

Housekeeping & Hospital Environment

GDIPC

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Element : E-6

- **Sub- Element (17)**
- **Activities for auditing:**
 - ✓ **(D)** documentation
 - ✓ **(SI)** staff interview
 - ✓ **(O)** observation
- **Score (0-1-2-NA)**

Sub- Element (E-6.1)

There is a written policy and procedures for environmental cleaning & disinfection including safe handling of blood/body fluids spills. (D)

Review policies & procedures for environmental cleaning & disinfection including safe handling of blood/body fluids spills:

Comprehensive: policy must include the following:

- Cleaning protocols
- Methods of cleaning
- Types of cleaning (Regular and Terminal)
- Frequency of cleaning of each area in the hospital according to risk assessment
- List of approved disinfectant used in the hospital
- Method of use of disinfectants and its preparation with clear description according to the manufacturer instructions (dilution, contact time, MSDS safety data sheet)
- Cleaning schedule with assigned responsibilities
- Curtain changing policy
- Environmental sampling
- The role and responsibility of housekeeper and nurses in management of blood/body fluid spills
- Described procedure / steps how to deal with spills (large, small) according to amount and type.

- 3. Fully applicable:** all elements of the policy can be applied and comply with the hospital's scope of services
- 4. Based on scientific references** approved by MOH (CDC, WHO & APIC)
- 5. Signed from authorized personnel** (i.e., owner of the policy / hospital director or medical director / concerned department)
- 6. Approved by IC committee**
- 7. Valid** (updated within 2 - 3 years and when indicated)

NOTE:

Approval by IC committee is required for the infection control manual as a whole before distribution and also for individual policy after major changes

Sub- Element (E-6.2)

There is a written policy and procedures for pest control (regular schedule/ pesticides list). (D, SI)

Review the policy and procedures for pest control that should be:

- **Comprehensive** and include the following:
 1. Describe a clear procedure for pest control in the hospital.
 2. Timing and schedule for pesticides.
 3. List of approved chemicals used.
- **Fully applicable**: all elements of the policy can be applied and comply with the hospital's scope of services
- **Based on scientific references** approved by MOH (CDC, WHO & APIC)
- **Signed from authorized personnel** (i.e., owner of the policy / hospital director or medical director / concerned department)
- **Approved by IC committee**
- **Valid** (updated within 2 - 3 years and when indicated)

Review other documents to ensure implementation of pest control policy:

- Review the contract for pest control regarding the date of expiration of the current contract with the contracting company.
- Review the logbook for the pesticide company visits to the hospital and if it meets with the required schedule.
- Monitoring must be conducted from Infection Prevention and Control Department

Ask the pest control / housekeeping staff:

- 1) How they conduct Pest control activities in an area / procedure (routine or as needed)
- 2) List of pesticides they use and how they use it?

Ask the IPC team:

- 1) How frequently pest control visits are conducted. Verify by asking pest control visit of any unit/ area and match with the specified frequency in available document. **For example, Ask randomly about last visit to ER, Medical ward, kitchen etc.**
- 2) Ask about the monitoring & tracking procedure in relation to pest control activities throughout hospital in order to ensure effective implementation of policy.

Sub- Element (E-6.3)

Each unit has an environmental cleaning/ disinfection schedule that records responsible worker, used agents, methods of cleaning and the environmental surfaces intended to be cleaned. (D, SI)

Review the following:

- 1) Schedule of unit cleaning and disinfection
- 2) Schedule must include the frequency, the used disinfectant and the responsible staff:
 - a) Nursing staff for medical equipment
 - b) Housekeeper for other environmental surfaces
 - c) Radiology technicians for portable X-ray
 - d) Respiratory therapist for respiratory therapy equipment, etc.

Ask

- 1) Nursing staff about the method and how frequent they disinfect medical equipment
(ask a nurse to simulate the procedure of cleaning and disinfection of patient monitor)
- 2) Ask the housekeeper how frequent they do routine cleaning of patient room.
- 3) Nursing staff about used disinfectant in disinfection and cleaning of regular room and isolation room

Sub- Element (E-6.4)

Cleaning agents and disinfectants are consistent with hospital's policies and used in the correct method according to manufacturer's recommendations including dilution and contact time. (O, SI)

Observe

- 1) Housekeeper cleaning cart (All equipment and disinfectants needed are available e.g. mops, disinfectants, small measuring containers and microfiber cloths ...)
- 2) Presence of assigned equipment and cart for isolation rooms
- 3) phenolic disinfectant in the patient care areas is prohibited

Ask the housekeeper:

- 1) Which disinfectants are used for environmental surfaces cleaning in regular room, isolation room and bathrooms?
- 2) Who is responsible about disinfectant preparation and dilutions and how will you prepare different solutions?
- 3) Describe how you will clean the patient room? **The housekeeper may perform the cleaning process in front of you.**
- 4) What is the contact time for different disinfectants?

