8.1.3 STANDARD OPERATING PROCEDURE FOR INFECTION CONTROL

Rajarajeswari dental college follows a standard infection control protocol. Every department has Sterilisation unit and all of them follow one centralised standard protocol to ensure complete infection control.

Purpose- To follow standard sterilization procedure for Instruments and Equipments

Policy-

1. To implement the proper sterilization procedure.

2. To eliminate the risk of transmission of blood borne pathogens from patient to patient and patient to health care providers.

Procedure-

1. CLINIC area has been divided into critical [sterilization], semi critical [clinical working area] and non-critical area [personnel sitting area]

2. In the clinical working area, a separate sterilization area is maintained with an autoclave and chemical sterilization.

3. Instruments which need to be sterilized after use are transported to the sterilization area in the labelled pouch / container.

4. The decontamination process is completed immediately after the instruments are brought to the sterilization area to reduce the risk of microorganisms becoming encapsulated on instrument surfaces.

5. Puncture resistant nitrile utility gloves and personal protective equipment (including a laboratory coat, mask and safety glasses) will be worn when handling contaminated instruments.

6. Procedure to sterilize or disinfect particular instrument as described in infection control manual

7. Sterilized instruments are kept in the storage area for further use.

8. Periodic maintenance (weekly) will be done and documented.

9. The door handles, partitions and doors in the clinical area of will be disinfected every day

10. The waste disposal protocol will be followed

Validation / Verification:

Daily- Class I Indicator - Every Set/Bin. Class 6 Indicators - Every Batch/Coad.

Weekly: - Biological Indicator. Bowie Dick Indicator - Bowie Dick is used to check the penetration of steam.

Biological Indicator: The tube contains a population of geobacillus theemophillus spores soaked on a strip of paper and it has an growth indicator media of purple color contained in ampule. This shall be autoclaved at 121^{0}C for at least 30min. Place the biological indicator along with the sets/bins in an appropriate manner & generally it has to be placed in the centre of the load. Change from purple to yellow growth indicates a sterilization process failure has occurred. If no color change, result is valid.

INSTRUMENT PROCESSING

⇓

HOLDING (PRE SOAKING)

⇓

PRE-CLEANING

⇓

CORROSION CONTROL, LUBRICATION

⇓

PACKAGING

⇓

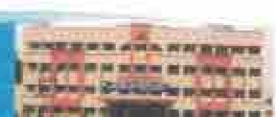
STERILIZATION

⇓

STERILIZATION MONITORING

⇓

HANDLING PROCESSED INSTRUMENT



1. PROTECTIVE MEASURES

Protection can be achieved by a combination of immunization procedures, use of barrier techniques and strict adherence to routine infection control procedures.

Hepatitis B vaccination is available to all employees who are at risk of occupational exposure to blood or other potentially infectious material

Protective coverings Uniforms: Uniforms should be changed regularly and whenever soiled. Gowns or aprons should be worn during procedures that are likely to cause spattering or splashing of blood and saliva.

Hand protection: Gloves must be worn for procedures involving contact with blood, saliva or mucous membrane. A new pair of gloves should be used for each patient. Hands should be washed thoroughly with a proprietary disinfectant liquid soap prior to and immediately after the use of gloves. Any cuts or abrasions on the hands or wrists should be covered with adhesive water proof dressings at all times.

Protective glasses, masks or face shields:

Personal protective equipment includes:

Gloves; Mask;
Protective eye wear (goggles);
Apron;/Gown;
Slippers/boots/shoe covers; and
Cap/hair cover/ head mask

Hospital infection control :

1.1.1 Hospital infection is also called Nosocomial infection, now a day it is termed as HAIs (Health care associated infections). It is the single largest factor that adversely affects both the patient and the hospital. The English word Nosocomial is derived from the Greek NOSOKOMEION meaning "hospital". Nosocomial infection is that which develops in the patients after more than 48 hours of hospitalization. In India Hospital infection estimates vary from 10 to 30 percent, the least being about 3 percent in the best of hospitals.

