

Department:	Maternal Intensive Care Unit		
Document:	Departmental Policy and Procedure		
Title:	Infection Control in Maternal Intensive Care Unit		
Applies To:	All Maternity Intensive Care Unit Staff		
Preparation Date:	January 12, 2025	Index No:	ICU-DPP-007
Approval Date:	January 26, 2025	Version:	2
Effective Date:	February 26, 2025	Replacement No.:	ICU-DPP-007(1)
Review Date:	February 26, 2028	No. of Pages:	5

1. PURPOSE:

- 1.1 To prevent the cross-transmission of infection between patients, Health Care Worker and visitors in MICU.
- 1.2 To reduce morbidity and mortality of patients and personnel by preventing and/or reducing exposure to infectious agents.

2. DEFINITIONS:

- 2.1 **Infection** – the transmission of microorganisms into a host after evading or overcoming defence mechanisms, resulting in the organism's proliferation and invasion within host tissue(s).

3. POLICY:

- 3.1 Adequate precautions should be taken by all MICU staff, based on each patient's diagnosis/ condition, to protect both patients and their visitors from exposure to any infectious contaminates.
- 3.2 Personnel who are at risk, due to immunosuppression or other communicable infections, should not have direct contact with MICU patients.
- 3.3 Visitors with a noticeable illness (common colds, flu, etc.) should be restricted from the patient care areas.
- 3.4 Food or drink other than patient food should not be allowed inside the MICU.
- 3.5 Staff should notify his/her supervisor when exposure to blood/body fluid occurs.
- 3.6 Staff compliance to Infection Control (IC) practices should be monitored by Infection Control Practitioner.
- 3.7 Any significant findings or trends are reported to the Infection Control Head, MICU head Nurse and Head of MICU by the Infection Control Practitioner.

4. PROCEDURE:

- 4.1 Measures for Prevention and Control of Infections in MICU:
 - 4.1.1 Health Standards for Personnel
 - 4.1.1.1 Personnel who are at risk, due to immunosuppression or other communicable infections, should not have direct contact with MICU patients.
 - 4.1.1.2 Nursing staff whose current health conditions are unable to utilize the standard precautions e.g. rash on hands and cannot use gloves, will be evaluated by the Employee Health Clinic/ Healthcare Services.
 - 4.1.1.3 The MICU Head Nurse will be responsible for advising personnel of exposure to airborne pathogens, as well as obtaining information requested from Infection Control Representative.
 - 4.1.1.4 Each employee is responsible to notify his/her supervisor when exposure to blood/ blood fluid occurs.
 - 4.1.1.5 MICU personnel who have concerns or questions regarding the risk of acquiring infections or exposure to disease shall contact the Employee Health clinic/ Health Care Services.

