University Hospitals of Leicester NHS
NHS Trust

Orthodontics and Restorative Dentistry Infection Prevention UHL Policy (Including Maxillofacial & Prosthetics)

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Author / Originator(s):	Lisa Chamberlain, Specialist Dental Nurse
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KEY WORDS

Orthodontics & Restorative Infection Prevention Policy and Guidance (Including Maxillofacial & Prosthetics)

SUMMARY

This document provides specific procedures and guidance for the decontamination of reusable dental instruments

1 INTRODUCTION

1.1 This document sets out the University Hospitals of Leicester (UHL) NHS Trusts Policy and Procedures for the decontamination of reusable dental instruments

1.2 The aim is to prevent and control the spread of infection via reusable dental instruments / medical devices, by the provision of decontamination principles (essential requirements) identified in the Health Technical Memorandum (HTM) 01- 05 (Department of Health (DH) 2013). Surgical instruments are processed following Health Technical Memorandum (HTM) 01- 01 (Department of Health (DH) 2013).

1.3 This document is supported by the Trust Cleaning and Decontamination for Infection Prevention Policy including other Trust polices (please see section 6), which must be used in conjunction with the following procedures

2 POLICY AIMS

This is a policy intended to outline the Trust's approach to the broad and complex issues relating to infection prevention. This overarching policy confirms the Trusts' commitment to the prevention of infections. It is supported by documents including other policies and guidelines to ensure that healthcare provision within UHL complies with good standards of infection prevention practices

3 POLICY SCOPE

3.1 This document applies to all staff employed within University Hospitals of Leicester NHS Trust that are required to decontaminate reusable dental equipment.

3.2 The document also applies to all staff within the Trust responsible for the purchase and maintenance of equipment where decontamination is necessary.

3.3 The document applies to orthodontics, restorative dentistry at Glenfield Hospital and maxillofacial prosthetics at Leicester Royal Infirmary (LRI) that use reusable dental devices.

4 DEFINITIONS

- DUWL Dental unit water lines
- DOU Dental Operating unit
- SOP Standard Operating procedure
- USB Ultrasonic bath
- RO Reverse Osmosis
- PPE Personal Protective equipment
- Potable water Drinking water
- Water Either: potable, reversed osmosis or distilled water
- TST Time, Steam, Temperature

5 ROLES AND RESPONSIBILITIES

Infection prevention is the business of every employee within University Hospitals of Leicester NHS Trust. Specific roles and responsibilities are described below.

5.1 Chief Executive

5.1.1 The Chief Executive is the accountable officer and devolves responsibility for infection prevention to the Trust's Director of Infection Prevention (DIPaC).

5.2 Chief Nurse/Director of Infection Prevention (DIPaC)

5.2.1 The DIPaC is responsible for the Trust's infection prevention strategy, implementation of the annual infection prevention programme and for providing assurance on infection prevention to the Trust board, the commissioners and the public. The DIPaC is the focal point for the integration of infection prevention into the Trust's clinical governance systems and for ensuring the safety of patients from infection is not forgotten. The DIPaC will chair the Trust Infection Prevention Assurance Committee. The DIPaC is directly accountable to the chief executive and to the board and they will be responsible for the Trusts Infection Prevention Team. The DIPaC will also be responsible for producing an annual report on Infection Prevention within the Trust. The Chief Nurse is responsible for the professional performance of nursing and midwifery staff within the Trust ensuring that they know what is expected of them about infection prevention and to ensure that they fulfil their responsibilities as part of their duty of care.

5.3 Medical Director

5.3.1 The Medical Director is responsible for the professional performance of medical staff within the Trust ensuring that they know what is expected of them with regard to infection prevention and to ensure that they fulfil their responsibilities as part of their duty of care.

5.4 Director of Estates and Facilities

5.4.1 The Director of Estates and Facilities is accountable for the quality of the domestic and estate services across the Trust. The post holder is required to work in close co-operation with the DIPaC and Lead Nurse Infection Prevention to ensure a safe clean patient care environment.

5.5 CMG Directors

5.5.1 The CMG Director is accountable for the CMG's infection prevention performance. The CMG Director is expected to set a good example and ensure that others do the same by complying with infection prevention policies.

5.6 CMG Medical Lead for Infection Prevention

5.6.1 The CMG Medical Lead is accountable to the CMG Director for performance in relation to infection prevention within the CMG. The medical lead is expected to set a good example and ensure that others do the same by complying with infection prevention policies. The CMG Medical Lead may devolve the lead for infection prevention to another member of the CMG consultant medical team.

5.7 CMG Infection Prevention Lead Clinician

5.7.1 The CMG infection prevention Lead Clinician is responsible for the development and implementation of the CMG annual IP plan. It is expected that the Lead Clinician will represent the CMG at the Trust Infection Prevention Committee. The CMG Infection Prevention Lead Clinician is also expected to promote infection prevention policies and guidelines and challenge poor infection prevention and medical practice. They have a key role in persuading their clinical colleagues when there is a need to change their behaviour, e.g. hand washing, antimicrobial prescribing and dress code compliance.

5.8 CMG Head of Nursing

5.8.1 The CMG Head of Nursing is responsible for ensuring that nursing and midwifery staff within the CMG is compliant with infection prevention policies and guidelines. The CMG Head of Nursing is expected to participate in infection prevention audits and observations of practice. They are responsible for ensuring that High impact intervention audits are carried out within the CMG. The CMG Head of Nursing is also expected to reinforce the importance of good infection prevention practice and challenge poor practice.

5.9 Matron

5.9.1 Matrons have a role in ensuring that the environment in which care is provided meets expected standards. They are responsible at a local level of leading and driving a culture of cleanliness in clinical areas and for monitoring, recording and reporting compliance with standards. The Matron is responsible for ensuring that audits such as hand hygiene, environmental audits and high impact intervention audits are carried out within their area of responsibility.

