PURPOSE:

To guide and implement infection control practices in ICU

SCOPE:

Intensive care unit

RESPONSIBILITY:

Intensivist/ Infection control nurse/ICU nurses

POLICY:

ICU shall follow infection control practices as per the laid down protocols /procedures

I.GENERAL PRACTICES:

A. A conscious-careful attitude must be incorporated into each patient care practice in these high-risk areas to reduce the risk of nosocomial colonization or infection.

B. While entering the ICU either the general footwear shall be removed and only the approved footwear shall be used inside.

C. Hand washing;

- WHO Guidelines on hand washing/hand rub to be strictly adhered to, as hand washing is the single most important practice to reduce the nosocomial infection risk.

- All individuals in the intensive care setting should practice hand hygiene appropriate to the task as given below.
- Alcohol based hand rubs shall be used before gloving for performing any invasive procedure on the patient.

- DO NOT use alcohol when the presence of spores (c. difficile, anthrax etc.) is known or suspected. In such cases wash hands vigorously with soap and water.

GUIDELINES FOR HAND WASH: SOAP AND WATER

- Before beginning work and before going home.
- Before direct patient contact.
- Before and after eating.
- After washroom (toilet).
- Before caring for neutropenic or severely immune suppressed patients.
- After contact with a patient's intact skin (eg taking BP, lifting a patient).
- After contact with inanimate objects, including medical equipment in the immediate vicinity of the patient.
- After removing gloves.
- Whenever hands are visibly soiled.
- Whenever hands are contaminated.
- When contact with Bacillus anthracis, c. difficile, or other spores is known or suspected.

GUIDELINES FOR USE OF HAND RUB -;

1. Wash hands using an antiseptic-containing product (or a waterless alcohol based product) before palpating, inserting, changing or dressing any peripheral venous or arterial intravascular catheter
2. Perform surgical scrub before placing a central venous or arterial catheter (lines that terminate in the heart or in a large blood vessel near the heart)

FUMIGATION/FOGGING

- Complete fumigation shall be done in the whole ICU per month or as & when required due to any contiguous patient admitted to ICU, Weekly once terminal cleaning with recommended solution.

SURVEILLANCE PROGRAM:

- Monthly swab culture from deferent places (5sets of samples)
- Every 6th months air velocity (particle count)
- Environmental c/s eg: Nurses uniforms, hand, nostrils- Monthly.
- MDRO cases need to Isolate as HIC manual.

II. ISOLATION / BARRIER NURSING PRACTICES

A. The barrier nursing practice shall be followed for the patient care. Patients shall be assessed individually to determine any infection that would require additional isolation precautions.

B. Personal Protective Equipment is available to all the staff in the ICU for the appropriate use.

III. INTRAVASCULAR DEVICE RELATED INFECTIONS

A. Surveillance

i. Palpate the catheter insertion site for tenderness daily through the intact dressing.

ii. Visually inspect the catheter insertion site if the patient develops tenderness at the insertion site, fever without obvious source, or symptoms of local of bloodstream infection.

iii. In patients who have large bulky dressings that prevent palpation or direct visualization of the catheter insertion site, remove the dressing (wearing gloves) and visually inspect the catheter site at least daily. If loose, damp or soiled, the dressing may need changing more frequently.

iv. The time and date of catheter insertion shall be noted down

B. Barrier Precautions During Catheter Insertion and Care

i. Wear clean gloves when inserting a peripheral venous or arterial catheter

ii. Wear maximum barrier protection, including sterile gowns, gloves, mask, and cap and use a large sterile drape when inserting a central line (arterial or venous).

C. Selection of Catheter Insertion Site

i. Weigh the risk and benefits of placing a device at a recommended site to reduce infectious complications against the risk of mechanical complications (e.g. pneumothorax, subclavian artery puncture, air embolism, catheter misplacement).

ii. Do not routinely use cut-down procedures as a method to insert catheters.

POLICY FOR CATHETER SITE

Prepared by:	Verified by:	Approved by:
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Microbiologist	Medical Director	Chief Executive Officer

Cutaneous antisepsis, catheter site dressing & catheter replacement shall be followed on a regular basis as per following guidelines

D. Catheter Site Care (Guidelines)

D.1 Cutaneous Antisepsis

i. Although the surface area for prepping is dependent on the size of the extremity, in adult patients, an area 2 to 4 inches in diameter is generally accepted for central lines.

ii. Cleanse the skin with chlorhexidene or chloraprep as first choice because of its residual effects; second choice, povidone iodine swab.70% alcohol may be used to prep for peripheral catheters.

iii. Chlorhexidine cannot be used on children less than two months of age.

iv. Do not palpate the insertion site after the skin has been cleansed with the antiseptic.

v. Do not routinely apply topical antimicrobial ointment to the insertion site.

D.2 Catheter site dressing

i. Use either sterile gauze or semipermable transparent dressing to cover the catheter site.

ii. Tegaderm is the only transparent dressing approved for use with intravascular devices.

iii. The use of the biopatch at the insertion under a transparent dressing will reduce bacterial colonization rate.

iv. The first change of the dressing shall take place after 24hr. The second change shall take place after 48 hrs after the first change. Afterwards, change catheter site dressings every 72 hours routinely or before or when they become damp, soiled or loose.

v. Replace catheter site dressing when the device is removed or replaced Change dressings more frequently in diaphoretic patients.

vi. Avoid touch contamination of the catheter insertion when replacing the dressings.

E. Replacement of Catheter

i. In adults replace short peripheral venous catheters and rotate peripheral venous sites every 48-72 hours to minimize the risk of phlebitis. Remove and replace when signs and symptoms of infections are present, i.e. warmth, tenderness, erythema or tenderness at the insertion site.

ii. Leave peripheral venous catheters in place in children until IV therapy is completed unless complications (e.g. phlebitis, infiltration) occur.

iii. Replace peripheral intravenous locks every 96 hours.

iv. The frequency of replacement of peripherally inserted central venous catheters and totally implantable devices are a physician decision.

IV. OCCUPATIONAL HEALTH ASSESSMENT

- An annual health check –up shall be done for the staff.