



HEALTH HOLDING

HAFER ALBATIN HEALTH
CLUSTER
MATERNITY AND
CHILDREN HOSPITAL

| | | | |
|--------------------------|---|-------------------------|----------------|
| Department: | Infection Prevention and Control Department | | |
| Document: | Departmental Policy and Procedure | | |
| Title: | Pediatric Intensive Care Unit (PICU) Infection Control Guidelines | | |
| Applies To: | PICU Department | | |
| Preparation Date: | December 02, 2024 | Index No: | IPC-DPP-072 |
| Approval Date: | December 16, 2024 | Version : | 2 |
| Effective Date: | January 16, 2025 | Replacement No.: | IPC-DPP-072(1) |
| Review Date: | January 16, 2028 | No. of Pages: | 5 |

1. PURPOSE:

- 1.1 To prevent the cross-transmission of infection between patients, Health Care worker and visitors in PICU.

2. DEFINITIONS:

- 2.1 Pediatric ICU is a unit or department staffed and equipped with critical care technologies such as monitors, ventilators and life support machines to provide appropriate care to critically ill patients.

3. POLICY:

- 3.1 Standard precautions should be taken by all PICU staff, based on each patient's diagnosis/condition, to protect both patients and their visitors from exposure to any infectious contaminants.
- 3.2 Routine screening for all PICU newly admitted or transferred patients to identify those who require isolation precautions. MDROs screening must be done from specific body sites known to be associated with colonization by a specific microorganisms such as:
 - 3.2.1 Methicillin-Resistant Staphylococcus Aureus (MRSA): Nares, axilla, groins area.
 - 3.2.2 Vancomycin-Resistant Enterococcus (VRE): Rectal swab or perianal swab, Wounds and catheter exit sites.
 - 3.2.3 Carbapenem-Resistant Enterobacteriaceae (CRE): Stool sample or rectal swab.
 - 3.2.4 Extended Spectrum Beta-Lactamase (ESBL): Stool sample or rectal swab.
 - 3.2.5 Acinetobacter: Nostrils, pharynx and skin surface
 - 3.2.6 Candida Auris: bilateral axilla and groin.
 - 3.2.7 Other laboratory test: Blood culture, blood group, CBC, CRP and Chemistry or other laboratory investigation as per patient condition.
- 3.3 Personnel who are at risk, due to immunosuppression or other communicable infections, should not have direct contact with PICU patients.
- 3.4 Visitors with a noticeable illness (common colds, flu, etc.) should be restricted from the patient care areas.
- 3.5 Food or drink other than patient food should not be allowed inside the PICU
- 3.6 Staff compliance to Infection Control (IC) practices should be monitored by Infection Control Practitioner or IPC link staff.

4. PROCEDURE:

- 4.1 Health Standards for Personnel
 - 4.1.1 Personnel who are at risk, due to immunosuppression or other communicable infections, should not have direct contact with PICU patients
 - 4.1.2 Nursing staff who's 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/Health Care Services.

