the decontamination room are processed on a Friday afternoon, pouched and stamped with expiry date.

9.6.3. *Using instruments*

Before using instruments, it is the responsibility of team members to ensure that:

a. If wrapped, packaging is intact indicating that sterilisation has taken place
b. The expiry date has not passed, if it has, instruments require reprocessing
c. Instruments with the earliest use-by dates are used first (first in first out)
d. There is no visible soil
e. If unwrapped and in a covered container, the instruments have remained covered
f. All new instruments including metal matrix bands etc. are decontaminated before use
g. Instruments are decontaminated before being sent for repair or disposal
h. On a monthly basis, all expiry dates are checked, and any found to be out of date, are reprocessed

9.6.4. *Transporting instruments (offsite)*

If using instruments outside of the practice and transporting them to and from other locations such as domiciliary or school visits, the following procedure needs to be followed:

a. Decontaminated instruments are to be kept in clearly labelled rigid containers that are leakproof and easy to clean
b. Containers are never to be left on view or unattended in the vehicle
c. After use, contaminated instruments are to be stored in separate clearly labelled rigid containers that are leak proof, and easy to clean with water/ foam to keep them moist
d. A log is kept showing that dental instruments were transported, including details such as the date, and the vehicle used. If there is no clinician travelling with the instruments, then the time of dispatch and the intended recipient also needs to be recorded
e. The transportation log needs to be positioned prominently within any vehicle used for transportation that clearly displays a contact telephone number
f. A small sharps container is to be available that has a mechanism for temporary closure; where used it needs to be kept out of view and not left unattended in the transport vehicle
g. Any waste produced needs to be segregated accordingly, stored in clearly labelled ‘used medical equipment’ rigid containers that are leakproof and easy to clean, and disposed of on return to the practice

9.7. *Decontamination of equipment*

Manufacturer's instructions need to be followed when cleaning and decontaminating any piece of clinical equipment, and where items are sent for repair, the equipment requires labelling as disinfected or sterilised as appropriate.

X-ray film sleeves need to be handled with gloves, and care taken not to touch the actual film. Heat sterilisable or single use film-holders are to be used. Single use covers are to be used for digital X-ray film, When removing the single-use cover, the equipment requires disinfecting.

Computer keyboards have been fitted with keyboard protectors, which require cleaning regularly and at the end of every session with water and detergent, then dried. Keyboards are not to be touched with gloved hands.

Ensure any equipment defects found during decontamination are reported to the Decontamination Lead, Tanya Clark, and where available recorded in the equipment maintenance record on iService.

9.8. *Disinfection of impressions and appliances*

Following removal from the mouth, impressions, and appliances need to be immediately rinsed under running water until visibly clean, and then immersed in the impression disinfectant bath (Steradif for 1 minute). The impression/appliance then requires further rinsing before being packaged for dispatch to the laboratory, and labelled indicating that they have been disinfected.

If using a spray disinfectant, to avoid inhalation, the object needs to be placed inside a plastic bag, sprayed, with Impressiv, left to dry for 5 minutes and a label applied to the impression bag to inform the laboratory that the impressions/appliances have been disinfected.

Appliances received from the laboratory require disinfecting following the procedure above before they are placed in the patient's mouth. Each surgery has a small sterilisation bath for appliances to be disinfected at the start of each patients appointment. The bath is filled with Steradif solution and the appliance immersed for 1 minute and rinsed thoroughly prior to placing in the patients mouth. The solution is disposed of after each use and the bath is rinsed out with clean potable water and dried.

10. **Cleaning**

Our procedures and governance for cleaning follow the standards as set out in HTM 01-05. Cleaning requirements have been identified and risk assessed, and a practice specific cleaning schedule has been compiled. The national colour coding for household gloves, buckets, and cleaning cloths (based on the NPSA 'Colour coding hospital cleaning materials and equipment') is used to reduce the risk of cross-contamination:

Colour	Areas
RED	Sanitary areas e.g., bathrooms, washrooms, showers, and toilets
BLUE	General areas e.g., waiting rooms, reception, and offices
YELLOW	Clinical areas e.g., treatment rooms, and decontamination rooms

GREEN	Food preparation areas e.g., staff kitchen

Cleaning equipment used for general and non-clinical areas are to be kept separate from those used for clinical and other high-risk areas, and stored where they cannot be accessed by any unauthorised personnel. Mops and buckets are to be kept clean and dry during storage, with mop heads stored up, and buckets stored upside down.

It is the responsibility of all team members to maintain a clean and safe environment, to follow the cleaning schedule, and ensure the correct colour-coded cleaning equipment is used when carrying out cleaning duties.