5.10 Senior Dental Nurse

5.10.1 The senior dental nurse is accountable for the standards of infection prevention within their clinical area. The senior dental nurse is expected to audit, observe and report compliance with infection prevention policies and to personally demonstrate and promote compliance within their department. The senior dental nurse is expected to promote good infection prevention practice in his/her area of clinical responsibility and identify through appraisal and observation the development needs of team members and to make appropriate arrangements to have these training needs met in co-operation with the Infection Prevention Team and CMG Education Team.

5.11 Patient Safety Managers

5.11.1 The Patient Safety Managers are responsible for co-ordination of root cause analyses of serious untoward incidents relating to infection prevention. This includes facilitating the investigation, action planning and reporting.

5.12 Infection Prevention Link Staff.

5.12.1 Each clinical area will have a staff member nominated by the manager as the liaison person between the Infection Prevention Team and the department.

5.13 Healthcare Professionals

5.13.1 All healthcare professionals on a professional register are personally accountable for their standards of practice which must include compliance with the Trust's infection prevention policies and guideline. In addition, all registered practitioners are expected to challenge non-compliance when observed to protect patients and promote patient safety. Local clinical leaders have a responsibility to maintain an organisational culture of vigilance through their role in supervising other staff.

5.14 All employees

5.14.1 All employees of UHL must be aware of infection prevention policies and are expected to follow them at all times. Any breach of infection prevention policies will put patients at risk and repeated non-compliance will lead to disciplinary action.

5.15 Contracted staff

5.15.1 All contracted staff are expected to comply fully with the Trust's Infection prevention policies.

5.16 Infection Prevention Team

5.16.1 The Infection Prevention Team will provide a specialist role in the provision of a quality infection prevention service for patients and staff. The team will provide infection prevention advice on the management of patients to prevent the spread of infection.

5.16.2 They will also provide training and education and training as detailed in Section 6

5.16.3 The Infection Prevention Team will provide advice on infection prevention during building works and refurbishments.

5.17 Infection Prevention Doctor

5.17.1 The Infection Prevention Doctor will provide microbiological support to the Trust with specific emphasis on Infection Prevention.

5.17.2 The Lead infection prevention doctor will also have the role of Deputy DIPaC.

6 POLICY STATEMENTS

A number of policies and guidelines support this policy. These are listed below

Trust Policy Ref No	Title
B4/2005	Infection Prevention & Control Policy
B32/2003	Hand Hygiene
B30/2010	Uniform and Dress Code Policy
B5/2006	Cleaning & Decontamination for Equipment & Environment
B42/2007	Exposure to blood borne viruses: policy for management of
B9/2004	Personal Protective Equipment at Work policy
B9/2006	Staff Health Guidelines
B4/2006	Blood borne infections - Management of patients
B8/2013	Sharps management guidelines

Procedure/Guidance Title	Procedure
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7 EDUCATION AND TRAINING REQUIREMENTS

7.1 General cleaning and decontamination training/competency is provided via infection prevention e-learning training package.

7.2 Specialist training on items for example ultrasonic baths, bench top sterilizers, Dental operating units (DOU), Cavitron machine, is provided at local level by the orthodontics / restorative and maxillofacial departments.

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

7.4 Infection Prevention is considered mandatory within the Trust. For full details see the Statutory and Mandatory Training policy.

8 PROCESS FOR MONITORING COMPLIANCE

8.1 Compliance with infection prevention policy and guidance will be carried out in accordance with the agreed infection prevention annual audit programme. The annual audit programme will be agreed each year by the Infection prevention committee.

8.2 Where there are specific auditing requirements these will be detailed in the appropriate policy or guidance document.

8.3 Staff are encouraged to report serious adverse events pertaining to infection prevention in accordance with the Trust's reporting procedures. This will include non-adherence with infection prevention procedures.

8.4 Habitual non-adherence to policy may result in disciplinary action being taken. Root cause analysis will be used to investigate serious adverse events to determine system failure or care delivery problems.

8.5 The relevant departments will undertake an assessment against the DH (2013) Health Technical Memorandum 01-05: Decontamination in primary dental practices. 2013 Version.
Using the (2013) Infection Prevention Society HTM 01-15 audit tool 2013 edition.

Key Performance Indicator	Method of Assessment	Frequency	Lead
Cleanliness of Equipment	Environmental audit tool	Monthly – Via Escalation plan if audit fails	Matrons
Compliance with Policy	Equipment Decontamination Audit: • Ultra-sonic baths • Bench-top sterilizes • Cavitron machine • Dental unit water lines	 • Monthly • Daily • Monthly • Monthly	Heads of Nursing

9 EQUALITY IMPACT ASSESSMENT

9.1 The Trust recognises the diversity of the local community it serves. Our aim therefore is to provide a safe environment free from discrimination and treat all individuals fairly with dignity and appropriately according to their needs.

9.2 As part of its development, this policy and its impact on equality have been reviewed and no detriment was identified.

10 LEGAL LIABILITY

10.1 The Trust will generally assume vicarious liability for the acts of its staff, including those on honorary contract. However, it is incumbent on staff to ensure that they:

- Have undergone any suitable training identified as necessary under the terms of this policy or otherwise.
- Have been fully authorised by their line manager and their CMG to undertake the activity.
- Fully comply with the terms of any relevant Trust policies and/or procedures at all times.
- Only depart from any relevant Trust guidelines providing always that such departure is confined to the specific needs of individual circumstances. In healthcare delivery, such departure shall only be undertaken where, in the judgement of the responsible clinician it is fully appropriate and justifiable - such decision to be fully recorded in the patient's notes.

10.2 It is recommended that staff have Professional Indemnity Insurance cover in place for their own protection in respect of those circumstances where the Trust does not

automatically assume vicarious liability and where Trust support is not generally available. Such circumstances will include Samaritan acts and criminal investigations against the staff member concerned.