1.1.2 This infection control program is documented and aims at preventing and reducing the risk of nosocomial and iatrogenic infections.

1.1.3 **ABBREVIATIONS:**

HIC : Hospital Infection Control

ICP : Infection Control Programme

1.2 The DHSP has an infection control committee/competent authority.

INFECTION CONTROL COMMITTEE

1.2.1 The Infection control committee is a management committee appointed to direct, monitor, and support the hospital infection control program.

1.2.2 It is made up of the representatives of various clinical and other disciplines.

1.2.3 It is important for the members to devote enough time for the programs.

1.2.4 The Infection Control Committee consists of:

- Chair person
- Co ordinator
- Nursing Superintendent

- Infection control Doctors
- Infection Control Nurses
- Infection Control Officer – Microbiologist

The Invited Members are:

- Clinical assistants
- Members of supporting departments

INFECTION CONTROL COMMITTEE

Sl.No	Staff Name	Position	Department
1	DR.MADHUMATI SINGH	Chairman	Department Of Oral & Maxillofacial surgery
2	DR.SHRUTHI R	Criteria in charge	Department Of Oral & Maxillofacial surgery
3	DR.MAHESH KUMAR T S	Coordinator	Department Of Oral Medicine & Radiology
4	DR.PRAJNA P SHETTY	Member	Department Of Orthodontics And Dentofacial Orthopedics
5	DR.ROHIT S	Member	Department Of Oral & Maxillofacial surgery
6	DR.ANUROOPA P	Member	Department Of Periodontology
7	DR.VEENA ARALI	Member	Department Of Pedodontics and Preventive dentistry
8	DR.NANDAKISHORE K J	Member	Department Of Conservative Dentistry and Endodontics
9	DR.MAYANK TRIVEDI	Member	Department Of Orthodontics and Dentofacial Orthopedics
10	DR.ARUNA C N	Member	Department Of Public Health

			Dentistry
11	DR.VAIDEHI NAYAK	Member	Department Of Oral & Microbiology Pathology
12	MRS.SICILLY DEVASSY	Member (Staff Nurse)	Department Of Oral & Maxillofacial surgery

1.3 The DHSP has an infection control team

1.3.1. Hospital Infection Control Team:

1.3.1.1. The infection control team will have **the responsibility** of monitoring the infection control and recommending corrective action. They shall support surveillance process and detect lapses

1.3.1.2. Participate in audit activity

1.3.1.3. The Infection Control Team consists of:

- Infection Control Nurses
- Infection Control Doctor
- Infection Control Officer – Microbiologist.

IC.2. INFECTION CONTROL MANUAL:

This report consolidates recommendations for preventing and controlling infectious diseases and managing personnel health and safety concerns related to infection control

2.1 The manual identifies the various high-risk areas.

2.1.1 RISK AREAS

2.1.1 **Critical:**

Penetrates soft tissue, contacts bone, enters into or contacts the blood stream or other normally sterile tissue.

- Surgical instruments,
- periodontal scalers,
- scalpel blades,
- surgical dental burs
- Endodontic files

2.1.2 **Semi critical:**

Contacts mucous membranes or non intact skin; will not penetrate soft tissue, contact bone, enter into or contact the bloodstream or other normally sterile tissue.

- Dental mouth mirror
- amalgam condenser
- reusable dental impression trays
- dental handpieces

2.1.3 **Non critical:**

Does not have direct contact or Contacts intact skin.

- Radiograph head/cone,
- blood pressure cuff,
- facebow,
- pulse oximeter

2.2 **INFECTION CONTROL POLICY** - Policy should be made to apply various infection control procedures during patient work on dental chair stations.

To ensure the dental health care setting has appropriate infection prevention policies and practices to provide safe care and a safe working environment.