Sub- Element (E-6.5)

There are separate clean and dirty utility rooms in each patient care area. (O)

Observe

- 1) Designated/labeled room for clean and dirty utility equipment/materials
- 2) Rooms dedicated only for its usage (observe that no dirty/used items are stored in clean utility room)

Sub- Element (E-6.6)

Housekeeping staff is trained on hand hygiene, use of PPE, methods of cleaning, and proper and safe mixing of chemicals. Only experienced housekeeping staff are allowed in critical care areas. (D,O,SI)

Review:

- 1) Training records such as electronic database / manual records as documented evidence for training & education of housekeeper staff about infection control standards (HH, PPEs, environmental cleaning and disinfection, preparation of cleaning solutions ...)
- 2) Approved documented special training for housekeepers working in critical areas e.g., OR, ICUs ER...etc.

Observe:

- 1) Process of cleaning (from high to low surfaces, from clean to dirty areas and if they allow the contact time)
- 2) A daily and terminal cleaning process
- 3) Observe if housekeeping staff are compliant with Hand hygiene & PPE use
- 4) Observe the cleaning carts & how they are using the equipment in a regular room / isolation room.
- 5) and mixing of the solutions
- 6) Type of PPEs used during cleaning process

Ask the housekeeping staff:

- 1) Last training received on infection control measures like hand hygiene, use of PPE, methods of cleaning, and proper and safe mixing of chemicals.
- 2) Ask about frequency of infection control training & content taught?
- 3) During audit visit of ICU, ER and other critical care areas ask about the time duration since they are working in this area to verify if experienced or not?
- 4) Give specific task to staff about cleaning process to assess if they are well trained.

Question: After discharge of **COVID** patient from AIRs in ICU, head nurse called you to perform terminal cleaning of patient room. How will you proceed?

- Assess if they are compliant with HH & appropriate PPE based on type of isolation.
- Assess if they are using the right disinfectant in right dilution.

Sub- Element (E-6.7)

Hospital environment, lockers and cabinets are regularly cleaned, dry and dust free. (O)

Observe during audit visit of different patient care areas:

- 1) Observe presence of dust on the environmental surfaces & assess if they are dirty/dusty. You may use wet wipe to wipe a surface that you suspect it's not clean
- 2) Open lockers or cabinets and check for its cleanliness from inside.

Sub- Element (E-6.8)

Bedside curtains are clean, free of stains and changed regularly & when visibly contaminated. (D, O, SI)

Review:

- 1) Log sheet for curtain changing according to risk classification of the areas like ICU, ER, medical wards etc.
- 2) Check date of last installation if there is any sticker on the fabric curtains.
- 3) Check date of expiry for the antimicrobial curtains. (Should be changed after 06 months/based on manufacturer's instructions)

Observe

- Curtains in different patient care areas / patient rooms / ER observation rooms / phlebotomy rooms etc. for any dirt or stain.

Ask

- The staff how frequently they change the curtains as per hospital IC policy
- Ask staff about frequency of changing curtains with huge patients influx e.g ER
- Frequency of changing in isolation rooms (after patient discharge or referral)
- Availability of replacement stocks of the clean curtains in the clean utility room.

Sub- Element (E-6.9)

Terminal cleaning process is done by using ultraviolet machine or hydrogen peroxide fog machine when indicated. (D,O,SI)

Review within the infection control department:

- 1) Policy and procedure for environmental cleaning that includes hydrogen peroxide / ultraviolet to be used in terminal cleaning processes
- 2) Review terminal cleaning checklist and verify the use of hydrogen peroxide or ultraviolet equipment in terminal cleaning

Ask the infection control practitioners:

- Observe the availability & use of hydrogen peroxide and ultra violet used in the process during terminal cleaning

Ask the infection control practitioners:

- Method of terminal cleaning used
- The use of new technology for terminal cleaning process.
- The cycle of use for the ultraviolet device after terminal cleaning.
- Ask if the UV Machine and / or hydrogen peroxide fog machine is in working condition.
- Ask any IPC/HCWs to demonstrate to assess if they are familrized with the functioning of these machines.