10.3 Suitable Professional Indemnity Insurance Cover is generally available from the various Professional Institutions and Bodies. For further advice contact: Head of Legal Services on 0116 258 8960.

11 SUPPORTING REFERENCES, EVIDENCE BASE AND RELATED POLICIES

Cleaning and Decontamination for Infection Prevention Policy: Trust Reference B5/2006.

DH (2013) Health Technical Memorandum 01-05: Decontamination in primary care dental practices. 2013 Version.

IPS (2013) Infection Prevention Society HTM 01-05 audit tool 2013 edition.

Department of Health (2010) The Health and Social Care Act 2008 – Code of Practice on the prevention and control of infections and related guidance.

Health Technical Memorandum (HTM) 01-01: management and decontamination of surgical instruments (medical devices) used in acute care.

General Dental Council Standards for the dental team

12 PROCESS FOR VERSION CONTROL, DOCUMENT ARCHIVING AND REVIEW

DEVELOPMENT AND APPROVAL RECORD FOR THIS DOCUMENT			
Author / Lead Officer:	Lisa Chamberlain Author (2017) Debbie Bellchamber (2020)	**Job Title:** Specialist Dental Nurse. Snr Dental Nurse	
Reviewed by:	Debbie Bellchamber- SNR Dental Nurse Stephanie Willett- Specialist Dental Nurse		
Approved by:		**Date Approved:**	

REVIEW RECORD			
Date	**Issue Number**	**Reviewed By**	**Description of Changes (If Any)**
March 2023		Debbie Bellchamber SNR Dental Nurse Stephanie Willett Specialist Dental Nurse	Page 12, 23 and 32 updated.

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Date	**Name**	**Dept.**	**Received**

POLICY MONITORING TABLE

The top row of the table provides information and descriptors and is to be removed in the final version of the document

What key element(s) need(s) monitoring as per local approved policy or guidance?	Who will lead on this aspect of monitoring? Name the lead and what is the role of other professional groups	What tool will be used to monitor/check/ observe/asses/ inspect Authenticate that everything is working according to this key element from the approved policy?	How often is the need to monitor each element? How often is the need to complete a report? How often is the need to share the report?	Who or what committee will the completed report go to. How will each report be interrogated to identify the required actions and how thoroughly should this be documented in e.g. meeting minutes.	Which committee, department or lead will undertake subsequent recommendations and action planning for any or all deficiencies and recommendations within reasonable timeframes?	How will system or practice changes be implemented the lessons learned and how will these be shared.
Element to be monitored	**Lead**	**Tool**	**Frequency**	**Reporting arrangements**	**Lead(s) for acting on recommendations**	**Change in practice and lessons to be shared**
Enviromental Audit	Matron	Inspect	Monthly	Musculoskeletal & Specialist Surgery	Matron	Feedback via email
IPS HTM 01-05 Audit Tool	Stephanie Willett	Check and inspect	Annually	Musculoskeletal & Specialist Surgery Meeting Minutes	Matron	Feedback via email to department staff

Procedure: Daily Surgery Room Set **up** at **Glenfield Hospital**	University Hospitals of Leicester NHS NHS Trust **Procedure: 1a**

1.	**Start of Day: Follow steps below that are relevant to the area**
1.1.	Wearing uniform / scrubs
1.2	Take out equipment required to set up (i.e. water and solutions)
1.3	Carry out DUWL flushing procedure following manufacturers guidance for the dental unit fitted (Procedure 11)
1.4	Wash hands and put on PPE (gloves, mask, apron and protective eyewear)
1.5	Mix up a solution of Chlorclean
1.6	Using Clinell wipes clean the dental chair, DOU and light; allow to dry
1.7	Using Chlorclean clean all surfaces, cupboards, handles
1.8	Remove PPE and wash/ sanitise hands
1.9	Place barrier shields onto equipment required for procedure
2.	**Between Patients: Follow steps below that are relevant to the area**
2.1	Wearing PPE
2.2	Remove used instruments and barrier shields to work surface dirty zone. Place instruments that can be machine processed into the blue transportation box or Steris box as appropriate.
2.3	Remove PPE and wash/sanitise hands
2.4	Put on PPE
2.5	Using Clinell wipes clean the dental chair, DOU and light.
2.6	Using Chlorclean clean all surfaces used during the procedure including door handles as required
2.7	Remove PPE and wash / sanitise hands
2.8	Select instruments, materials and consumables required for next procedure
2.9	Place barrier shields onto equipment required for procedure
2.10	At the end of the AM session, carry out flushing procedure following manufacturers guidance for the dental unit fitted (Procedure 11)
3.	**End of Day: Follow steps below that are relevant to the area**
3.1	Complete steps listed above in section 2 from: 2.1 to 2.2
3.2	Remove 3 in1 syringe and suction connectors and follow manufactures decontamination guidance for individual dental unit
3.3	Remove PPE and wash/sanitise hands
3.4	Put on PPE
3.5	Carry out suction unit cleaning as per the manufactures instructions for the unit
3.6	Using Clinell wipes clean the dental chair, DOU, light and computer keyboard
3.7	Use Chlorclean clean all surfaces e.g. cupboards, door handles, chairs, trolleys and desk
3.8	On a Friday carry out DUWL super clean flushing procedure following manufacturers guidance for the dental unit fitted (Procedure 11)
3.9	Place green **"I am Clean"** stickers onto the trolley, drill unit and mobile suction unit. Then take to storage area.
3.10	Remove PPE and wash/sanitise hands
3.11	Complete surgery log book & turn off master switch to surgery and chair