To systematically assess personnel compliance with the expected infection prevention practices and to provide feedback to DHCP

2.2.1 Before the start of the first case

Wipe all dental chair, equipment, room lights, suction points, OR table, surgical light reflectors, other light fittings, slabs with 2 % bacillocid solution. This should be completed at least one hour before the surgery.

2.2.2 After each use

Instruments: Used instruments should be cleaned immediately by the scrub nurse and the attender.

All the instruments should first be decontaminated in 1 percent sodium hypochlorite solution for 20 minutes and then soaked in a multienzyme cleaner for 30 minutes followed by scrubbing with a brush using liquid soap in warm water and then dried.

They should then be sent for sterilization to CSSD.

Handpieces, ultrasonic scaler inserts/tips and air-water syringe tips where detachable should be flushed for 30 seconds, dismantled, cleaned, oiled where required ,and autoclaved between patients

Environment: Wipe used equipment, furniture, OR table with detergent and water. If there is a blood spill, disinfect with sodium hypochlorite before wiping. Empty and clean suction bottles and tubing with disinfectant.

INSSTRUMENT PROCESSING

⇓

HOLDING (PRE SOAKING)

⇓

PRE-CLEANING

⇓

CORROSION CONTROL, LUBRICATION

⇓

PACKAGING

⇓

STERILIZATION

⇓

STERILIZATION MONITORING

⇓

HANDLING PROCESSED INSTRUMENT

2.3 SURVEILLANCE - Manual should incorporate a regular vigilance/surveillance program to monitor implementation of infection control procedure.

2.3.1 Validation / Verification:

Daily- Class I Indicator - Every Set/Bin. Class 6 Indicator - Every Batch/Coad.

Weekly: - Biological Indicator. Bowie Dick Indicator - Bowie Dick is used to check the penetration of steam.

Biological Indicator: The tube contains a population of geobacillus theemophillus spores soaked on a strip of paper and it has an growth indicator media of purple color contained in ampule. This shall be autoclaved at 121^{0}C for at least 30min. Place the biological indicator along with the sets/bins in an appropriate manner & generally it has to be placed in the center of the load. Change from purple to yellow growth indicates a sterilization process failure has occurred. If no color change, result is valid.

2.3.2 Recall: If any sterilization process failure has occurred, issued sets/bins brought back to CSSD immediately rectify the process and re-sterile the equipment. Take necessary actions on failure/ complications also

2.4 PROTOCOLS FOR INFECTION CONTROL - Manual of infection control should identify different critical components of dental chair station to control infection spread.

SL NO		
	Dental chairs	Clean with detergent and water If there is visible blood or pus,clean and disinfect with 0.5%sodium hypochlorite or 2%glutaraldehyde, rinse
	Attachments dental units	Wipe with 2% glutaraldehyde,rinse
	Amalgam/composite carriers	Wipe with 70% ethyl alcohol
	Articulators	Wipe with 70% ethyl alcohol
	Bracket tables	Wipe with 70% ethyl alcohol

	Bur holder	
	Burs - Steel tungsten-carbide	Clean with metallic brush anddetergent, rinse, dry andimmerse in 2% glutaraldehydefor 10 hours, rinse
	Cotton holder	Wipe with 70% ethyl alcohol If there is visible blood or pus,clean and disinfect with 0.5%sodium hypochlorite, rinse
	Denture	If contaminated with blood,immerse in 0.1% sodiumhypochlorite for 10 mins. Andrinse
	Flask and clamps	
	Handpiece motors Lathe machine Die cutting machine Cast Timmers	
	Impressions –Alginate :(plastic trays)Zinc-oxide eugenol paste :Alginate :(metallic trays)Rubber base :	Rinse, get rid of excess water,spray with 0.1% sodium hypochlorite, put in closed container for 10 mins."Rinse, get rid of excess water, spray with 2% glutaraldehyde, put in closed container for 10mins.
	Light cure unit	