11. **Housekeeping**

It is the responsibility of all team members to ensure the general tidiness of the practice is maintained for health and safety reasons, and for the comfort of our patients. Boxes, or other obstructions that could pose a slip, trip, or fall hazard, are never to be left in public areas, and toilets need to remain accessible at all times throughout the day.

No eating or drinking to be undertaken in the treatment rooms. Disposable bibs are available to protect the patient's clothes. The sharps container and waste bins are to be kept out of reach of the patients and their companions.

At the end of the day the treatment rooms need to be left tidy, with all sharp instruments stored away. It is the responsibility of the dental nurse to ensure that waste bins are emptied, sharps bins are left where they cannot be disturbed, and that all surfaces have been decontaminated.

The dental nurse needs to also ensure that no contaminated instruments, or potentially infective materials are left in the treatment room; this includes splashes around the spittoon or on the floor, as well as any appliances that may have been removed from the patient's mouth. All filters from the surgery spittoons are transported to the decontamination room in the dirty box to be cleaned and soaked over night in the "dirty sink". The decontamination room dirty sink has been fitted with a SRAB Dirty Sink Amalgam Separator Unit to help us avoid amalgam getting into our waterways.

The staff area needs to be kept clean and tidy. The staff area sink is not for the purposes of cleaning clinical equipment or instruments, and the staff fridge is not to be used for the storage of clinical materials.

12. **Water supply**

12.1. *Practice water*

The practice always makes sure that the hardness of water used during the decontamination cycle is compatible with the detergent chosen.

The water used for decontamination is potable purified water from a water distiller.

The practice takes all reasonable measures to minimise the risk of exposure of staff, patients, and visitors to legionella in accordance with existing guidance. A legionella risk assessment is undertaken, reviewed regularly, and kept up to date. Routine legionella monitoring, and checks are completed in line with the risk assessment and records

maintained.

Any water delivery equipment that is connected to the mains water supply has been installed with a type A air gap to ensure that infective agents are not introduced into the water supply.

12.2. *Dental Unit Water Lines (DUWLs)*

The water used in the dental units is delivered by a bottled water delivery system.

DUWLs require flushing for 2 minute at the beginning of the day,(following manufacturers instructions from Bioclear Daily) or after a prolonged period of non-use such as lunch. In between patients they require flushing for at least 20-30 seconds.

At this practice we use a dental unit treatment disinfectant to improve the quality of the water within the DUWL. The DUWLs are flushed in line with the manufacturer's instructions (Dentisan Bioclear Daily used at a 1% concentration - prepared solutions can be kept in suitable plastic containers for up to 10 days) and the water bottles are left on. They are only removed when refilling the system or disinfecting the DUWLs using Bioclear which is left in-situ for at least 16hrs, then rinsed thoroughly until no green colour or foam is present, the bottle is rinse and refilled with fresh water, flushing process is repeated. Complete rinsing can be confirmed using Bioclear test strips. DUWLs are tested on a quarterly basis as part of the Dentisan Clean Water Club.

DUWL bottles are disinfected on a weekly basis, The practice uses a 2 water bottle system allowing disinfection of one while the other is in use, the bottles are disinfected using 1 sanitising tablet (effervescent chlorine sanitiser) to 1ltr potable/purified water with a contact time of at least 15 minutes, then rinsed thoroughly before storing with lid on until next use (1 week).

13. **Waste management**

All team members are responsible for ensuring that waste is managed in accordance with the procedures set out in the waste management policy, this includes ensuring that waste is:

a. Correctly segregated
b. Stored safely and securely on the premises
c. Packaged appropriately for collection
d. Described accurately and fully on the accompanying documentation when removed
e. Transferred to an authorised waste carrier for transport and disposal

14. **Sharps management and contingency arrangements**

14.1. *Safe management of sharps*

Sharps are only used where they are necessary for the delivery of dental care. This includes using local anaesthetic needles, suture needles, matrix bands, sharp dental instruments, orthodontic wires, probes, sickle scalers, and scalpels.

The risks of using sharps are reviewed annually. We substitute traditional medical sharps with a 'safer sharp' where it is reasonably practical to do so.

The practice carries out a regular sharps risk assessment which has identified that local anaesthetic needles are never to be recapped manually. Our safer sharps syringes have a retractable protective sheath and are never recapped.

It is the responsibility of the clinician using sharps to ensure they are disposed of safely and immediately after use. Sharps containers are available in all areas where medical sharps are used for the purposes of safe disposal and require locking when no more than 2/3rds full (never press down on the container to make more room) and never open the container to examine or retrieve any of the contents. They need to be kept in a secure area away from unauthorised interference prior to collection, on a level surface above waist height, but below shoulder height.