1.	**Surgery Daily Set Up: Maxillofacial Department**
1.1	Wearing uniform / scrubs
1.2	Wash hands, put on PPE (Gloves, mask, apron and protective eyewear)
1.3	Mix up a solution of Chlorclean (following manufactures' instructions)
1.4	Using Chlorclean/Clinell wipes clean all surfaces, handles, trolleys, dental chair, DOU and light
1.5	Remove PPE and wash/sanitise hands
1.6	Place barrier shields onto equipment required for procedure
1.7	Collect equipment required (e.g. drill, suction and surgical set required for procedure)
2.	**Between Patients:**
2.1	Wearing PPE
2.2	Remove used instruments to work surface in dirty zone. Dispose of barrier shields and used consumables into appropriate waste stream. Remove used instruments and place in transportation trolley.
2.3	Dispose of sharps as per policy B8/2013
2.4	Remove PPE and wash/sanitise hands
2.5	Put on PPE
2.6	Using Clinell wipes clean the dental chair and light
2.7	Wipe down surfaces and door handles with Chlorclean
2.8	Remove PPE
2.9	Wash/sanitise hands
2.9	Select instruments, materials and consumables required for next procedure
2.10	Place barrier shields onto equipment required for procedure
3.	**End of Day:**
3.1	Wearing PPE
3.2	Remove used instruments to work surface in dirty zone. Dispose of barrier shields and used consumables into appropriate waste stream. Remove used instruments and place in transportation trolley.
3.3	Remove PPE and wash/sanitise hands
3.4	Put on PPE
3.5	Using Chlorclean clean all surfaces e.g. light, cupboards, handles.
3.6	Using Clinell wipes clean e.g. suction unit, chair, drill unit and computer keyboard
3.7	Remove PPE and wash/sanitise hands
3.8	Place green **"I am Clean"** stickers onto the trolley, drill unit and mobile suction unit. Then take to storage area.
3.8	Complete surgery log book
3.9	Turn off master switch to surgery and chair

Note: Any surfaces soiled with blood must be cleaned with 1% sodium hypochlorite (small spillage) or Haz Tabs (large spillage).

Procedure: Surgery 6 – Daily set up & shut down at LRI Maxillofacial Department	University Hospitals of Leicester NHS NHS Trust **Procedure: 1c**

1.	Start of Day: Maxillofacial Surgery 6
1.1	Wearing uniform / scrubs and PPE
1.2	Switch on mains electric for chair and light
1.3	Before operating the chair attach the water bottle and fill with 1400ml water and 2 ICX tablets.
1.4	Under the bracket table, push silver switch towards the blue dot, the chair is now on
1.5	Under the bracket table a 2nd switch with a red dot, this is the water flush switch Flush DUWL for two minutes. (You **don't** need to attach handpieces or an ultrasonic scaler tip)
1.6	Attach the 3-in-1 hand piece, hold over sink and push the water button on the top of the 3-in-1 until water comes through for 2 minutes
1.7	Flush suction with 2 litres of cold water
1.8	The DOU is now ready to use
1.9	Wipe all surfaces, patient chair, light and DOU with Chlorclean/Clinell wipes
1.10	Put on barrier shields
1.11	Remove PPE

2.	**Between Patients:**
2.1	Wearing PPE
2.2	Remove used instruments and barrier shields to work surface dirty zone. Remove used instruments and place in transportation trolley.
2.3	Remove PPE and wash/sanitise hands
2.4	Put on PPE
2.5	Flush DUWL for 20–30 seconds
2.6	Flush suction tube with cold water. If bleeding has occurred during procedure, carry out suction cleaning as per the manufactures instructions for the unit
2.7	Using Clinell wipes clean the dental chair and light
2.8	Wipe down surfaces and door handles with Chlorclean
2.9	Remove PPE
2.10	Wash/sanitise hands
2.11	Select instruments, materials and consumables required for next procedure including barrier shields

3.	**End of Day:**
3.1	Wearing PPE
3.2	Remove used barrier shields and send instruments for reprocessing.
3.3	Flush DUWL until lines are dry
3.4	Remove PPE and wash/sanitise hands
3.5	Put on PPE
3.6	Using Chlorclean clean all surfaces e.g. cupboards, handles.
3.7	Using Clinell wipes clean e.g. suction unit, chair, DOU and computer Keyboard.
3.8	Carry out suction cleaning as per the manufactures instructions for the unit
3.9	Remove water bottle and store inverted
3.10	Remove PPE and wash/sanitise hands
3.11	Complete surgery log book
3.12	Turn off master switch to surgery and chair

1.	**Start of day**
1.1	Wash hands and put on PPE (Gloves, mask, apron)
1.2	Fill Cavitron reservoir with sterile water
1.3	Turn the Cavitron on. Check to see indicator light is on
1.4	Set to minimum power level
1.5	Hold the insert handle in an upright position over the sink and pressing the foot peddle flush water for 2 minutes. Remove handle and place into the blue transportation box
1.6	Wipe unit with a Clinell wipe and attach new handle and tip
1.7	Put on barrier shields as required
1.8	Remove PPE and sanitise hands
1.9	Unit is ready for use
2.	**Between patients**
2.1	Whilst wearing PPE
2.2	Remove used insert to work surface dirty zone
2.3	Remove barrier shields and dispose in correct waste stream
2.4	Remove used PPE
2.5	Wash/sanitise hands
2.6	Put on clean PPE
2.7	Clean Cavitron machine and lead using Clinell wipes
2.8	Flush water line for 30 seconds and top up with water when necessary
2.9	Remove PPE
2.10	Wash/sanitise hands

3.	**End of day**
3.1	Whilst wearing PPE
3.2	Remove barrier shields and dispose in correct waste stream
3.3	Remove handle and insert to work surface dirty zone and place in blue transportation box.
3.4	Remove PPE
3.5	Wash/sanitise hands
3.6	Put on clean PPE
3.7	Wipe Cavitron unit with Clinell wipes
3.8	Empty water reservoir
3.9	Purge water from the water line. Hold handle over sink and press foot control for 30 seconds to air purge the water line

