INFECTION CONTROL GUIDELINE

RAWAL DENTAL HOSPITAL

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Rawal Institute of Health Sciences(Pvt) Ltd. Lethrar Road Pharana Dak Islamabad 051-2677381-3

Members of Infection Control Committee Rawal Dental Hospital

1.	Prof Kiran Tauseef	Convener
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1. Introduction

Infection control is a critical component of dental practice. This manual outlines protocols to prevent and manage infections within the dental hospital of RIHS, ensuring a safe environment for students, faculty, staff, and patients. It provides detailed guidelines on hygiene, sterilization, waste disposal, patient management, and emergency response to uphold high infection control standards.

2. Infection Control Responsibilities

The responsibility of infection control lies with every individual working within the dental college, which is overlooked by the infection control committee:

- **Compliance with Regulations:** Adhering to national and international infection control guidelines.
- **Training and Education:** Conducting regular workshops and hands-on training for students and staff on proper infection control measures.
- **Monitoring and Enforcement:** Ensuring all staff and students follow infection control protocols and addressing any breaches promptly.

3. STANDARD INFECTION CONTROL PRECAUTIONS IN RIHS

Rawal Institute of Health Sciences (RIHS) follows an Infection control policy which includes the following points.

1. An infection control committee is constructed by the order of Chairman RIHS.
2. Central figure in infection control of this hospital is Infection Control Officer (ICO) who is a microbiologist and in case of lack of a microbiologist Head of the Department of Pathology.
3. An Infection Control Nursing Officer (ICN), is appointed to assist ICO.
4. **Sample Audit Plan:** Infection Control Officer (ICO) carries out a 6 monthly infection control audit of whole hospital according to an Infection Control Audit Plan and records the findings of every audit.
5. **Monthly Infection Control Checkup:** ICO and/or ICN make a monthly surprise roundof different departments of the hospital and record their findings. This form is presentedin infection control committee meeting and required actions are taken accordingly.
6. **Waste Disposal Policy:**
   - **a. Categorization of Waste:**
   - **(1) No Risk Waste:**
     - (a) General waste such as papers, unused tubing, packing of drugs and infusion bags etc.

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(b) Cooked food or food related waste.

(2) Risk Waste:

(a) Infected Waste

(i) Human Blood and blood products.

(ii) Collections from Drains inserted in body cavities or near operation sites.

(iii) Empty Syringes. (Note: All Syringes Must Be Cut before Disposal according theSOP-HICP

(b) Sharps:

(i) Used and unused hypodermic needles. (Note: All Needles Must Be Cut BeforeDisposal as per SOPs.

(ii) Stylets of peripheral cannulae and central venous lines.

(iii) Empty glass ampoules.

(c) Chemical Waste:

(i) Expired drugs.

(ii) Disinfectants and germicides used for cleaning.

(d) Human Biological Waste: Parts of human body amputated during surgery.

(e) Radiological Waste: Waste from the Dept. of Radiology.

b. **Separation and Disposal:** All waste shall be separated according to following colorcoding system:

- **No Risk Waste:** Throw in the bucket containing **Blue** colored polythene bag.When filled, dispose of this blue bag.
- **Risk Waste:** Throw it in the bucket containing **Red** colored polythene bag. Whenfilled, dispose of this red bag.
- **Sharps** are kept in boxes of cardboard, which are thrown in **yellow** bags.
- **Disposal Points (DPs):** There are disposal points in different areas from wherewaste is collected at least twice a day (one on each floor).
- **Collection of Waste:** All the waste from DPs are collected at 1000 hrs and 1800hrs.
- **Disposal of Collected Waste:** All collected waste bags are placed at a centrally located waste disposal place, designated as central waste storage facility (CWSF). Both blue and red colored bags are segregated by a partition.
- **All the waste is incinerated** in an incinerator placed at 5th floor of the hospitaland the ash is disposed of in the nearby city waste disposal facility.

7. **Cleaning of the Hospital:** Cleaning of the floor of the hospital is carried out at least twice a day unless required more frequently e.g. in OT or ICU. Sweepers shall **NOT** use conventional broom or conventional mop anywhere in the hospital. Garbage is collected at the spot and then thrown away according to waste disposal policy.

8. **Cleaning and disinfection of Bathrooms:** Bathrooms are cleaned at least twicedaily unless needed more frequently. Toilets bowls and washbasins are disinfected with phenyl.

9. **Personal Hygiene of RIHS Staff:** All heads of the departments are responsible to check the nails and haircut of their under command people and record them in a register labeled as "Record" of Personal Hygiene. This is checked bi-monthly in the department and quarterly by the ICO. Record of monthly Stool RE tests of food handlers is also kept in the same register in cafeteria.

10. **Special Dresses in more Vulnerable Areas:** The whole staff of OT, ITC, and Cath Lab wears Special dresses. Once changed to the specific dress nobody is allowedto leave the area without changing back to street cloths. ICO checks any violation of this order by his monthly surprise rounds and can send a NCR to head of the department in case of violation, record it in his monthly round report on form or include the same in his three monthly audit. This can also be checked and recorded byICN on form.

11. **Shoe Covers, Caps and facemasks in Areas of Critical Care:** No individual is allowed to enter in ITC, Cath lab, without wearing clean shoe covers provided for the purpose. Visitors and Doctors who are supposed to go nearer to the patients in ITCand Cath lab must also

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wear cap and facemask. Sister in-charge of the ward isresponsible for compliance of this order.

12. **Visitors Policy:** All visitors coming to RIHS are required to abide strictly with the visitors policy. The visitors' policy is displayed prominently on the notice boards atall entrances of RIHS and in all wards
13. **Disposal of Syringes:** RIHS abides with a very strict policy of syringes disposal.
14. **Washing of Hands:**
    a. All doctors must wash their hands with soap in between the examination of every patient.
    b. All nurses must wash their hands with soap after every handling of patient and/or apply hand rub

4. STANDARD INFECTION CONTROL PRECAUTIONS IN OT

All Operation Theatre/Cardiac OT : Operation theatre of RIHS.

It is composed of:

1. Operation rooms (ORs): Total nine operation ORs are functional, out of which six ORs are specified for general surgery(including OMFS), 2 operation rooms are specified for cardiac OT and one room is specified for Eye - OT.
2. Three changing rooms, one each for male doctors, female doctors and OTAs.
3. Two Scrub areas.