- 4.1.2 Standard Precautions:
 - 4.1.2.1 Hand Hygiene: Wash Hands before initiating contact with patients, and when body substances have soiled and hands. Hand are to be washed with soap or hospital approved antiseptic agent, running water and friction or 10 seconds, paying particular attention to around and under fingernails and between the fingers. Hands should be washed thoroughly and immediately if they accidentally become contaminated.
 - 4.1.2.2 Gloves should be changed between each patient and/or each task involving blood and/or body substances.
 - 4.1.2.3 Protective barrier gown is worn whenever contamination of clothing or arms with blood or body substances is anticipated.
 - 4.1.2.4 Face masks shield and/or more eye protection devices are to be worn during tasks where splashing, splattering or spraying with body substance is anticipated, i.e., line placement, suctioning, etc.
 - 4.1.2.5 Sharps such as scalpels and needles will be disposed of in the approved sharps container.
- 4.2 Management if Patient with Resistant Organisms
 - 4.2.1 In the Intensive Care units, when multiple drug resistant bacteria are cultured from any site, the need for isolation/ transfer will be evaluated in consultation with the infection Control Specialist and/or the physician. The following organism are examples:
 - 4.2.1.1 Gram negative bacilli resistant to Gentamycin, Amikacin or Tobramycin.
 - 4.2.1.2 Methicillin (Oxacillin) Resistant Staphylococcus Aureus (MRSA)
 - 4.2.1.3 Steptococcus pneumonia resistant to penicillin.
 - 4.2.1.4 Pan-resistant organism
 - 4.2.2 Precautions:
 - 4.2.2.1 Standard Precautions (including the use of gloves) should be used for ll patient contact.
 - 4.2.2.2 Contact Precaution should be used in care of patient with resistant organisms.
 - 4.2.2.3 Precautions will be maintained until:
 - 4.2.2.3.1 Two negative cultures are obtained from the original site at least 72 hours apart and following completion of effective therapy (negative culture is defined as a report of "no growth", "normal flora" an organism which does not confirm to any of the preceding definitions).
 - 4.2.2.3.2 If unable to obtain culture: continue precautions at least one week after discontinuation of all antibiotics.
 - 4.2.2.3.3 If not treated: Two negative culture are obtained from the original site at least 72 hours apart, at least one week following collection date of original isolate.
 - 4.2.2.3.4 If unable to obtain culture and not treated:
 - 4.2.2.3.4.1 One week after resolution of clinical signs of infection.
 - 4.2.2.3.4.2 Nursing personnel should document in the patient's plan of care that standard precautions & contact precautions are in use for patients with resistant organism.
 - 4.2.2.3.4.3 When a resistant organism is isolated from any site, in two or more patients of the same unit, the Infection Control Department will be consulted and an epidemiological investigation will be initiated, if indicated.
- 4.3 Management of Outbreak
 - 4.3.1 Cluster epidemiology will become the immediate top priority at any time an unexpected occurrence of frequency of infection becomes evident.
 - 4.3.2 The nurse is to report infection clusters or unusual patterns (especially viral or parasitic infection).
 - 4.3.3 Indicators for such increased incidence may include reports of a particular organism, service, site or unit.
 - 4.3.4 All infections which fit the previously mentioned criteria will be reported to the Infection Control Specialist.

- 4.3.5 The outbreak investigations are to be directed by Infection Control staff with cooperation of Nursing staff.
- 4.3.6 The type of control measures and their duration (e.g., closure of unit of closure to new admission) will be determined by the Chairperson of the Infection Control Committee.
- 4.3.7 If diversion of new admits is required, they will be located in an Intensive Care environment which can best meet their treatment needs.
- 4.3.8 The decision to close a unit or limit admission in the event of an outbreak will be made by:
 - 4.3.8.1 Chairperson, Infection Control Committee.
 - 4.3.8.2 Head of the Department/Unit.
- 4.4 Assignment of nursing personnel
 - 4.4.1 Nursing personnel will be given patient care assignments which minimize the risk of transmission of infectious organism, if at all possible. In the event such assignments are not possible, patients will be grouped, based on infectious agents/ colonizing organisms to minimize the spread of accidental transmission.
- 4.5 Isolation Precautions for Patients
 - 4.5.1 If nursing personnel suspects a patient requires isolation precautions:
 - 4.5.1.1 Contact the MICU physician.
 - 4.5.1.2 Obtain confirmation of diagnosis.
 - 4.5.1.3 Initiate isolation precautions, as indicated.
 - 4.5.1.4 Document in patient's medical record.
 - 4.5.1.5 Evaluate the document patient's response to intervention.
 - 4.5.1.6 Call Infection Control Specialist to assist with special needs to required.
 - 4.5.2 Physician should document patient's diagnosis of a defined airborne disease in patient's medical record.
 - 4.5.3 Isolation/ Private Room
 - 4.5.3.1 An isolation/ private room can reduce the possibility of transmission of infectious agents. The Type of infection, Patient's Clinical Manifestation; infectious source and mode of transmission are factors to be considered when determining the need for the need for a private room.
 - 4.5.3.2 Cardiac/Medical/Surgical intensive care patients requiring airborne precautions should be placed in a private room with a door.
 - 4.5.3.3 Isolation/ Private rooms should be provided when soiling with body substances is excessive.
 - 4.5.3.4 Room determination shall be made without regard to diagnosis.
 - 4.5.3.5 If the unit cannot follow special precautions for any reason the infection Control Specialist will be notified.
- 4.6 Transport of Patients with infectious Disease
 - 4.6.1 Communicate with the receiving department about the patient current infectious status when a patient with an infectious disease requires transport out of the MICU.
 - 4.6.2 During transport all non-essential personnel should not have contact with the patient.
 - 4.6.3 When preparing the patient for transport, the staff should create a closed system as much as possible.
 - 4.6.4 Consideration should be given for discontinuation of any equipment not necessary for the patient's short term care needs.
 - 4.6.5 Invasive lines should be secured to minimize the potential for body substance contamination.
 - 4.6.6 Intubated patients requiring oxygen should be transported in a way which minimizes the potential for respiratory contamination.
 - 4.6.7 Non-intubated patients requiring respiratory isolation will wear a mask all the time when off their unit or during transport.
- 4.7 Infection Control Guidelines for Visitors
 - 4.7.1 Nursing personnel are responsible for ensuring that adequate precautions are taken, based on each patient's diagnosis/ condition, to protect both the patient and their visitors from exposure to any infectious contaminates.