Sub- Element (E-6.10)

**Terminal cleaning process after discontinuation of isolation is supervised by the in-charge nurse, and in case of an outbreak by infection control practitioner.
(D,O,SI)**

Review:

- 1) Terminal cleaning checklist (must include all the items present in the assigned area)
- 2) Last terminal cleaning checklist which should be signed by the nurse in-charge and infection control practitioner in case of outbreak.
- 3) Ask about any previous outbreak in units e.g. ICU, NICU etc. and validate any terminal cleaning checklist to confirm signatures of IPC team.

Observe:

- 1) Process of terminal cleaning if possible
- 2) Observe in any unoccupied Isolation rooms in different locations like ICU, ER, NICU etc. and assess if appropriate terminal cleaning is done (You may notice huge medical supply inside AIR drawers which will be used for next patient. All items must be removed as part of terminal cleaning process.

Ask:

- 1) When they conduct terminal cleaning?
- 2) Steps for proper terminal cleaning
- 3) If they use a dedicated checklist
- 4) The nurse in-charge how she will supervise the process of terminal cleaning
- 5) Visit any unoccupied room in isolation ward etc. & give specific task to staff to gauge if appropriate cleaning is done. Ask him / her to wipe the highest or hardest point on machines / bed side monitors that are hard to reach and check if clean or not.)

Sub- Element (E-6.11)

Biological spill kits are available in all areas have risk of blood and body fluid splashes and HCWs are capable of using them properly. (O,SI)

Observe

- 1) Availability of the Biological spill kits in all areas with its content.
- 2) Clear instruction about use and steps use are available.
- 3) Biological spill kits must be present in all patients care areas and supportive services including laundry, infectious waste room, mortuary etc.

Ask

- 1) Indication when to use the blood spill kit
- 2) The staff how to deal with biological spill kits.
- 3) You may ask a nurse to simulate the management of blood spill by giving a scenario.

Sub- Element (E-6.12)

Routine environmental microbiological cultures (for air, water, or environmental surfaces) are not recommended routinely. Only microbiologic sampling is conducted when indicated and approved by the IC team. (D,SI)

Review within the infection control department:

- The last environmental sampling done, it's indications and results (if available)

Ask the infection control practitioners:

- When it's indicated to take environmental samples? (The answer should be during an outbreak or after construction and renovation)

Microbiological cultures are conducted ONLY after construction & Renovation of positive pressure isolation rooms and operating theater or when required (e.g, outbreak) based on the IPC recommendations.

Sub- Element (E-6.13)

Endo cavitary ultrasound probes are cleaned and high level disinfected then covered with clean cover till use.

(D, SI)

Review

Policies & procedures for cleaning & disinfection, which should include;

- Ultrasound probes cleaning and disinfection methods specially Endo-cavitary ultrasound probes.
- Log sheet / checklist as documented evidence of cleaning and **high-level disinfection**
 - Endo cavitory: Within a body cavity or organ (e.g., an atrium, the rectum, or the vagina)

Ask the staff:

- Methods of cleaning and disinfection of ultrasound probs specially Endo-cavitary US probes.
- Provide, at a minimum, high-level disinfection for semi critical patient-care equipment (e.g., gastrointestinal endoscopes, endotracheal tubes, anesthesia breathing circuits, and respiratory therapy equipment) that touches either mucous membranes or non-intact skin.

❖ SEMI CRITICAL ITEMS

- Semi critical items are those that come in contact with mucous membranes or non-intact skin.
- This category includes respiratory therapy and anesthesia equipment, gastrointestinal endoscopes, bronchoscopes, laryngoscopes, esophageal manometer probes, anorectal manometer catheters, **endocavitary probes (e.g., rectal and vaginal probes)**, prostate biopsy probes, infrared coagulation devices, and diaphragm fitting rings.
- These medical devices should be free of all microorganisms (i.e., mycobacteria, fungi, viruses, bacteria), although small numbers of bacterial spores may be present.
- Intact mucous membranes, such as those of the lungs or the gastrointestinal tract, generally are resistant to infection by common bacterial spores but are susceptible to other organisms such as bacteria, mycobacteria, and viruses.