No	Instruction	Responsibility
1.	**Entry in Operation Theatre:** **a.** No person is allowed to enter the operation theatre instreet shoes beyond an area marked by red line. **b.** Wear OT slippers beyond **RED LINE**	Compliance ensured by OTA incharge OT
2.	**Changing Room:** **a.** Dress: Change street clothes to operation theatre dressin the changing room. **b.** Theatre dress is NOT allowed outside OT except in emergency. **c.** In case of emergency outside OT, wear your streetshoes and a white gown above OT dress. **d.** After the emergency is over, change the dress before re-entry in OT. **e.** Always wear cap and facemask in OT. **f.** Staff with beard must wear a special mask, which mustcover it completely and must also cover the nose.	Sister in-charge OT
3.	**Washing Hands:** **a.** Always wash hands with soap and pyodine in scrubroom before touching any equipment, drug or patient. **b.** This is MUST for every-one who wants to enteroperating room.	Individual
4.	**Scrubbing:** **a. Scrubbing is MUST for:-** **1.** Nurses assisting the surgeon during operation. **2.** Surgeons and their assistants. **b. How to Scrub:-**	Individual Sister in- charge OT to ensure compliance Responsibility

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	1. Both hands and forearms are to be scrubbed up to the elbows starting from fingers upwards to the elbows. **2.** Take minimum five minutes and note the time inwall clock provided. **Do not guess** **3.** First wash with soap. **4.** Rinse thoroughly with pyodine and start massagewith hands. **5.** Clean the nails and creases of hands and forearms. **6.** Follow all steps of hand hygiene.	Individual Sister IC OT to ensurecompliance
	7. Rinse with water. **8.** Dry with sterile towel provided for the purpose.	
5.	Wearing Gowns/Wrappers and Gloves: a. Pick one wrapper /gown from the sterilized tray lying in the operating room. b. Hold it from the inner side. c. At no times, hands should touch the outer side of the wrapper. d. Ask a person who is already scrubbed and wearing gloves to wrap the gown around your waist. e. Wear the gloves in such a manner that the hands should not touch the outer surface of gloves.	Individual Compliance ensured by sister I/C OT
6.	Cleaning / Disinfection of Operation Theatre Floor and Walls: **a.** Whole floor and lower 5 feet of walls of operation theatres are cleaned daily. **b.** Floor of every operating room is cleaned whenever it is wet during the operation and after every operation. **c.** Following material is used for cleaning of floor and walls and disinfection. 1. Carbolic acid in the strength of 1/60 daily. Preseptic sol. 50% for walls daily. 2. For gross spillage of blood secretions or excretions, hypochlorite solution 1% used before through cleaning. 3. Formaldehyde once in a week. **d.** Management of Cleaning 1.Equipment: a. Conventional Broom or Conventional Mop will not used in OT b. Clean the OT floor with surgical gauze soaked in carbolic acid 1/20. c. Shoes and gloves of sweepers MUST be washed daily with pyodine scrub in every list and in between if they are soaked with patients' blood and / or secretions. **e.** Sanitary workers: - **1.** All sweepers must have a morning bath before entering OT changing room. **2.** All sanitary workers must have their hands washed by pyodine under supervision of OTA I/C OT or a person designated by him.	OTA in charge OT Sanitary Workers OTA in charge morning, evening and night shift

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07	Equipment's in OT **a.** Anesthesia Equipment: 1. Laryngoscope, Magill's Forceps, Style and Boogie for ET insertion: is washed with soapy water every time after use followed by cleaning with 70% alcohol. If blood stained, hypochlorite solution is used. 2. Endotracheal Tubes. Always use disposable endotracheal tube. 3. Each endotracheal tube must be opened just 4. Facemasks and Breathing Circuits: Washed with soapy water every time after use followed by cleaning with 7% alcohol 5. Ventilator: Disposable ventilator circuits are used along with bacterial filter. Same breathing circuit and filter are shifted to ICU along with patient and disposed off after removal of patient from ventilator. 6. Fiberoptic Bronchoscope: i Wash with detergent after each use. ii Then rinse in 2% glutaraldehyde for 30 minutes iii If used in a HIV, Hepatitis B or HCV positive patient a thorough cleaning with 7% alcohol followed by 5 hours rinsing in 2% glutaraldehyde MUST be performed. iv. Dry it with sterile surgical hand towel. **b.** Surgical Equipment: 1. Sterilized set of instruments specified for each operation MUST be brought from CSSD just before operation. 2. Trolley sister MUST open these packs immediately before use. 3. Before opening the pack trolley sister MUST confirm the color change of the tape over the packing made by CSSD staff. 4. First surgical assistant shall also confirm that color change in tape is adequate. 5. All disposable equipment must be opened immediately before use. **c.** Perfusion Equipment: 1. Heart Lung Machine: i. Clean with soapy water after every use. . ii. Blood stained must be cleaned first with soapy water and the with hypochlorite solution. iii. Hemotherm: Clean with soapy after every use. iv. Disposable equipment: Must only be opened after perfusionist has scrubbed and is wearing sterile gloves. v. Intra-Aortic Balloon Pump: Must be cleaned by a damp cloth soaked in sample detergent after every use. **d.** Monitoring Equipment: Clean with damp cloth soaked in soapy water before start and after finishing daily list.	Senior OTA assisting the anesthesiologist during operation. Anesthesiologist incharge of the case Senior OTA Assistant the Anesthesiologist OTA in charge C.OT Trolley Sister First Assistant of the surgeon during the surgery Perfusionist in charge of the case Senior OTA in charge operating Room
08	Staff Heath: **a.** General Hygiene: Whole Operation room staff MUST be examined weekly for cut and clean nails, hair and general body hygiene. **b.** Status of general body hygiene of OT staff is recorded in a	OTA in charge OT