- 4.1.3 The PICU Head Nurse will be responsible for advising personnel of exposure to airborne pathogens, as well as obtaining information requested from Infection Control Representative.
- 4.1.4 PICU 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.
- 4.2 Standard Precautions:
 - 4.2.1 Hand Hygiene: Wash hands before initiating contact with patients, and when body substances have soiled the hands. Hands must be washed with soap or hospital-approved antiseptic agent, running water and friction for 10 seconds, paying particular attention around and under fingernails and between the fingers. Hands should be washed thoroughly and immediately if they accidentally become contaminated.
 - 4.2.2 Gloves should be changed between each patient and/or each task involving blood and/or body substances.
 - 4.2.3 Protective barrier gown is worn whenever contamination of clothing or arms with blood or body substances is anticipated.
 - 4.2.4 Face mask 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.
 - 4.2.5 Sharps such as scalpels and needles will be disposed of in the approved sharps container.
- 4.3 Management if Patient with Resistant Organisms: 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.
- 4.4 Precautions:
 - 4.4.1 Standard Precautions (including the use of gloves) should be used for patient contact.
 - 4.4.2 Contact Precaution should be used in care of patient with resistant organisms.
 - 4.4.3 Precautions will be maintained until:
 - 4.4.3.1 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.)
 - 4.4.3.2 If unable to obtain culture: continue precautions at least once a week after discontinuation of all antibiotics.
 - 4.4.3.3 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.
 - 4.4.3.4 If unable to obtain culture and not treated:
 - 4.4.3.4.1 One week after resolution of clinical signs of infection.
 - 4.4.3.4.2 Nursing personnel should document in the patient's plan of care that standard precautions and contact precautions are in use for patients with resistant organism.
 - 4.4.3.4.3 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.
- 4.5 Management of Outbreak: See policy no.121 Outbreak Management
- 4.6 Assignment of Nursing Personnel: 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.
- 4.7 Isolation Precautions for Patients:
 - 4.7.1 If nursing personnel suspects a patient requires isolation precautions:
 - 4.7.1.1 Contact the PICU physician.
 - 4.7.1.2 Obtain confirmation of diagnosis.
 - 4.7.1.3 Initiate isolation precautions, as indicated.
 - 4.7.1.4 Document in patient's medical record.
 - 4.7.1.5 Evaluate the document patient's response to intervention.

- 4.7.2 Physician should document patient's diagnosis of a defined airborne disease in patient's medical record.
- 4.7.3 Medication considerations; See policy no. 16 for aseptic technique
- 4.7.4 Isolation/Private Room
 - 4.7.4.1 The type of infection, patient's clinical manifestation; infectious source and mode of transmission are factors to be considered when determining the need for a private room.
 - 4.7.4.2 Isolation/Private rooms should be provided when soiling with body substances is excessive.
 - 4.7.4.3 Room determination shall be made without regard to diagnosis.
- 4.7.5 Single Rooms
 - 4.7.5.1 Whenever possible, patients with infections should be moved to either a side-room or cohorted in an adjoining area. If patients have to remain on an open ward area this decision should be made in discussion with the Infection Control Team where possible. There is a microbiology consultant on call for support if required. Decisions should be documented in the patient notes alongside discourse with next of kin regarding their child's infection.
 - 4.7.5.2 If no single rooms are available discuss new referrals to PICU requiring isolation with the PICU Consultant for the day.
- 4.7.6 Transport of Patients with Infectious Disease
 - 4.7.6.1 Communicate with the receiving department about the patient's current infectious status when a patient with an infectious disease requires transport out of the PICU.
 - 4.7.6.2 During transport, all non-essential personnel should not have contact with the patient.
 - 4.7.6.3 When preparing the patient for transport, the staff should create a closed system as much as possible.
 - 4.7.6.4 Invasive lines should be secured to minimize the potential for body substance contamination.
 - 4.7.6.5 Intubated patients requiring oxygen should be transported in a way which minimizes the potential for respiratory contamination.
 - 4.7.6.6 Non-intubated patients requiring respiratory isolation will wear a mask all the time when off their unit or during transport.
- 4.7.7 Infection Control Guidelines for Visitors
 - 4.7.7.1 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 contaminants.
 - 4.7.7.2 Parents and visitors should be asked to wear aprons and decontaminate their hands before when entering and leaving the bed areas. They should wear aprons if carrying out cares. Parents and relatives of other patients on the ward should be discouraged from visiting at other patients' bed areas.
 - 4.7.7.3 Parents, visitors and staff attending any patient presenting with diarrhoea must use soap and water for hand hygiene as the gel is less effective for some of the diarrhoeal infections(see hand hygiene policy).
 - 4.7.7.4 Nursing personnel should restrict visitors with a noticeable illness (Common cold, flu, etc.) in the patient care areas.
 - 4.7.7.5 Staff should evaluate the appropriateness of the visit to prevent patients from exposure to communicable disease.
 - 4.7.7.6 Staff will inform a visitor when exposure would potentially affect the patient's condition adversely and request they leave the area.
 - 4.7.7.7 Traffic Control:
 - 4.7.7.7.1 All visitors should enter/exit a unit from the main entrance following the hospital/unit visitor protocol.