❖ HIGH-LEVEL DISINFECTION

Semi critical items minimally require high-level disinfection using chemical disinfectants:

- **Glutaraldehyde**
- **hydrogen peroxide**
- **ortho-thioaldehyde**

Sub- Element (E-6.14)

There is a specific area for routine scheduled cleaning and disinfection of incubators or when required and by using approved MOH disinfectant and based on manufacturer's recommendation. (D,O,SI)

Review the following documents:

- 1. Policies & procedures for cleaning & disinfection of Incubators, which should include:**
 - Frequency, methods, type of disinfectants, roles & responsibilities for routine scheduled and additional required cleaning and disinfection of incubators.
 - Terminal cleaning must be done when the baby leaves or after 7 days of admission.
 - It must be done in a special room (if without the baby) using appropriate equipment and wearing appropriate clothes.
 - Clean the unit with detergent and warm water. Do not use excessive liquid or harsh cleansers.
 - Never use alcohol, ether, or grease, and scouring or reactive detergents; this could modify the properties used in the incubator.
 - After cleaning, perform a complete functional check out before returning the unit to service.
 - Use a cleanser or disinfectant to thoroughly clean all surface. Clean all holes, indentations, baffles, etc. and then dry with a clean cloth or paper towel.

- 2. Review checklist for routine scheduled cleaning and disinfection of incubators. Checklist should include date, type of disinfectant used etc.**

Observe the cleaning room / area dedicated for cleaning & disinfection of incubators:

- The availability of supplies and equipment required for cleaning and disinfection of incubators.
- Randomly check if disinfectants are approved from MOH & not expired.

Ask the NICU staff (staff) about:

- Frequency of cleaning and disinfection of incubators.
- Role & responsibility in cleaning/disinfection activities (e.g., recommended procedure for cleaning and disinfection / methods of cleaning / tools, agents & materials to be used.

Sub- Element (E-6.15)

Hydrotherapy equipment (for example, Hubbard tanks, tubs, whirlpools, whirlpool spas, or birthing tanks) used in Burn unit and physiotherapy department are drained, cleaned and disinfected after each patient's use. (D, O, SI)

Review the following documents:

- Review the policy for cleaning and disinfection procedures for hydrotherapy equipment which should include frequency, type of disinfectants used, responsible staff etc.
- Cleaning logs / checklists for cleaning & disinfection of the hydrotherapy equipment in the Burn unit and physiotherapy department.

Observe the following:

- During the audit visit in the Burn unit and physiotherapy department observe the hydrotherapy equipment is its clean and in good working condition.
- Observe if its free from water when nit in use for any patient.

Interview Burn unit and physiotherapy staff:

- Nurses' role & responsibility in cleaning & disinfection activities after completion of patient session.
- Methods of cleaning of hydrotherapy equipment – agents & materials to be used in cleaning/disinfection activities (e.g., recommended procedure for cleaning and disinfection of certain equipment) / methods of cleaning / tools, agents & materials to be used.
- Ask about the last training & education received from infection control department on appropriate cleaning and disinfection methods.

Sub- Element (E-6.16)

Flowers and plants are permitted in the rooms of immunocompetent patients only. (O)

Review :

- Patient files to confirm the patient diagnosis. Confirm to rule if patients are immunocompromised.

During audit visit of different patient care areas observe the following:

- Observe for presence of any natural or artificial plant in the patient's room.

Immunocompromised or immunosuppressed means having a weakened immune system. Immunocompromised patients have a reduced ability to fight infections and other diseases. This may be caused by certain diseases or conditions, such as AIDS, cancer, diabetes, malnutrition, and certain genetic disorders. It may also be caused by certain medicines or treatments, such as anticancer drugs, radiation therapy, and stem cell or organ transplant.