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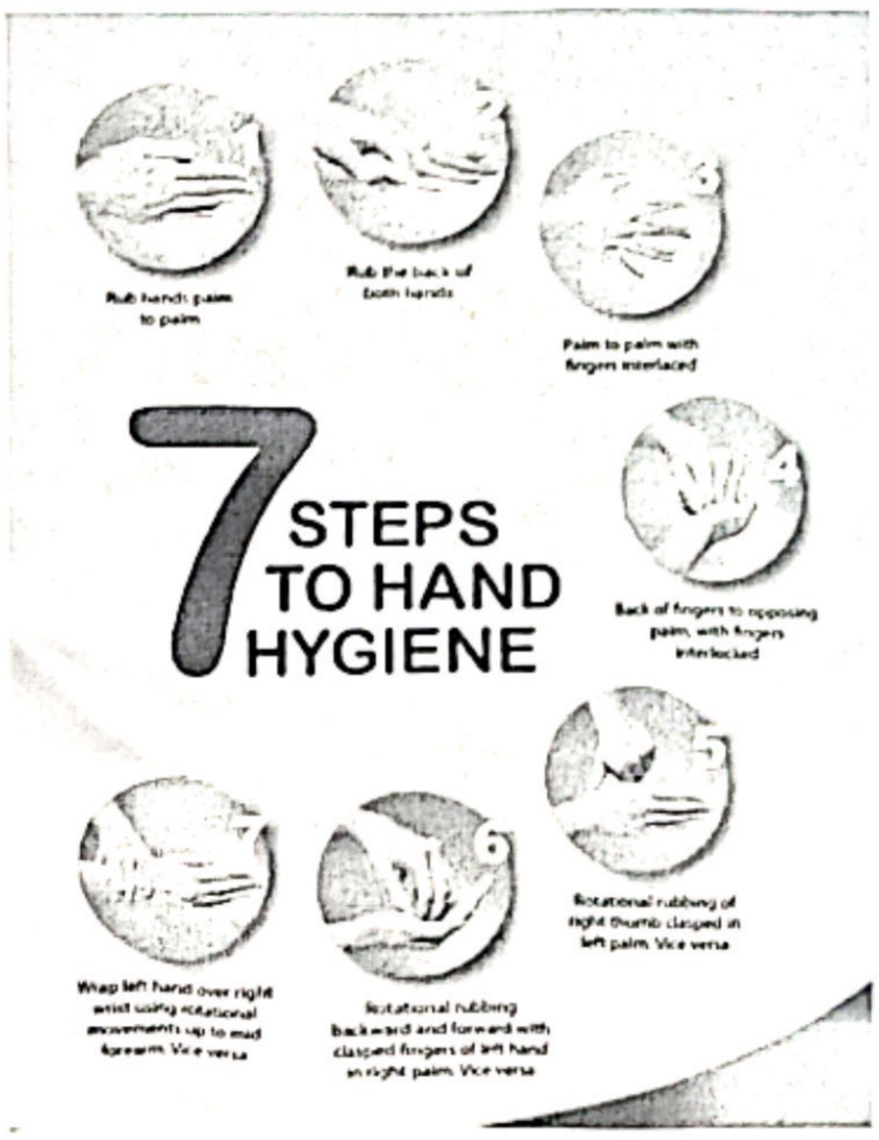
	register named personal hygiene register. **c.** Any person having a running nose or ear or a discharging wound is not allowed in OT. **d.** Vaccination: Whole staff must be vaccinated for hepatitis B virus. **e.** Staff handing hepatitis B or Hepatitis C positive patient shall wear gloves. **f.** Status of Vaccination of whole C.OT staff is recorded in a register named "Vaccination Register" RIHS-F.	

5. SOP for Hand Washing and Hygiene

Proper hand hygiene is the most effective way to prevent infections. The following steps must be followed:

- Wet hands with clean running water and apply an adequate amount of antimicrobial soap.
- Rub hands together to create lather, covering all surfaces including the backs of hands, between fingers, and under nails.
- Scrub hands for at least 20 seconds.
- Rinse hands thoroughly under running water.
- Dry hands with a disposable paper towel or air dryer.
- Use alcohol-based hand sanitizer (minimum 60% alcohol content) when soap and water are unavailable.
- Hand hygiene must be performed before and after every patient interaction, before wearing gloves, and after removing gloves.



6. SOP for Use of Mask and Protective Eyewear

The correct use of masks and protective eyewear is essential to prevent exposure to infectious agents.

- **Mask Usage:**
  - Use a new, clean surgical mask for each patient.
  - Ensure the mask covers both nose and mouth completely.
  - Avoid touching the mask while wearing it.

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- Replace the mask if it becomes damp or soiled.
- Dispose of used masks in designated waste bins immediately after removal.

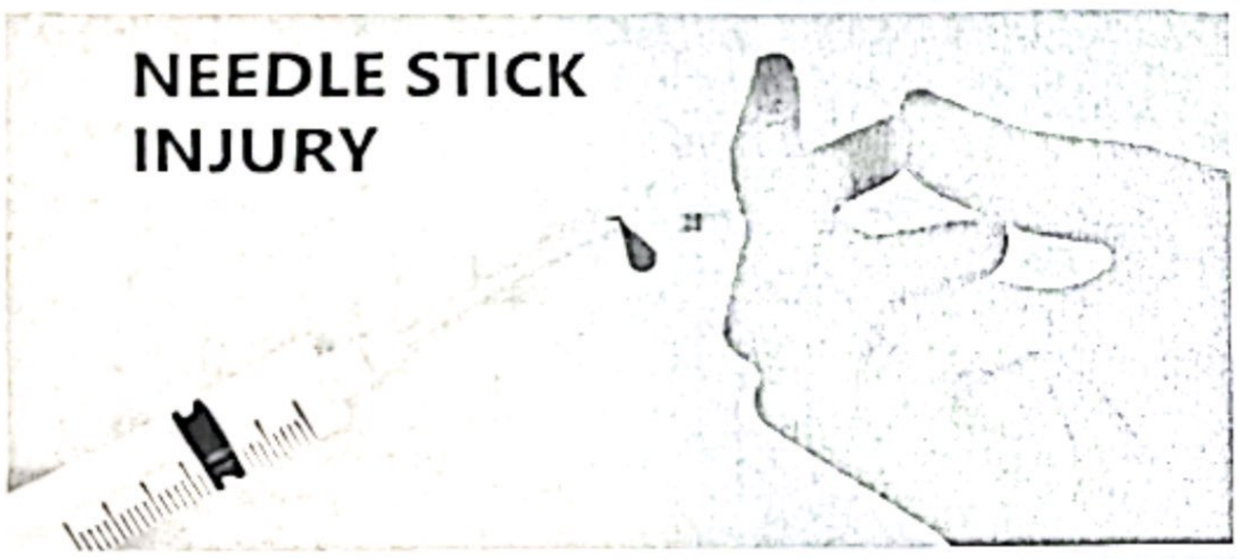
- **Protective Eyewear:**
  - Wear protective goggles or face shields during all aerosol-generating procedures.
  - Disinfect reusable eyewear with an approved disinfectant after each use.
  - Ensure eyewear provides full coverage to protect against splashes and debris.