4.	**Weekly**
4.1	Wash/sanitise hands
4.2	Whilst wearing PPE (Visor mask, non-sterile gloves and apron)
4.3	Fill reservoir bottle with Milton (Sodium Hypochlorite 2%)
4.4	Turn on unit and set to minimum power level
4.5	Hold handle upright over sink (without insert in) and operate foot pedal for 30 seconds.
4.6	Turn of unit and leave Milton to work in the unit for 15minutes.
4.7	Place sign on unit to identify disinfection process is taking place.
4.8	Empty remaining Milton from reservoir and fill with sterile water
4.9	Turn unit on and set power level to minimum
4.10	Whilst holding handle over the sink, flush fresh water through the unit for a minimum of 10 seconds and a maximum of 3 minutes
4.11	Remove PPE
4.12	Wash/sanitise hands

1.	Transport containers should be such as to protect both the product during transit and the handler from inadvertent contamination, and therefore should be: a. Leak-proof b. Easy to clean c. Rigid d. Capable of being closed securely

2.	**Dirty instrument sets**
2.1	Wearing PPE (gloves) place used instrument tray into transportation bag with instrument list and label.
2.2	Remove PPE and sanitise hands
2.3	Place contaminated Instrument tray into transportation box. (If instruments are going to offsite reprocessing. Instrument tray should be bagged)
2.4	Place kit tracer sticker into record book Record Date and clinic code, where it was used
2.5	Ensure lid is secure
2.6	End of day take used kits to Steris hub

3.	**Clean Instrument sets**
3.1	Collect from Steris hub
3.2	Place into clean transportation box
3.3	Secure Lid
3.4	Record returned kits in Steris record book
3.5	Put returned kits into clean instrument store room, ensuring date rotation of kits

4.	**After use**
4.1	Sanitise hands
4.2	Put on PPE (apron & gloves)
4.3	Using Chlorclean clean transportation boxes
4.4	Remove PPE and wash / sanitise hands

1	**Dirty transportation procedure**
1.1	Whilst wearing PPE
1.2	Place used instruments and instrument list into Steris bag and tie bag. Place Steris sticker onto bag
1.3	Remove PPE and Wash hands
1.4	Place contaminated instruments into dirty transportation box or onto the work surface in the dirty zone
1.5	Take to dirty instrument store
1.6	Wash/Sanitise hands

2.	**Clean transportation procedure**
2.1	Wash/Sanitise hands
2.2	Store clean instrument in clean storage area ensuring rotation of dates are followed (i.e. last in first out)

1.	Daily
1.1	Assemble ultrasonic bath turn on power supply
1.2	Sanitise hands
1.3	Put on PPE
1.4	Fill bath with suitable cleaning solution following manufactures guidance.
1.5	Close lid start 15 minute degas cycle
1.6	Bath is now ready for use (change solution if visibly contaminated or a colour change has occurred. Repeat degas cycle before use)

2.	End of Day
2.1	Put on PPE
2.2	Empty cleaning solution from ultrasonic bath by tilting over sink (equipment cleaning sink) making sure the solution empties over the indicator arrow
2.3	Clean the instrument basket and ultrasonic bath with a neutral detergent to remove any visible deposits; following clean outside surfaces with Chlorclean.

Quarterly Efficacy Testing

3.	Foil Testing
3.1	The solution MUST firstly be degassed - using cold water with fresh solution and running the unit for 15 minutes prior to performing the performance test
3.2	Turn the unit off (mains switch)
3.3	Using 3 rods, suspend three pieces of household grade aluminium foil 90 x 90mm in the solution, one on either end of the tank and one in the centre (3 foils in total)
3.4	The foil should just touch the base of the basket as instruments being cleaned would touch the basket base in day to day usage
3.5	After a fifteen-minute test cycle, shut the unit off and remove the foil from the tank
3.6	You should observe an even pattern of dimpling, wrinkling or holes in the aluminium foil below the water/solution mixture line You should observe an even pattern of dimpling, wrinkling or holes in the aluminium foil below the water/solution mixture line
3.7	If the above outcome is observed the USB has passed the test
3.8	Perform this **test every 3 months** with the basket in the bath for 15 minutes (ColteneWhaledent)

1.	**Instrument cleaning procedure using an Ultrasonic Bath**
1.1	**Wearing PPE (Heavy duty gloves, apron and visor)**
1.2	Ensure that joints or hinges are opened fully and instruments that need taking apart are fully disassembled before they are immersed in the solution
1.3	Place instruments in the basket and fully immerse in the cleaning solution, ensuring that all surfaces are in contact with the solution.
1.4	**Do not** overload the basket or overlap instruments, because this results in poor cleaning and can cause wear to the instruments
1.5	**Do not** place instruments on the floor of the ultrasonic cleaner, because this results in poor cleaning and excessive instrument movement, which can damage the instruments
1.6	Close the lid, select the 5-minute cycle and do not open until the cycle is complete
1.7	Remove PPE and wash/sanitise hands
1.8	Pre-fill a disposable rinsing bowl with water or rinsing sink
1.9	After the cycle, has completed. Whilst wearing PPE open lid, lift basket and allow solution to drain
1.10	Tip instruments into the pre-filled rinsing bowl
1.11	Rinse instrument basket with water to remove residual soiling from the basket, before placing basket back into the bath
1.12	After rinsing inspect instruments using an illuminated magnifier, for cleanliness, and where possible check for any wear or damage before sterilisation.
1.13	If still visibly contaminated use immersion method (Procedure 6)

NB: Instruments should be sterilised as soon as possible after cleaning to avoid air-drying (which can result in corrosion and/or microbial growth).