Avoid walking with a sharp, rushing when using them, leaving sharps lying around, passing them directly from hand to hand, and putting them with dressings, tissues, or other items that may obscure them from view.

14.1.1. *Sharps spillage*

In the case of a single discarded sharp, and only where the sharp is fully visible, an appropriately trained team member can retrieve the sharp using forceps, and place it promptly in a sharps container.

In all other cases, an appropriately trained team member needs to stay by the spillage to keep other persons clear and instruct another team member to retrieve the sharps spillage kit, containing heavy-duty gloves, a dustpan, a rigid piece of straight-edged card or plastic, and a spare sharps container.

When clearing the spillage, heavy-duty gloves are required, and the loose sharps gently eased onto the dustpan using the rigid piece of cardboard or plastic, which then needs to be carefully placed in the spare sharps container and the lid applied. Extreme caution is necessary when carrying out this procedure as sharps could penetrate the heavy-duty gloves.

If the sharps container has been over-filled and cannot be closed, items are not to be retrieved from it. Instead, heavy-duty gloves are to be worn and the container placed in a larger unassembled container, which is then carefully assembled and locked.

14.2. *Dealing with spilt, potentially infective materials*

Blood or other potentially infective body fluid spillages need to be managed immediately by following the procedure below:

a. A facemask, disposable apron, eye protection, and thick household gloves, are worn when clearing up spills
b. Absorbent tissues, or paper towels, are placed onto the spill until it is completely absorbed
c. Hypochlorite is made up, either freshly using hypochlorite-generating tablets, or at least weekly in clean containers at 10,000ppm available chlorine, then poured onto the tissues, and left to soak for no less than 5 minutes
d. Alcohol is NOT used for cleaning in this situation
e. Additional tissues are used to absorb the hypochlorite solution
f. Rigid card is then used to collect all tissues, and these are placed in a bag which is

sealed and disposed of appropriately

g. The area is wiped further with the hypochlorite solution
h. Clinical clothing needs to be changed if it becomes soiled
i. If hypochlorite is used on metal surfaces in the process, the surface requires cleaning with water and detergent, and then dried to avoid corrosion

14.3. *Posting specimens*

Tissue biopsy or pathological tests need to be sent to an NHS facility or accredited laboratory using the Royal Mail service Safebox, which is a Special Delivery or First Class service. Secure packaging for specimens can hold up to 50ml and can be ordered direct online by visiting the Royal Mail website, or by calling 03457 640640.

15. **Training**

Practice training relevant to each role is provided at induction, during team meetings, and on the job throughout the year. All GDC registered team members are required to undertake verifiable continuing professional development on infection prevention and control topics every year. The procedures are regularly reviewed, and training records are kept as part of the individual team member's file.

Training includes the principles of infection prevention, including hand hygiene and environmental cleaning, the use of decontamination equipment and materials, the daily inspection and testing of equipment, and the maintenance of records.

16. **Quality improvement**

Infection prevention and control procedures are audited twice a year to monitor performance against this policy and national standards. Where required, an action plan is formulated, and improvements are made.

17. **Related templates**

The following iComply documents should be read in conjunction with this policy:

Respiratory Tract Infection SOP (M 257-RTI)
Waste Management Policy (M 233-WMP)

The following iComply templates have been provided to help members implement the procedures detailed within this policy, and can be used as required:

Staff Immunisation Record (M 257J)
Ultrasonic Cleaner Daily Checklist (M 257O)
Washer Disinfector Checklist (M 257D)
Weekly Autoclave Checklist (M 257E)
Autoclave Cycle Log (M 257F)
Domestic Cleaning for Dental Practice (M 257I)
Legionella Risk Assessment (M 257LA)
Water Management Log (M 257LB)
General Health and Safety Risk Assessment (M 250B)
Support Staff Training Meeting Agenda (G 170-SST)
Team Training Record (M 222E)
Audit of Infection Prevention and Control (G 180-FIC)

The following iComply templates are available as printable downloads for display, and can be used as required:

Cleaning Principles Poster (M 257B-PCP)
Hand Hygiene Principles Poster (M 257B-PHH)
Manual Cleaning Poster (M 257B-PMC)
Safe Handling of Sharps Poster (M 257B-PSS)
Surgical Hand Hygiene Principles Poster (M 257B-PSH)
Ultrasonic Cleaning Poster (M 257B-PUC)
Using a Washer Disinfector Poster (M 257B-PWD)
Hand Hygiene Poster (M 257G)
Surgical Handrub Procedure (M 257GB)
Inoculation Injury Procedure (M 257H)