7. SOP for Prevention of Blood-Borne Viruses (HBV, HCV)

To prevent the transmission of blood-borne viruses such as Hepatitis B (HBV) and Hepatitis C (HCV), the following measures must be strictly followed:

- **Vaccination:** All healthcare workers, including students, must be vaccinated against Hepatitis B before clinical exposure.
- **Use of PPE:** Gloves, masks, protective eyewear, and gowns must be worn at all times when handling bodily fluids.
- **Safe Handling and Disposal of Sharps:**
  - Use puncture-resistant containers for sharp object disposal.
  - Never recap used needles.
- **Disinfection of Equipment and Surfaces:**
  - All instruments and surfaces contaminated with blood should be disinfected using hospital-grade disinfectants.
  - Autoclaving of reusable instruments is mandatory after each use.
- **Screening of Patients:** Patients should be screened for HBV and HCV before invasive dental procedures, and necessary precautions should be taken accordingly.
- **Education and Training:** Regular workshops and training sessions must be conducted to educate staff and students on the prevention of blood-borne infections

8. SOPS FOR NEEDLE STICK INJURY



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Needle S

Definition

Injury from needles or sharps used in medical procedures is called needle stick injury (NSI) or sharps injury. Sharps include blades, scalpels, lancets and broken glass. Needle stick injurymay expose you to blood borne pathogens which include Hepatitis B Virus (HBV), Hepatitis C Virus (HCV) and Human Immunodeficiency Virus (HIV).

Purpose

- To ensure proper management of needle stick injury.
- To decrease likelihood of needle stick injury.

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- For prompt identification of blood borne pathogens.
- To reduce serious health problems in healthcare workers.
- To prevent transmission of blood borne pathogens.
- Early detection and management of exposure to blood borne pathogens.

Scope

This procedure is applicable to Infection Control Department services of Rawal General andDental Hospital (Khanna pul Islamabad)

Needle Stick Injury Prevention

- Avoid recapping or bending needles.
- Make sure availability of leak proof and puncture resistant sharps container nearby.
- Promptly dispose off used needles/sharps in sharps container, facing the needledownwards.
- In case of recapping (if necessary), use scoop technique.
- Do not overfill sharps container. Immediately replace when it is three quarter full.
- Use PPE (Gloves) to minimize exposure to body fluid and injury.
- Do not detach needle from syringe unnecessarily.
- Use safety devices if available.
- Protect yourself with hepatitis B vaccination.

Needle Stick Injury Management

- Encourage the wound to bleed in running water without squeezing it.
- Avoid sucking, rubbing or squeezing.
- Wash with soap and water.
- Dry the wound.
- Cover the wound with water proof dressing.
- Report the incident to Infection Control Coordinator or Nurse
- Do not exceed the reporting up to 24 hours.

Post Exposure Prophylaxis (PEP);

Immediately receive PEP. It is not effective after 72 hrs.

- If source patient is HIV positive
- If source patient is positive for Hepatitis-B and Hepatitis-C
- If source patient is unknown and not available at the time of reporting (i.e, outpatient)

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9. Notification Form for Needle Prick Injury / Splash with blood

Infection Control Department

Date: ---------- Time: ----------

Employee (victim) name_____ **Emp #**_____

Unit_____ **Designation**_____

Date & Time of Incident_____ **Time duration since incident**

_____

Type of injury: I) Percutaneous

II) Mucous membrane

a) Superficial

b) Deep

Type of device: a) Hollow bore needle b) Other needle c) other sharps

Contamination of device: a) Blood

b) Body fluid

c) No visible contamination

d) No contamination with Blood/body fluid

Site of injury/exposure: _____

Where injury/exposure took place_____

Procedure during which exposed_____

Details of incident_____

History of Hep B vaccination: complete / partial YES/NIL/ unknown

Titer post Hep B immunization: Not done/don't know/level was

SOURCE: I) Identified **II)** Unidentified

Patient's name_____ MR no _____

Serological status: (make check boxes for each)

Known HIV +ve Known Hepatitis C + ve Known Hepatitis B + ve

Status unknown Status checked and –ve

ACTION TAKEN BY _____

Infection Control Nurse informed_____

Immediate Step taken:

Wash with water and soap (mention duration)_____ Alcohol swab used only

Any other measure (write detail)_____ Squeezing done

Test done (victim):

1. Anti HBs titer_____(Also add HepBsAg) 2. Anti HCV_____

3. HIV_____ 4. ALT_____

Test done on patient (source) (incase status is unknown)

1. HBsAg 2. HCV 3. HIV

RISK EVALUATION:

1. Prick with hollow bore needle.
2. Visible Blood/Body fluid contamination
3. Deep injury.
4. Mucosal exposure with large amount of Blood/Bodyfluid.

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5. Source positive for blood borne pathogen.

6. Unvaccinated.

ACTION PLAN:

Vaccination_____ Booster dose_____

Prophylactic a) HBIG b) PEP for HIV

Referral_____ Follow up_____

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10. VACCINATION POLICY FOR HEPATITIS AND COVID-19 IN RIHS:

PURPOSE: To establish mandatory vaccination guidelines for Hepatitis B and COVID-19 to protect students, faculty, staff, and patients from infectious diseases in the dental college.

SCOPE: This policy applies to all students, faculty members, dental assistants and other personnel working in clinical area of the dental college.

Vaccina Policy

RESPONSIBILITY:

- The Infection Control Committee (ICC) is responsible for implementing and monitoring compliance.
- The Human Resources (HR) and Student Affairs departments will ensure all staff and students meet vaccination requirements.
- All individuals are responsible for maintaining their vaccination records and adhering to the policy.