➢ AUTOCLAVING

- Diagnostic instrument - Mouth mirror, Probe ,Tweezer, periodontal probe, Kidney tray
- Surgical instruments
- Hand piece- Aerotor handpiece, Micromotor handpiece Lab handpiece
- Impression trays Chrome-plated trays Aluminium trays
- Burs- Crown cutting burs, Metal trimming bur
- Others
- Retraction cord packer
- Bur checker
- T burnisher
- Lacrons carver
- Wax knife, Wax spatula ,Cement mixing spatula
- Agate spatula
- Metallic scale
- Compass
- Surveying tools
- Articulating paper holder

DISCARDED AFTER ONE USE

- Gloves

- Head cap
- Mouth mask
- Local aneasthetic syringe
- B P blade
- Plastic disposable trays
- Custom acrylic resin trays.
- Retraction cords
- Casts
- Cotton
- Gauze
- Suction tips
- Articulating papers

CHEMICLAVE

- Polishing buff (rag/felt polishing buff)
- Glass plate
- Glass slab
- Porcelain tile
- Tissue marking pencil
- Intraoral tracer
- Rubber bowls
- Matrix band and retainer
- Rubber dam clamps –
- Band removers,
- Stainless steel crowns

DHSP – STERILIZATION ACTIVITY MONITORING

5.1 RRDCH has adequate Space avaiiability for sterilization

Department level:

5.2 Sterilization Monitoring: Monitoring of sterilization procedures include a combination of process parameters, including mechanical, chemical, and biological. These parameters evaluate both the sterilizing conditions and the procedure's effectiveness.

5.2.1 Mechanical techniques for monitoring sterilization include assessing cycle time, temperature, and pressure by observing the gauges or displays on the sterilizer and noting these parameters for each load

5.2.2 Chemical indicators internal and external, use sensitive chemicals to assess physical conditions (e.g., time and temperature) during the sterilization process. Colour indicator strips are used on daily basis

5.2.3 Biological indicators

File is maintained in the department and CSSD

Indicator strips are marked with batch no , date, department

The sterilization cycle is recorded every day

5.3 RRDCH has an established recall and corrective audit procedure. RRDCH ensures that the sterilization procedure is regularly monitored and in the eventuality of a breakdown it has a procedure for withdrawl of such items and corrective steps implemented to prevent recurrence.

5.3.1 Recall of instruments

The validity of sterilized instruments is two days

The instruments should be repacked and sent to CSSD for sterilization

Breakdown of sterilization system should be immediately recognized and recorded

Batch no and date of sterilization should be correlated to recall the instrument back immediately from the departments

Criteria Incharge
Infrastructure & Learning Resources
RajaRajeswari Dental College & Hospital
Bangalore-560 074

Principal
RajaRajeswari Dental College & Hospital
14, Ramohalli Cross, Mysore Road,
Kumbalgodu, Bangalore - 560 074

8.1.3 STANDARD OPERATING PROCEDURE FOR INFECTION CONTROL –STERILISATION RECORDS MAINTAINED IN THE DEPARTMENT

RAJARAJESWARI DENTAL COLLEGE & HOSPITAL
#14, Ramohalli Cross, Kumbalgodu, Mysore Road, Bangalore - 560060

Sterilization department
ORAL MEDICINE AND RADIOLOGY

Daily documentation for sterilizer No: 2 Date 29/6/19

O Sterilizer type O Steam O Ethylene oxide O Formaldehyde O Hydrogen peroxide

Bovid-Dick-Simulation Test (BDS) not applicable (no BDS – test necessary).