1.	**Immersion method**
1.1	Wash hands
1.2	Put on PPE (PPE Gloves, Apron, Visor/visor mask & heavy duty gloves)
1.3	Dismantle and open the instruments, as applicable, ready for immersion
1.4	Fill the disposable bowl with water and cleaning detergent (Hospec). Note: ensure a temperature of 45^{oC}or lower (use a thermometer) is maintained (manufacturer recommendation)
1.5	Fully immerse instruments in the cleaning solution during cleaning to prevent aerosols. Agitate/scrub the instruments using long-handled brushes with soft plastic bristles. Until visible contamination has been removed.
1.6	Place instruments into second disposable bowl and rinse with water
1.7	Visually inspect under an illuminated magnifier ensuring they are clean
1.8	Put instruments into ultrasonic bath, close lid and start 5 min cycle
1.9	Drain water from bowl and dispose into clinical waste
1.10	Wash heavy duty gloves using a neutral detergent and towel dry. (Replace gloves if damaged)
1.11	Remove PPE and wash/sanitise hands

- **Guidance on use of Bench Top Sterilisers (Type N)**

1.	**Start of Day**
1.1	Visually check the bench top steriliser is in good working order. Ensure the printer has enough paper for the clinical session
1.2	Wash / sanitise hands
1.3	Ensure drainage tap is closed
1.4	Fill water reservoir with fresh distilled water up to max level indicator
1.5	Place an instrument free perforated tray into the chamber with a TST strip on
1.6	Close steriliser door
1.7	Start test cycle. When test cycle has completed check TST strip. Sanitise hands. Open door and remove tray using tray handle. Check TST has changed colour as advised on the strip.
2	**End of Day**
2.1	Allow to cool
2.2	Sanitise hands. Put on PPE (Apron and gloves)
2.3	Drain water reservoir
2.4	Clean door seal with neutral detergent using a non linting cloth
3 Weekly	
3.1	At the end of each week the data from the USB sticks needs to be checked, downloaded and saved accordingly.

After sterilisation instruments, may be wrapped immediately in a view pack and stored or covered if for use that day.

1.	**Wrapped Instruments Procedure**
1.1	Instruments should never be packed before sterilisation as per procedure 7a
1.2	Before handling instruments ensure hands have been washed/sanitised and correct PPE is worn. (**DO NOT** handle instruments unless wearing gloves or using instrument forceps)
1.3	Instruments must be completely dry before packaging and should be dried if necessary using a non-linting cloth
1.4	Instruments are to be packed immediately after removal from the steriliser
1.5	Pouched Instruments can be stored for 1 year providing the pouch is not compromised, dated with an expiry date and signed

2.	**Unwrapped Instruments Procedure**
2.1	Unwrapped instruments that are required to be used in the same day as they are sterilised, should be stored covered to protect them from contamination
2.2	Instruments should not be stored uncovered on work surfaces
2.3	If an instrument does need to be retrieved from a cupboard or drawer during treatment, remove PPE, clean hands and put on new gloves before handling unwrapped sterilised instruments
2.4	Unwrapped instruments in the clinical area can be stored up to 1 day. Any instruments unused at the end of the day must be fully re-processed i.e. Cleaned in USB and sterilised

3.	**Storage Procedure**
3.1	Storage facilities must ensure that the instrument packs are protected from contamination and protected from moisture.
3.2	Damp packaging will render the pack permeable to microorganisms.
3.3	Storage facilities should provide ease of finding the correct instrument with minimal handling and have an effective stock rotation, i.e. "First In - last Out"
3.4	Check the expiry dates of instruments monthly, reprocess expired instruments

Storage Times	Wrapped / Pouched Instruments	Unwrapped Instruments
Clinical area	1 year	1 day
Non-clinical area	1 year	7 days

1.	**Instrument fit for purpose: checks**
1.1	All instruments that have been through any cleaning procedure should be inspected to ensure they are: • Clean • Functional – working order • Good condition Instruments that are blunt, bent or damaged or show any signs of pitting or corrosion should be discarded. An illuminated magnifier is recommended because it makes it easier to see residual contamination, debris or damage.
1.2	Instruments should be inspected for any visible soiling such as blood or dental materials. It is especially important to check joints, hinges or the serrated surfaces of jaws, which are difficult to clean. If there is any residual contamination, the instrument should be rejected and should undergo another cycle of the cleaning process.
1.3	Ensure there is free movement of all parts and that joints do not stick e.g. • Edges of clamping instruments meet with no overlap and that teeth mesh together • Scissor tips meet and move freely across each other with no overlap or rough edges • All screws on jointed instruments are tight and have not become loose during use
1.4	Occasional use of a lubricant may be required where hinged instruments are found to be stiff. A non-oil-based lubricant should be used to avoid it interfering (that is, preventing the steam coming into contact with the instrument surface) with the sterilisation process.
1.5	If found to be faulty or damaged during inspection and function-testing, or if users identify that they are faulty, they **must** be taken out of use and either repaired or replaced. Instruments for repair should be decontaminated, labelled to identify they have been through the decontamination process, and then returned to either the manufacturer or a reputable repair company.

Procedure: Daily Decontamination Room Set Up at Glenfield Hospital.

Procedure 8.

1.	**Start of Day: Follow steps below that are relevant to the area**
1.1.	Wearing uniform / scrubs
1.2	Take out equipment required to set up (i.e. water and solutions)
1.3	Wash hands and put on PPE (gloves, mask, apron and protective eyewear)
1.4	Mix up a solution of Chlorclean
1.5	Using Chlorclean clean all surfaces, cupboards, handles
1.6	Remove PPE and wash/ sanitise hands
2.	Equipment Set Up
2.1	Set up and test USB as per Procedure 4.
2.2	Set up and test Bench Top Steriliser as per Procedure 7a
2.3	Turn on Extraction Unit
3.	**End of Day: Follow steps below that are relevant to the area**
3.1	Complete steps listed above in Procedure 4 and 7a to close down USB and Bench Top Steriliser.
3.2	Complete steps 1.1, 1.3, and 1.5 as above.
3.3	Remove PPE and wash/sanitise hands
3.4	Turn off Extraction Unit.
3.5	Complete surgery log book & turn off master switch to surgery and chair