HEPATITIS B VACCINATION POLICY:

- All students and staff must complete the **Hepatitis B vaccination series (3 doses)** before engaging in clinical work.
- Proof of immunity (anti-HBs test) must be submitted after completion of the vaccine series.
- Those with incomplete vaccinations must receive the missing doses before clinical exposure.
- In case of contraindications, a medical exemption must be provided along with serological testing.
- Non-responders (those who do not develop immunity despite full vaccination) must undergo revaccination or follow alternative preventive measures as advised by the Infection Control Committee.

COVID-19 VACCINATION POLICY:

- All students, faculty, and staff must be fully vaccinated against COVID-19 as per national health guidelines.
- Booster doses are recommended in accordance with the latest healthcare guidelines.
- Proof of vaccination must be submitted before the start of clinical rotations.
- Exemptions will be granted only for valid medical reasons, and alternative preventive measures (e.g., frequent testing, enhanced PPE) may be required.

DOCUMENTATION AND COMPLIANCE:

- All students and staff must submit official proof of vaccination to the designated administrative office.
- The Infection Control Committee will maintain and verify vaccination records.
- Failure to comply with this policy may result in restriction from clinical work and disciplinary action.

POST-EXPOSURE MANAGEMENT:

- Individuals with occupational exposure to Hepatitis B must follow the **Post-Exposure Prophylaxis (PEP)** protocol, including immediate reporting and testing.
- For COVID-19 exposure, affected individuals must follow institutional quarantine and testing guidelines before resuming work or classes.

11. Patient Management Protocols

- **Screening Procedures:** All patients should undergo a preliminary screening to identify infectious diseases before treatment.

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- **Infection Management:** Patients diagnosed with infectious diseases should be treated in designated areas with enhanced precautions.
- **Record Keeping:** Detailed records of all infection control procedures must be maintained for auditing and compliance.

12. Infection Control in Dental Laboratory

- **Decontamination of Impressions:** All impressions, prostheses, and dental appliances must be disinfected before being sent to the laboratory.
- **Prevention of Cross-Contamination:** Laboratory personnel must wear gloves and disinfect all work surfaces regularly.

13. Environmental Cleaning and Maintenance

- **Daily Cleaning Protocols:** All clinical and non-clinical areas should be cleaned using hospital-grade disinfectants.
- **Use of Disinfectants:** High-touch areas such as dental chairs, countertops, and light handles should be disinfected after each patient.
- **Ventilation and Air Quality:** Proper ventilation should be maintained in clinical areas to minimize airborne contamination.

14. SOPs for Before and After Patient Appointments

□ **Before Patient Appointment:**

- **Preparation of Operatory:** The treatment room must be thoroughly cleaned and disinfected before each patient visit.
- **Sterilization of Instruments:** All required dental instruments should be properly sterilized and arranged on a clean tray.
- **Barrier Protection:** New disposable covers should be placed on chair headrests, light handles, and other frequently touched surfaces.
- **PPE Preparation:** The dentist and assisting staff must wear appropriate PPE, including gloves, masks, and protective eyewear.
- **Hand Hygiene:** The treatment provider must perform hand hygiene before patient interaction.

□ **After Patient Appointment:**

- **Proper Disposal of PPE:** Used gloves, masks, and disposable protective coverings should be discarded in designated waste bins.
- **Disinfection of Treatment Area:** All surfaces, including dental chairs, countertops, and instruments, must be disinfected using hospital-grade disinfectants.
- **Instrument Processing:** Used instruments should be immediately placed in an enzymatic cleaning solution before undergoing sterilization.
- **Hand Hygiene:** The dental staff must perform thorough handwashing before attending to the next patient.
- **Replenishment of Supplies:** Ensure fresh barrier protections and sterilized instruments are available for the next patient.

15. Sterilization and Disinfection

Central Sterile Services Department (CSSD) Protocol
Rawal Dental hospital

Objective:

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To ensure the proper sterilization, storage, and distribution of dental instruments and equipment to prevent infections and maintain hygiene standards.

Scope:

This protocol applies to all dental departments, including Oral Surgery, Prosthodontics, Periodontology, Orthodontics, Operative Dentistry, and Oral Diagnostics/Oral medicine.

Cycle and receiving time:
Monday to Thursday (11:00am **First cycle**, 2:00pm **Second cycle**)
Friday (12:00 pm) **First cycle**
Saturday (11:00am **First cycle**, 2:00 pm **Second cycle**)

I. Collection and Receiving of Instruments

- Used instruments must be transported to CSSD in **stainless steel containers**.
- Instruments should be **pre-rinsed and cleaned** to remove visible debris before sending to CSSD.
- Each department must **log the instruments** being sent for sterilization.

II. Cleaning and Decontamination

- Instruments should be **manually cleaned** with enzymatic detergent or processed using an ultrasonic cleaner.
- Heavy debris should be removed with soft brushes under running water.
- Instruments should be disinfected using an **approved hospital-grade disinfectant**.

III. Inspection and Packaging

- After cleaning, instruments must be **dried completely** to prevent corrosion.
- Each instrument should be inspected for **damage, rust, or missing parts**.
- Sterile wrapping or pouches should be used for packaging, ensuring **adequate airflow for steam penetration**.
- Packs must be labeled with **batch number, sterilization date, and expiry date**.

IV. Sterilization Methods

- **Autoclaving (Steam Sterilization):** Primary method for dental instruments.
  - 121°C at 15 psi for **30 minutes** (gravity displacement)
  - 134°C at 30 psi for **4-7 minutes** (pre-vacuum)
- **Chemical Sterilization:** Used for heat-sensitive items (e.g., plastic instruments).
  - Glutaraldehyde (2%) or Hydrogen Peroxide (7%) immersion for **10 hours**.
- **Dry Heat Sterilization:** Used for heat-resistant metal instruments.
  - 160°C for **120 minutes**.

V. Storage and Distribution

- Sterilized instruments should be stored in **clean, dry cabinets** away from direct sunlight.
- Expired or compromised sterile packs must be **reprocessed**.
- CSSD staff must maintain a **logbook of sterilized instruments** for tracking.
- Instruments must be transported in **sterile, sealed trays** to the respective departments.