- 4.7.2 Nursing personnel should restrict visitors with a noticeable illness (Common cold, flu, Etc.) in the patient care areas.
- 4.7.3 Staff should evaluate the appropriateness of the visit to prevent patients from exposure to communicable disease.
- 4.7.4 Staff will inform a visitor when exposure would potentially affect the patient's condition adversely and request they leave the area.
- 4.7.5 Traffic Control:
 - 4.7.5.1 All visitors should enter/exit a unit from the main entrance following the hospital/ unit visitor protocol.
 - 4.7.5.2 In the unit, their contact shall be limited to whomever they have come to see.
 - 4.7.5.3 No visitors will be allowed access to any other patient area or where medication, intravenous or wound care supplied is prepared or stored.
- 4.8 Environmental Hygiene
 - 4.8.1 The patient care areas should be cleaned daily, upon patient discharge & as needed utilizing hospital approved disinfectant; however frequency & cleaning schedule may change according to the housekeeping policy.
 - 4.8.2 Any instrument which has been in contact with oral mucosa (laryngoscope blades and stylet) shall be confined and contained at the point of use.
 - 4.8.3 Equipment requiring sterilization and disinfection is the responsibility of Central Service Sterilization Department (CSSD).
 - 4.8.4 Crash Cart – the inside of the crash cart should be cleaned periodically and supplies replaced when out-dated. The above items will be cleaned with a hospital approved solution.
 - 4.8.5 All scissors, hemostats and similar instruments should be placed in clear plastic bags with a hazardous label & to be transported in a tray from dirty area.
 - 4.8.6 Refrigerator – MICU staff will contact. Housekeeping Department to schedule a time to refrigerator to be cleaned.
 - 4.8.6.1 MICU staff will remove all items from the medication refrigerator and wipe up any spills.
 - 4.8.6.2 Housekeeping staff will then clean all surface and defrost the freezer.
 - 4.8.7 MICU staff is responsible for cleaning/ rinsing items such as measuring cups and bedpans between their uses.
 - 4.8.8 Food or drink other than patient food items will be kept outside the MICU.
 - 4.8.9 General Equipment – items including tables, chairs, gurneys, scales, slider boards and monitor cables should be cleaned as soon as possible with approved solution and by appropriate staff.
 - 4.8.10 Patient Discharge:
 - 4.8.10.1 MICU staff will remove all items such as linen, patient care supplies, etc., which may have been contaminated by body substances.
 - 4.8.10.2 Monitor cables and lead wires will be cleaned by MICU staff, with an approved solution.
 - 4.8.10.3 Infusion pumps or equipment used at the bedside will be removed, obvious spills, wiped clean and the appropriate service area contacted for disinfection.
 - 4.8.10.4 IV poles will be removed from the bedside and placed in the dirty utility room for cleaning.
 - 4.8.10.5 Housekeeping staff will clean the area and prepare for the next admission.
- 4.9 Education and Training:
 - 4.9.1 The Head Nurse of the unit is responsible for assessing the infection control education needs of personnel.
 - 4.9.2 Compliance to stated Infection Control practices will be monitored and documented by the infection control practitioner.

5. MATERIAL AND EQUIPMENT:

- 5.1 Mask
- 5.2 Gown

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- 5.1 Mask
- 5.2 Gown
- 5.3 Cap
- 5.4 Soap
- 5.5 Alcohol Hand Scrub

6. RESPONSIBILITIES:

- 6.1 Physician
- 6.2 Nurse




7. APPENDICES:

N/A

8. REFERENCES:

- 8.1 Guidelines for Adult ICU Care/ Ministry of Health, General Directorate of Health Centers- Riyadh, 2013

9. APPROVALS:

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