Guidance: Cleaning and Decontamination of dental instruments in the Decontamination Room	University Hospitals of Leicester NHS NHS Trust **Procedure: 8**

1.	On receipt of transportation box
1.1	Wearing PPE worn during procedure transfer dirty instruments to work surface: dirty zone
1.2	Place instruments that are able to be machine processed into the ultrasonic bath close lid and select 5 minutes cleaning cycle
1.3	Remove PPE and wash/sanitise hands

2.	When ultrasonic cycle has finished
2.1	Put on PPE (apron, fluid shield & heavy duty gloves)
2.2	Place disposable rinsing bowl into sink and fill with water
2.3	Lift instrument basket. Allow solution to drain. Tip instruments into rinsing bowl
2.4	Place instrument basket back into ultrasonic bath and close lid
2.5	Inspect instruments with magnifying glass. Place instruments onto clean perforated Bench Top steriliser tray, pat dry with non-linting cloth. Visibly soiled ***/*** contaminated instruments require a 2ndUSB clean, after 2 USB cleans if still contaminated; a manual clean (Procedure 6) is required.
2.6	Drain rinse water from bowl and dispose of bowl into clinical waste
2.7	Wash heavy duty gloves with neutral detergent and towel dry
2.8	Remove PPE and wash/sanitise hands
2.9	Open Bench Top steriliser door
2.10	Put on PPE (gloves)
2.11	Place instrument tray in Bench top steriliser. Remove gloves and sanitise hands. Close steriliser door and select the 134^{oC} cycle

3.	When Bench Top steriliser cycle has finished
3.1	With sanitised hands, open door
3.2	Put on PPE (apron & gloves)
3.3	Using tray handle remove instruments to clean area on work surface
3.4	See Procedure 7 for full instructions. Immediately after removal from the steriliser, instruments should be dried and wrapped. (Once cool enough to handle using disposable non-linting cloths)
3.5	Seal the view packet, date and sign
3.6	Remove PPE and sanitise hands
3.7	Place wrapped instruments in store

Decontamination of dental impressions, models and laboratory devices is a multi-step process to be conducted in accordance with the manufacturer's instructions.

1.	**Start of Day**
1.1	Put on PPE (apron, gloves and visor)
1.2	Fill impression bath with Cavex-30ml solution to 1 litre of water.
1.3	In addition make up another 1litre solution of Cavex to be used to decontaminate prostheses received back from the Dental Lab

2.	**Disinfecting Dental Impressions and contaminated laboratory items**
2.1	Wearing PPE (apron, gloves and visor)
2.2	After removal from the mouth, the impression should be rinsed under clean running water, until the impression is visibly clean
2.3	Immerse fully in solution for 3 minutes
2.4	After disinfection, the impression/device should again be thoroughly rinsed under clean running water
2.5	This process should occur after any device is placed in a patient's mouth
2.6	Change the solution if visibly contaminated

3.	**Disinfecting laboratory work prior to patient use**
3.1	All medical devices require decontamination prior to use
3.2	Put on PPE (apron, gloves and visor)
3.3	Fully immerse medical device in solution for 3 minutes
3.4	On removal rinse device, thoroughly with water

4.	**End of Day**
4.1	Wearing PPE (apron, gloves and visor)
4.2	Empty Cavex down equipment sink
4.3	Rinse bath thoroughly and inside and out
4.4	Clean bath using a neutral detergent and dry

All radiograph holders require decontamination after patient use or when they have contact with saliva. Radiograph Holders require reprocessing the same as any reusable dental instruments. All personnel involved in the reprocessing of radiography holders are required to follow the procedures outlined below.

1.	**Contaminated Holders**
1.1	Wearing PPE, Radiographer to place radiograph holders in transport box /container which is labelled i.e. used / dirty instruments
1.2	Remove PPE and wash / sanitise hands
1.3	Put lid on the transport box
1.4	Transport to decontamination room for processing
2	Decontamination of Holders
2.1	Once received into Decontamination Room put on PPE
2.2	Remove lid from transport container
2.3	Place instruments into the ultrasonic bath close lid select 5 minutes
2.4	Remove PPE and wash/sanitise hands
2.5	Put on clean PPE and clean used transport container with Chlorclean **(Contact time 3min)**
2.6	Remove PPE and wash/sanitise hands

2.	**Completion of Ultrasonic Bath cycle**
2.1	Put on PPE (apron, fluid shield & heavy duty gloves)
2.2	Place disposable rinsing bowl into equipment sink
2.3	Lift instrument basket. Allow solution to drain. Tip holders into rinsing bowl
2.4	Place instrument basket back into ultrasonic bath close lid
2.5	Inspect holders with magnifying glass. If clean place radiography holders onto clean perforated Bench Top steriliser tray and pat dry with a non linting cloth. If contamination is present, repeat 2nd USB clean; if remains contaminated, a manual clean (Procedure 6) is required followed by a further USB clean.
2.6	Drain water from rinsing bowl and dispose bowl into clinical waste
2.7	Wash heavy duty gloves with neutral detergent and towel dry
2.8	Remove PPE and wash/sanitise hands
2.9	Open Bench Top steriliser door
2.10	Put on PPE (gloves)
2.11	Place instrument tray in Bench Top steriliser. Remove gloves and sanitise hands. Close steriliser door and select the 134^{o}Ccycle

3.	**Completion of Bench Top Steriliser cycle**
3.1	With sanitised hands, open Bench Top Steriliser door
3.2	Put on PPE (apron & gloves)
3.3	Using tray handle remove instruments to clean area on work surface
3.4	See Procedure 7 for full instructions Immediately after removal from the steriliser, Radiography holders should be dry and wrapped; dried using disposable non-linting cloths
3.5	Remove PPE and sanitise hands
3.6	Place into clean transportation box and return to radiography room
3.7	Place radiography holders' in store room, ensuring rotation of holders is followed