VI. Quality Control and Monitoring

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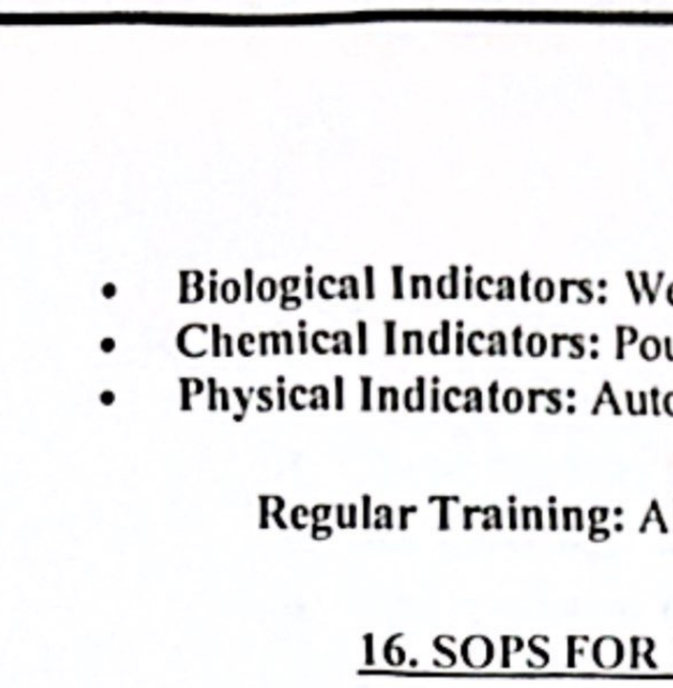
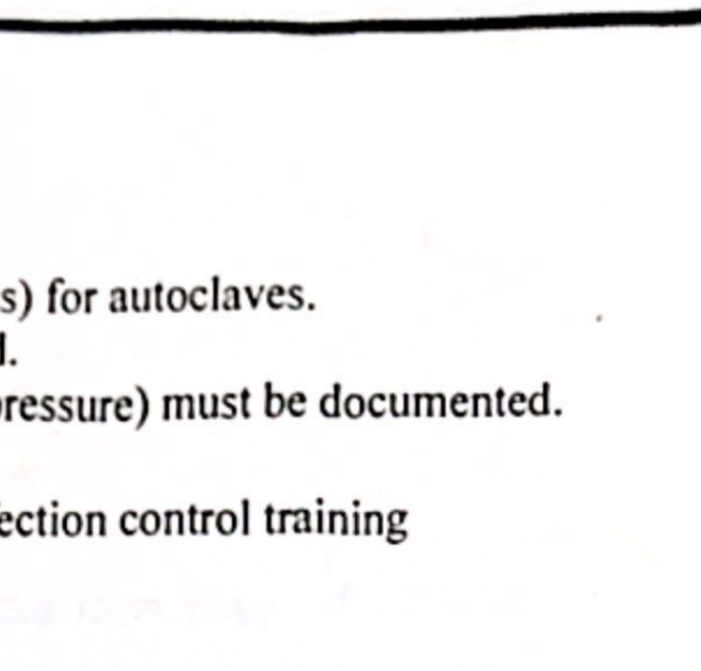
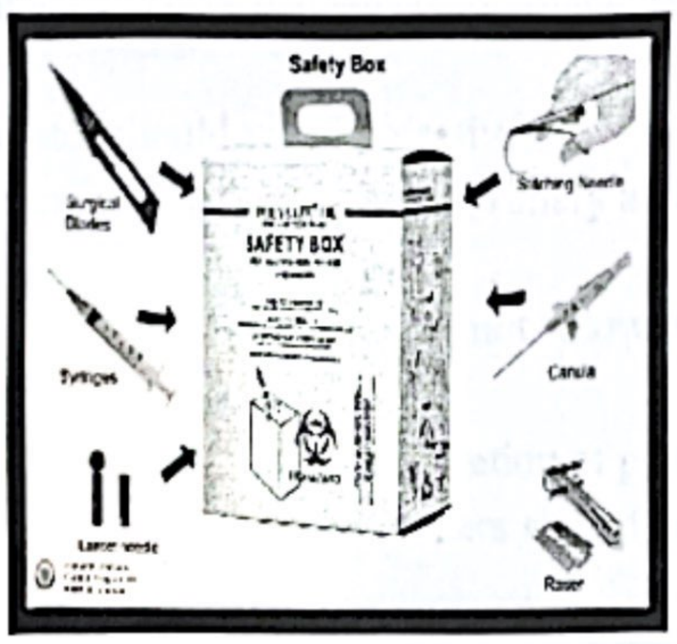
- **Biological Indicators:** Weekly spore tests (Bacillus stearothermophilus) for autoclaves.
- **Chemical Indicators:** Pouches with colour coded indicators to be used.
- **Physical Indicators:** Autoclave cycle parameters (time, temperature, pressure) must be documented.

Regular Training: All staff handling instruments must receive infection control training

16. SOPS FOR HOSPITAL WASTE MANAGEMENT







(A) Hospital Waste Segregation

1. Segregation is the responsibility of the person who produces the waste.
2. Segregation should be done at the place of waste generation.
3. Waste should be segregated in color coded containers.
4. Sharps should be discarded in sharp boxers.
5. All bags containing risk waste should be labelled.
6. Written SOPs for segregation should be pasted at the point of waste generation.

(B) Hospital Waste Collection

1. Separate Register should be maintained at the site of waste generation to signifythe amount of waste generated and time of waste collection.
2. Waste handlers should make sure that waste bags are tightly sealed when they are ¾ filled.
3. Waste should be removed from site twice a day or as per need.
4. Waste collection plan should be followed in true spirit.

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(C) Hospital Waste Transportation

1. Healthcare waste should be transported in special wheeled trolleys.
2. Waste handlers for transportation should wear protective clothing.
3. All waste bags should be sealed and protected during transportation.
4. Transportation of risk waste should be by the shortest route from place of generation to place of storage / disposal.