BDS test indicator strip	Release		Responsible User
	Yes	No	

Batch Monitoring

Stick in documentation tables or complete the form manually

User sterilizer and batch number	1	2	3	4
Date of production				
Expiry date				
Stick in indicator strip				
Program				
Temperature starting time	8:15	10:15	15:20	19:00
Release				
Signature	Manfeel	Manfeel	Manfeel	Manfe

User sterilizer and batch number	5	6		7		8	
Date of production							
Expiry date							
Stick in indicator strip							
Program							
Temperature starting time	1:30	Yes	No	Yes	No	Yes	No
Release							
Signature	Manfe						

Professor & HOD
Department of Oral Medicine & Radiology
...ege & Hospital

COMMUNITY DEVELOPMENT THROUGH EXCELLENT ORAL HEALTH CARE EDUCATION, SERVICE & RESEARCH

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Bangalore Urban

Sterilization department
Periodontics

Daily documentation for sterilizer No: ____ Date 24/7/15

O Sterilizer type: O Steam   O Ethylene oxide   O Formaldehyde   O Hydrogen peroxide

Bowie-Dick-Simulation Test (BDS)   not applicable (no BDS – test necessary).

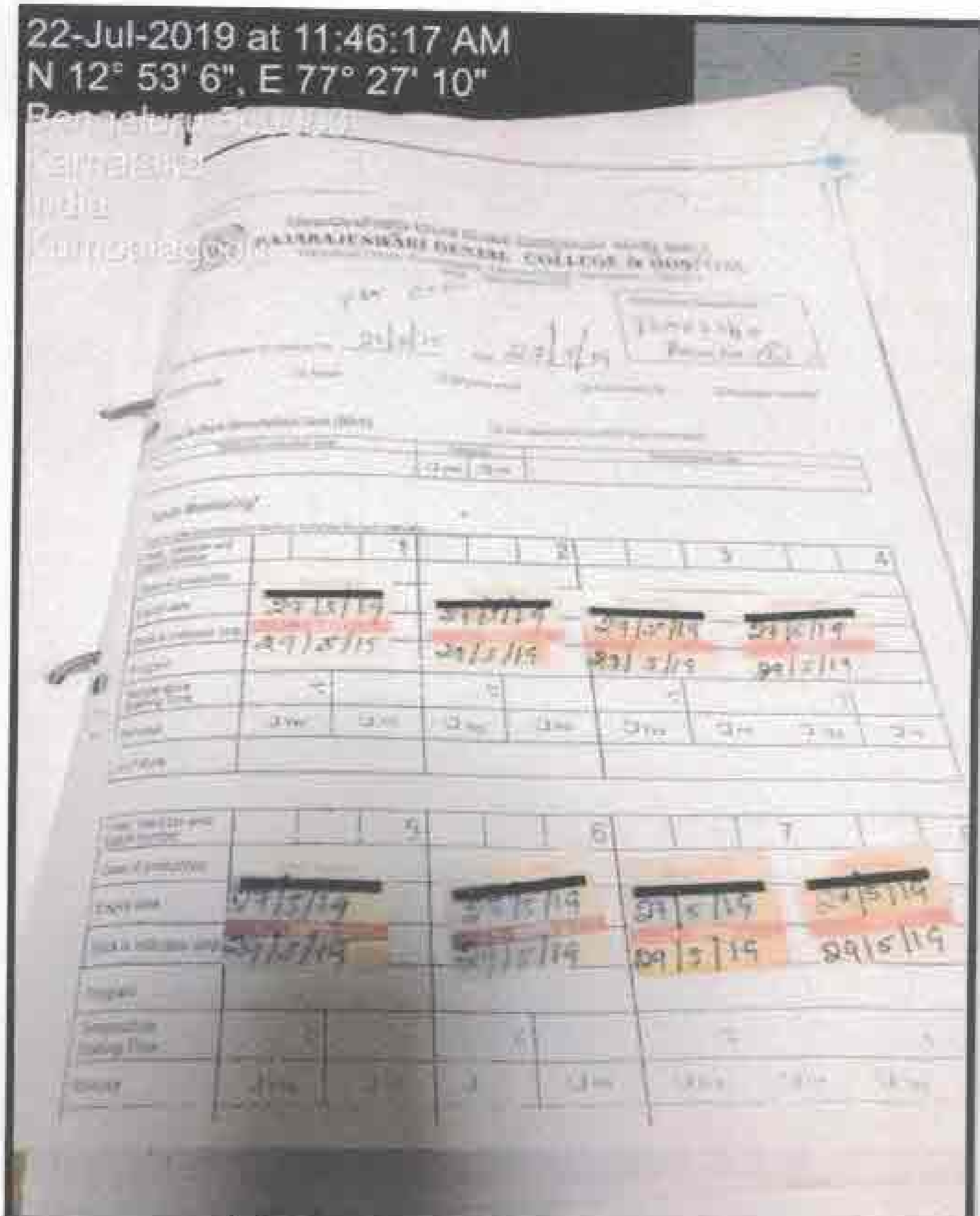
BDS test indicator strip	Release		Responsible User
	Yes	No	R. [illegible]