1.	**Adec: Daily Management**
1.1	Start of day Fill water bottle with 700ml water and add 1 ICX tablet
1.2	Start of day Purge water lines, cup filler and spittoon bowl for 2 minutes (refill bottle as required)
1.3	Between patient's flush water lines for 20-30 seconds
1.4	End of day purge water from all water lines
1.5	End of day remove water bottle and store inverted
2.	**KaVo: Daily Management**
2.1	Switch on Chair Power including Suction Motor (this MUST be done)
2.2	Press LP/AP button
2.3	Place 'potty' onto spittoon and attach all lines into the appropriate holes.
2.4	Press the bowl rinse key
2.5	The system will now flush each waterline including the cup fill tap and bowl rinse tap. This takes approx. 10 minutes, when completed 2 LED lights flash
2.6	Repeat above steps above at end of AM session
3.	**Belmont: Daily Management**
3.1	Start of day Fill water bottle with 1400ml water and add 2 ICX tablet
3.2	Start of day Purge water lines, cup filler and spittoon bowl for 2 minutes
3.3	Between patients' flush water lines for 20-30 seconds
3.4	End of day purge water from all water lines
3.5	End of day remove water bottle and store inverted
4.	**Cavitron: Daily Management**
4.1	Fill Cavitron reservoir with water
4.2	Turn the Cavitron on. Check to see indicator light is on
4.3	Set to minimum power level
4.4	Hold the insert handle in an upright position over the sink flush water for 2 minutes
4.5	Flush for 20-30 seconds between patients
4.6	End of day purge water from all water lines
5.	**All DWL - Weekly Management**
5.1	Follow manufactures instructions for the units for weekly water line managements

Flow Chart: Daily room set up procedure

University Hospitals of Leicester NHS
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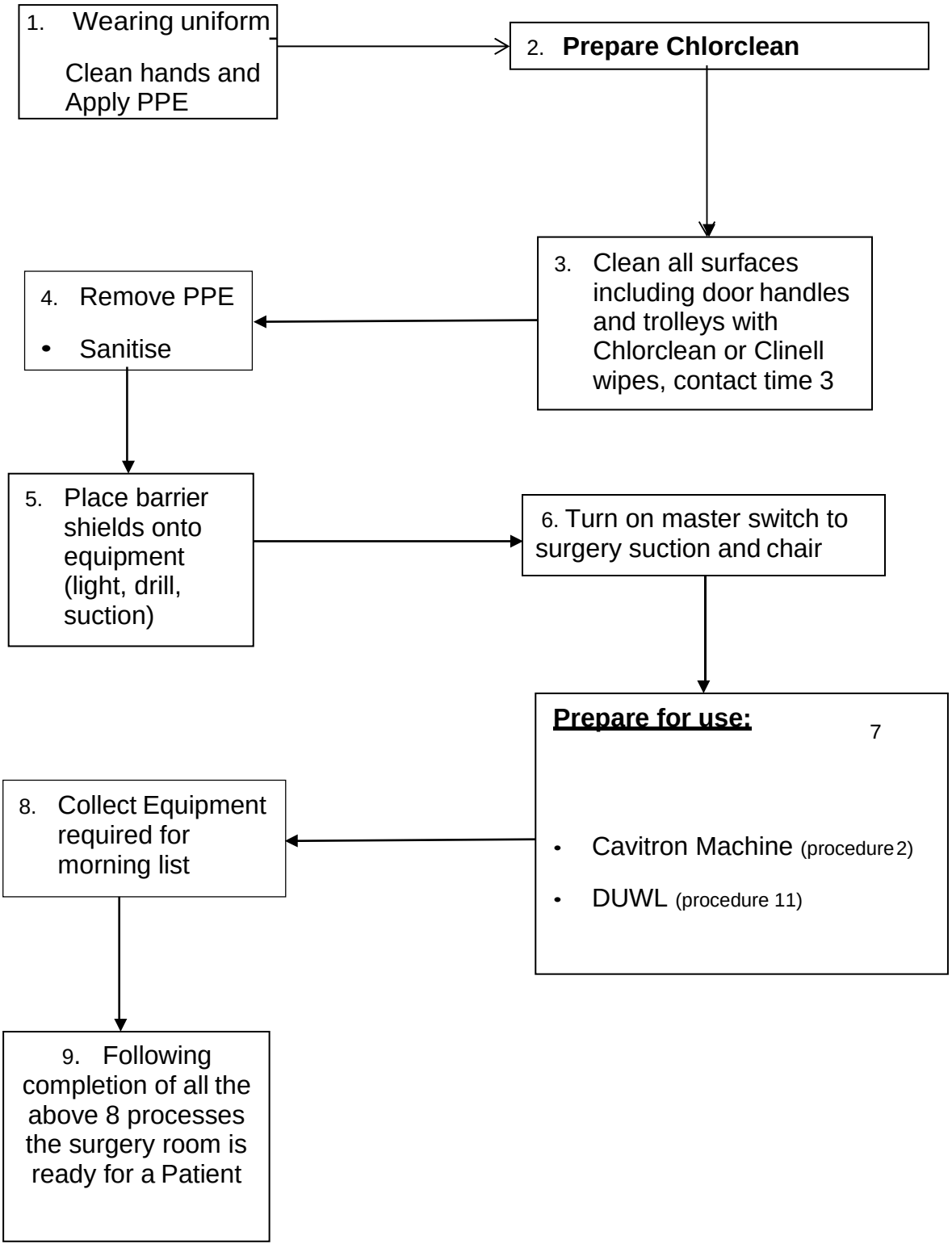
Appendix 1



FLOW CHART : DECONTAMINATION OF:

REUSABLE DENTAL INSTRUMENTS

University Hospitals of Leicester NHS Trust

Appendix 2