Sub- Element (E-6.17)

Medical equipment are cleaned/disinfected properly as per hospital's policies and manufacturer recommendations (frequency, recommended products, dilutions, contact time, methods, etc.) (D, O, SI)

Review the following documents:

Policies & procedures for cleaning & disinfection of medical equipment, which should be:

- **Comprehensive**: it covers all aspects of cleaning & disinfection of medical equipment which should include (but not limited to):
 - Classification items based on associated risk (**Critical, Semi critical, and Non-critical items**)
 - Definitions of cleaning & disinfection
 - Frequency of cleaning & disinfection
 - Detailed procedure / methods of cleaning activities,
 - Disinfection is done locally (i.e., inside the department) or centrally (i.e., sent to CSSD)
 - Types of used disinfectants with dilutions & contact times based on manufacturer's instructions.
 - Roles & responsibilities of staff in the process of cleaning & disinfection ...etc.

- **Fully applicable:** all elements of the policy can be applied and comply with the hospital's scope of services (**Applies to all inpatient units including areas where all invasive and noninvasive procedures are carried out**).
- **Based on scientific references** approved by MOH (GCC, CDC, WHO & APIC)
- **Signed** from authorized personnel (i.e., owner of the policy / hospital director or medical director / concerned department)
- **Approved** by IC committee*
- **Valid** (updated within 2 - 3 years and when indicated)

2. **Cleaning & disinfection activity logs / checklists:**

- Check the activity logs which should be detailed including all items/equipment intended to be cleaned according to relevant area/unit e.g., bedside monitors, ventilators, ECG machines etc.

2. **Orientation attendance and competency assessment for each machine:**

- The unit should have the abovementioned document to indicate that staff have received orientation regarding cleaning & disinfection of particular machine to become competent (e.g., orientation about cleaning & disinfection of dialysis machines: suitable disinfectants, frequency of use, dilutions & contact times ... etc.)
 - a) Policy for cleaning & disinfection of medical equipment can be a separate policy or as a part of major policy like patient care equipment.

According to **Spaulding Classification** system, medical devices are divided into categories based on the risk of infection related to their use.

❖ Critical Items:

- This category includes objects and items entering the vascular system and sterile tissue.
- Examples of critical items are surgical and dental instruments, cardiac and blood catheters, implants and needles ...etc.
- These items present a high risk of infections and require sterilization after each patient use in CSSD.

❖ Semi-critical Items:

- This category includes objects and items that come in contact with intact mucous membranes and non-intact skin but do not penetrate body tissues or the vascular system.
- Examples of semi-critical items are non-invasive medical equipment, gastrointestinal endoscopes, invasive ultrasound probes, respiratory therapy or anesthesia equipment: laryngoscope blades ...etc.
- These items require high level disinfection after each patient use in CSSD or clinical area responsible for high level disinfection e.g. endoscopy unit

❖ Non-critical Items:

- This category includes items and objects that come in contact with intact skin only.
- Examples of non-critical items are stethoscopes, bedpans, blood pressure cuffs, tourniquet cuffs, and crutches. that touch intact skin
- These items could potentially contribute to secondary transmission of microorganisms to healthcare workers' hands; therefore, they require low level disinfection with hospital-approved disinfectant at the point of use.

Observe the process in all patient care areas (ER, ICUs, HDs, OR ...etc.)

- Wipe surfaces of various medical equipment (e.g., bed side machines, monitors, ventilators ... etc..) to exclude the presence of dust, dirt or stains.
- Check the availability of supplies e.g., agents & materials used for cleaning/disinfection activities: approved chemicals and disinfectants, wipes, spray bottles and/or buckets ... etc.
- Check that available agents & materials used for cleaning/disinfection are matching MOH specifications
- Observe any ongoing cleaning & disinfection activity and notice responsible person (**should be a nurse**), procedure of cleaning process, type(s) of used disinfectant(s), dilutions & contact time... etc..

Ask the nurse (nurse in charge or nurse responsible for each unit) about:

- 1) Cleaning schedule for various medical equipment
- 2) Nurses' role & responsibility in cleaning & disinfection activities (Cleaning & disinfection of medical equipment is the responsibility of nursing staff like bed side monitors, bed mattress & other medical equipment etc.)
- 3) Methods of cleaning – agents & materials to be used (Ask staff to demonstrate cleaning by giving her specific task e.g., How to clean a bedside monitor?)
- 4) Cleaning logs & checklists for cleaning & disinfection of medical equipment: should be practical, detailed, duly signed and fully applicable
- 5) (Check for appropriateness, because sometimes items are checked in spite of being not available in the relevant unit/room).
- 6) Cleaning & disinfection activities after patients with infectious transmissible diseases – handling of body fluids spills.