Batch Monitoring

Stick in documentation tables or complete the form manually.

User sterilizer and batch number	1		2		3		4	
Date of production	2(1) 9:15am		2(2) 11am		2(3) 1:55pm		2(3) 1:57pm	
Expiry date								
Stick in indicator strip	PER 24/7/15		PER 24/7/15		PER 24/7/15		PER 24/7/15	
Program								
Temperature starting time	Exp 26/7/15		Exp 26/7/15		Exp 26/7/15		Exp 26/7/15	
Release	Yes	No	Yes	No	Yes	No	Yes	No
Signature	[illegible]		[illegible]		[illegible]		[illegible]	

User sterilizer and batch number	5		6		7		8	
Date of production								
Expiry date								
Stick in indicator strip								
Program								
Temperature starting time								
Release	Yes	No	Yes	No	Yes	No	Yes	No
Signature								



Criteria Incharge
Infrastructure ... Resources
RajaRajeswari D... Hospital
Bangalore-560 074

Principal
RajaRajeswari Dental College & Hospital
14, Ramohalli Cross, Mysore Road,
Kumbalgodu, Bangalore - 560 074

8.1.3 PERSONAL PROTECTIVE EQUIPMENT (PPE) WHILE WORKING IN THE CLINIC

PROTECTIVE MEASURES

Protection can be achieved by a combination of immunization procedures, use of barrier techniques and strict adherence to routine infection control procedures. Hepatitis B vaccination is available to all employees who are at risk of occupational exposure to blood or other potentially infectious material

Protective coverings Uniforms: Uniforms should be changed regularly and whenever soiled. Gowns or aprons should be worn during procedures that are likely to cause spattering or splashing of blood and saliva.

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Gloves; Mask;
Protective eye wear (goggles);
Apron;/Gown;
Slippers/boots/shoe covers; and
Cap/hair cover/ head mask

Principal
RajaRajeswari Dental College & Hospital
14, Ramohalli Cross, Mysore Road,
Kumbalgodu, Bangalore - 560 074

Co-ordinator / In-charge
Infrastructure & Learning Resources
RajaRajeswari Dental College & Hospital
Bangalore-560 074

8.2.3 INFECTION CONTROL PROTOCOL - FOGGING AND FUMIGATION RECORD

RAJARAJESWARI DENTAL COLLEGE & HOSPITAL

DEPARTMENT OF ORAL & MAXILLOFACIAL SURGERY

FUMIGATION CHART

DECEMBER 2016					
	1st week	2nd week	3rd week	4th week	5th week
Date	03/12/16	09/12/16	17/12/16	24/12/16	31/12/16
Sign					

HOD SIGNATURE

Criteria Incharge
Infrastructure & Learning Resources
RajaRajeswari Dental College & Hospital
Bangalore-560 074

Principal
RajaRajeswari Dental College & Hospital
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