(D) Hospital Care Waste Storage

1. Storage site for Health Care Waste should be designated with in the facility.
2. Storage facility should be sealed and protected from rodents and scavengers.
3. Storage facility should preferably be air conditioned
4. Waste should not be stored for more than 24 hrs in summer and 48 hrs in winter.
5. Storage area should be washed twice weekly

(E) Health Care Waste Disposal / Incineration

1- Risk waste should be stored in the storage room before incineration.
2- Incinerator should be started at such time that sufficient time is available for allthe waste to be incinerated.
3- Waste handlers at the incinerator should wear protective clothing / gloves.
4- Waste handles should make sure that temperature of primary and secondarychambers are achieved during incineration.
5- During incineration, incinerator supervisor should not allow the smoke emissionsand take appropriate steps accordingly.
6- Incinerator should be properly shut down after completion of process.
7- Hot water containing non-hazardous particulate matters should be drained out ondaily basis.
8- Incinerator should be cleaned daily.

Waste collection & Segregation

Collection and segregation is done as follows:-

Waste containers

Color of Container	Type of waste	Final Disposal
Yellow Bags/Bin	Disposal of used glass ware.	Incineration
Red Bags	Infectious waste dressings, all clinical waste)	Incineration
Blue Bags	Non-infectious waste (papers, packaging, foodwaste).	Contractor

1- Blood bags should not be incinerated. They must be carefully handled and transported to final disposal by autoclaving. (Incineration of bags produce chemicals harmful to our ozone layer).
2- Waste from non-disposal apparatus, i.e. suction bottles must be disinfected and flushed away in the following way.
3- Household bleach is added to the collection vessel so that the bleach marks 10% to 15% of the final

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volume. Allow a contact time of at least 30 minutes.

4- Carefully discharge the mixture to the sanitary sewer by way of the lab sink, then thoroughly rinse down the sink with water. Splash goggles, gloves and a lab coat should beworn before handling

Closure and handling

Disposal: Ash should be disposed off properly into municipal container for final disposal inthe landfill.

The plastic bags should be secured in a foot operated lidded the bags are sealed when three-quarters full. Lighter weight bags may be secured by taping the neck, while heavy bags require a purpose made plastic tie or closure. Staples must not be used.

The bags should be labeled;

1- By writing on them with a suitable permanent maker or Typing by label with the name of department concerned clearly identified on it.
2- Waste handler should wear protective clothing (Rubber Gloves, Long Rubber boots, facemask & Jackets) when handling waste bags.
3- The Bags should be handled by neck only & kept upright. To avoid injuries, hand shouldnot be put underneath the waste bag lifting.

Waste Transportation

1- Transportation of waste to the disposal site is the responsibility of the sanitary incharge.
2- Waste will be removed from the clinical areas daily according to the following scheduleor more frequently if necessary.
3- Waste generated during morning time till 1:30 pm
4- Waste generated during evening and night time till 7:30 am (next day)
5- For proper collection of the waste, sanitary worker should wear protective clothing likeapron, rubber gloves, long rubber shoes and mask.
6- The waste will be transported through trolleys to the storage room. These trolleys will notbe used for any other purpose and should be cleaned regularly.

Waste Storage

1- Waste is stored in the storage room near the incinerator, which must be secured against unauthorized access to persons, pests or rodents.
2- Waste is weighed to know that how much waste is generated per day per each ward.
3- Waste is not stored for more than two days.
4- Waste bags should be stored in a neat fashion to maintain safe handling procedures.
5- The area should be cleaned when necessary and kept dry.

Incineration

1- Incineration is the responsibility of the company contractor. It is done on daily basis.MOU is signed with VSES at G-6.We outsource the waste product for incineration.
2- Before incineration proper amount of waste is stored in the waste room so that wholeprocess be completed within 2-3 hrs.
3- The time duration of one cycle should be known.
4- During incineration the gases emission from the chimney should be noted down.
5- After completion of the whole process properly, shut down procedure should be done.
6- The hotwater containing non-hazardous particulate matters is drained out on daily basis.
7- For the proper hospital waste management it is very necessary to analyze the gasesreleased from the chimney periodically.

unauthorized access to persons, pests or rodents.

Removal of Ash: Next day before starting the incinerator ash should be removed

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17. STANDARD PRECAUTIONS OF GENERAL CLEANLINESS IN HOSPITAL

Responsibility: Manager Admin/ sanitary worker supervisors.

All corridors, patient waiting areas, stairs, offices etc. will be cleaned as under:

1. **Conventional Broom or Conventional Mop** will be used in OT
2. All floors must be cleaned at least twice a day.
3. Floor must be cleaned at 07AM and 06 PM.
4. Use phenyl as disinfectant.
5. Blood stains, secretions or vomits must first be removed with detergent and thencleaned with 1/10 hypochlorite.
6. Pest Control Measures

Cleaners and Cleaning Equipment:

a. Management of Cleaning Equipment:

i. Broom used MUST be washed with soap and then soaked in phenyl after everycleaning session.

ii. Shoes and gloves of sweepers MUST be washed daily with pyodine scrub andimmediately if they are soaked with patient blood and or secretions.

iii. Stored at a specified place in the ward.

b. Sanitary workers.

i. All sanitary workers MUST wear the hospital uniform.

ii. sanitary workers uniform shall be changed twice a week and will be sent to laundry.

iii. All sanitary workers MUST have a morning bath.

iv. All sanitary workers MUST have their hands washed by pyodine under supervision ofsister I/C Ward or a person designated by her.

18. STANDARD INFECTION CONTROL PRECAUTIONS IN COOK HOUSE

Responsibility: Cafeteria management team (CMT)

Following rules of infection control apply in Cookhouse of RIHS

1. Clean floor at least twice a day with detergent soaked mop.
2. Whole staff **must** wash their hand with soap first early in the morning, whenever they getdirty during work and after every visit to the toilet.
3. Whole staff shall change their personal clothes at the start of duty and wear uniform.
4. Whole staff **must** wear a decent looking cap, which covers the hair completely.

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5. **General Hygiene:** All cookhouse staff **must** cut and clean nails, hair on weekly basis and general body hygiene on daily basis.
6. Status of general body hygiene of cookhouse staff is recorded in a register.
7. Whole staff **must** get a monthly stool RE test.
8. Record of stool RE exam is kept in personal hygiene register.
9. Staff having cough, running nose, or discharging wounds are **not** allowed in the cafeteria.