- 4.7.7.7.2 In the unit, their contact shall be limited to whomever they have come to see.
- 4.7.7.7.3 No visitors will be allowed access to any other patient area or where medication, intravenous or wound care supplied is prepared or stored.
- 4.7.8 Environmental Hygiene:
 - 4.7.8.1 The patient care areas should be cleaned daily, upon patient discharge and as needed, utilizing hospital approved disinfectant; however frequency and cleaning schedule may change according to the housekeeping policy.
 - 4.7.8.2 Any instrument which has been in contact with oral mucosa (laryngoscope blades and stylet) shall be confined and contained at the point of use.
 - 4.7.8.3 Equipment requiring sterilization and disinfection is the responsibility of Central Service Sterilization Department (CSSD).
 - 4.7.8.4 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,
 - 4.7.8.5 All scissors, hemostats and similar instruments should be placed in clear plastic bags with a hazardous label and to be transported in a tray from dirty area.
 - 4.7.8.6 PICU staff is responsible for cleaning/rinsing each items such as measuring cups, an bedpans between their uses.
 - 4.7.8.7 Food or drink other than the patients food items will be kept outside PICU.
 - 4.7.8.8 General Equipment - items including tables, chairs, gurneys, scales and slider boards and monitor cables should be cleaned as soon as possible with approved solution and by appropriate staff.
- 4.7.9 Patient Discharge:
 - 4.7.9.1 PICU staff will remove all items such as linen, patient care supplies, etc., which may have been contaminated by body substances,
 - 4.7.9.2 Monitor cables and lead wires will be cleaned by PICU staff, with an approved solution
 - 4.7.9.3 Infusion pumps or equipment used at the bedside will be removed, obvious spills, wiped clean and the appropriate service area contacted for disinfection.
 - 4.7.9.4 IV poles will be removed from the bedside and placed in the dirty utility room for cleaning.
 - 4.7.9.5 Housekeeping staff will clean the area and prepare for the next admission
- 4.7.10 Education and Training
 - 4.7.10.1 The Head Nurse of the unit is responsible for assessing the infection control education needs of personnel.
 - 4.7.10.2 Compliance to stated Infection Control practices will be monitored and documented by the Infection Control Practitioner.

5. MATERIALS AND EQUIPMENT:

- 5.1 **Forms and Records:**
 - 5.1.1 N/A
- 5.2 **Materials and Equipment**
 - 5.2.1 N/A

6. RESPONSIBILITIES:

- 6.1 Health care workers in PICU

7. APPENDICES:

- 7.1 N/A

8. REFERENCES:

8.1 PICU Infection Control Guidelines / 2016/12/1infection-Control-Guideline-PICU-2010.pdf

9. APPROVALS:

| | Name | Title | Signature | Date |
|--------------|---------------------------------|--|---|-------------------|
| Prepared by: | Ms. Marilou C. Magallano | IPC Practitioner |  | December 02, 2024 |
| Prepared by: | Ms. Asmaa Dahawi Al Shammari | PICU Head Nurse |  | December 02, 2024 |
| Reviewed by: | Dr. Fahad Obeid Al Shammari | Head of PICU/Pediatrics Department |  | December 03, 2024 |
| Reviewed by: | Ms. Awatif Hamoud Al Harbi | IPC Director |  | December 05, 2024 |
| Reviewed by: | Mr. Sabah Turayhib Al - Harbi | Director of Nursing |  | December 08, 2024 |
| Reviewed by: | Mr. Abdullellah Ayed Al Mutairi | QM & PS Director |  | December 10, 2024 |
| Reviewed by: | Dr. Tamer Mohamed Naguib | Medical Director |  | December 12, 2024 |
| Approved by: | Mr. Fahad Hazam Al - Shammari | Hospital Director & IPC Committee Chairman |  | December 16, 2024 |