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19. PREVENTION AND CONTROL OF METHICILLIN RESISTANT STAPHYLOCOCCUS AUREUS (MRSA)

Purpose

1) Provide a safe environment for all patients, health care staff and visitors.
2) To protect patients from colonization or infection with MRSA.
3) To ensure patients who are identified as MRSA colonized/infected are managed safely andeffectively.

Definition of MRSA:

MRSA is an abbreviation for Methicillin Resistant Staphylococcus Aureus type of bacteriathat has become resistant to many antibiotics, Including methicillin penicillin, amoxicillin,and Cephalosporin.

Factors that make it easier for MRSA to be transmitted:

1- Crowding
2- Contact (frequent skin-to-skin)
3- Compromised skin (cuts/scrapes) 4- Contaminated items and surfaces5- Lack of cleanliness

Key Points:

(1) Hand hygiene is the most important measure in preventing the spread of MRSA.
(2) Patients who present as an increased risk of spreading MRSA will need to be managed in Isolation and the room cleaned appropriately.
Hospital staff, patients and hospital visitors can take simple hygiene measures to help preventthe spread of MRSA and stop infection.

PROCEDURE

Informed Infection Control Department

Send Notification form in Infection Control Department.

Patient Placement

Place the patient in a private room, if possible. When a private room is not available, place the patient in a room with a patient who is colonized or infected with the same organism, butdose not have any other infection (cohosting). Another option is to place an infected patient with a patient who does not have risk factors for infection.

Apply Indicators

Contact precautions, barrier Nursing

Hand Washing

Between patient contacts is the key factor in controlling and preventing the spread of infection. Taps can be turned off using a disposable paper towel to avoid recontamination andto enable adequate hand washing.

Gloves

(Latex clean) should be worn for direct contact with patient. Hands should be washed afterremoval of gloves.

Mask

Should be worn to prevent respiratory transmission and nasal colonization during procedurescausing exposure to respiratory secretions.

Gowning

Wear a gown that is appropriate to the task, to protect skin and prevent soiling or contamination of clothing during procedures and patient -care activities when contact withblood and

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fluids, secretions or excretions is anticipated.

Yellow infection Control Stickers: Should be pasted prominently on patient's file.

Avoid: Exposure to infected blood and body fluids.

Aseptic technique: To be used when dealing with wounds and for other asepticprocedures.

Appropriate handling of laundry

Handle, transport, and process used linen to avoid contamination of air, surfaces andpersons.

Terminal cleaning

- Discharge of a positive MRSA patient is vital to control the spread of these organisms.
- All disposable items should be discarded.
- All re-useable items e.g. curtains, bed sheets, patient gown, towel; pillow cover and comforter should be double bagged and properly labelled e.g MRSA or multidrug-resistantorganisms (MDROs) sent to Laundry .
- All surfaces and non-disposable equipment should be washed with detergent and water.
- Detergent and water will destroy approximately 90% of micro-organisms.
- All surfaces should be wiped over with a disinfectant solution and allowed to dry.

20. Emergency Infection Control Procedures

- **Outbreak Response Plan:** In the case of an infectious outbreak, immediate measures should be taken to contain and eliminate the threat.
- **Quarantine and Isolation:** Patients suspected of carrying contagious diseases should be isolated and treated with heightened precautions.
- **Communication Plan:** All infection control breaches should be reported to the infection control officer and corrective measures should be implemented.

21. Spillage Management Protocol Rawal Dental Hospital

General Guidelines for Spill Management

- **All spills should be cleaned immediately** to prevent contamination and accidents.
- **Appropriate personal protective equipment (PPE)** must be worn before handling any spill.
- The area should be **isolated**, and unauthorized personnel must be kept away.

Types of Spills and Response Procedures

A. Biological Spills (Blood, Saliva, Body Fluids)

- **Step 1:** Wear gloves, mask, face shield, and a disposable gown.
- **Step 2:** Cover the spill with absorbent paper/tissue or spill kit granules.
- **Step 3:** Apply **1% sodium hypochlorite** (bleach) and leave for **10 minutes.**
- **Step 4:** Wipe up the spill with disposable towels and place them in a **biohazard waste bag.**
- **Step 5:** Clean the area with detergent and water.
- **Step 6:** Dispose of PPE and wash hands thoroughly.

B. Chemical Spills (Disinfectants, Mercury, Acids, Solvents)

- **Step 1:** Alert nearby staff and evacuate if necessary.
- **Step 2:** Identify the chemical
- **Step 3:** Wear PPE (gloves, goggles, mask, apron).
- **Step 4:** Contain the spill using absorbent materials (e.g., sand or chemical spill pads).

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- **Step 5:** Neutralize acids with sodium bicarbonate (if applicable).
- **Step 6:** Dispose of waste as per hazardous waste guidelines.
- **Step 7:** Ventilate the area and wash hands after cleanup.

C. Mercury Spills

- **Step 1:** Wear gloves and a mask to prevent inhalation.
- **Step 2:** Use a mercury spill kit (available in the laboratory).
- **Step 3:** Collect mercury droplets using a suction pump or damp paper towel.
- **Step 4:** Store collected mercury in a **sealed container** for proper disposal.
- **Step 5:** Report the spill to the safety officer immediately.

D. General Spills (Water, Non-Hazardous Liquids)

- **Step 1:** Mark the area with a caution sign.
- **Step 2:** Use an absorbent mop or cloth to clean the spill.
- **Step 3:** Ensure the floor is dry to prevent slips and falls.

Reporting and Documentation

- All major spills (biological, chemical, or mercury) must be **reported** to the Infection Control Officer or Safety Officer.
- A **Spillage Incident Report Form** should be completed, documenting:
  - Type and location of spill.
  - Response actions taken.
  - Any injuries or exposures.
  - Corrective actions for prevention.

22. Education and Training

Workshops and Seminars: Regular training sessions should be conducted to educate students and staff on updated infection control measures.

23. Monitoring and Compliance

Routine Inspections: Infection control officers should conduct regular inspections to ensure adherence to protocols.

Adhering to infection control protocols is essential in maintaining a safe and effective learning and treatment environment.

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