

### **3.12 - Environmental Cleaning and Disinfection and Equipment Cleaning and Disinfection in Rooms Where Patients with an Emerging Infectious Disease (EID) are Hospitalized or Have Been Hospitalized or Treated**

**Purpose** To remove secretions and excretions containing the microorganism of an EID from environmental surfaces and equipment surfaces where patients receive healthcare to prevent the transmission of the microorganism from patient to patient, from patients to healthcare workers (HCWs) and from patients to visitors.

**Audience** HCWs including all personnel who work in patient care areas and personnel who work for Environmental Services (ES) and Clinical Equipment Services (CES).

**Policy Statement:**

- I. Environmental and equipment decontamination
  - A. Environmental Services personnel and CES personnel will be selected by the ES and CES administrations, respectively and be trained for cleaning and disinfecting EID patient rooms/units and in cleaning and disinfecting equipment attached to patients or used for patient care.
  - B. ES and CES personnel will use All Barrier Precautions (ABP) when cleaning in rooms/units where surfaces may be contaminated with the microorganism that causes the EID.
    1. N-95 mask (fit tested)
    2. Goggles
    3. Gown
    4. Gloves
  - C. ES and CES personnel will be trained in donning and removing Personal Protective Equipment (PPE).
  - D. Cleaning and disinfection in rooms occupied by EID patients
    1. Cleaning will be done using an EPA – registered hospital detergent-disinfectant.
    2. Cleaning rooms on medical/surgical nursing units
      - a. Cleaning of environmental surfaces will be done by ES and will be guided by a list of sites on a form that will be completed for each room cleaned. Sites cleaned will be those in the environment excluding surfaces of devices and equipment attached to the patient. All the sites cleaned will be checked off on the form and signed by the employee (See Appendix A).
      - b. Forms will be checked, approved and signed by the supervisor.

- c. Clinical Equipment Services (CES) personnel will clean and decontaminate surfaces of devices and equipment attached to patients.
  - d. These CES personnel will be specially trained in this task and will use a check off list for each item to be decontaminated. The form with the check off list will be reviewed, approved and signed by their supervisor (Appendix B).
3. Cleaning rooms in intensive care units (ICUs)
- a. Cleaning in ICUs by ES will be guided by a list of sites on a form. Sites cleaned will be those in the environment excluding surfaces of devices and equipment attached to the patient. Sites cleaned will be checked off on the form and signed by the employee (See Appendix C).
  - b. Forms will be checked, approved and signed by the supervisor.
  - c. CES personnel will clean and decontaminate surfaces of devices and equipment attached to patients.
  - d. These personnel will use a check off list for each item to be decontaminated. The form with the check off list will be reviewed, approved and signed by their supervisor (See Appendix D).
4. Cleaning patient rooms and procedure rooms (e.g. bronchoscopy suite) after performance of high risk aerosolization procedures
- a. ES will be called to decontaminate environmental surfaces in rooms after a high risk procedure has been performed.
  - b. All Barrier Precautions (ABP) will be followed as for cleaning of patient rooms.
  - c. All horizontal surfaces and other surfaces in the room that may have become contaminated will be cleaned and disinfected.
- E. Terminal cleaning of patient rooms
- 1. ABP will be used by personnel doing terminal cleaning.
    - a. N-95 mask (fit tested) for MERS-CoV or H7N9 influenza
    - b. Goggles
    - c. Gown
    - d. Gloves
  - 2. All surfaces in the room should be cleaned with an EPA-registered detergent disinfectant following the list of sites on a check off form (Appendix E).

- a. Mattresses and headboards should be wiped down with an EPA-approved hospital disinfectant.
  - b. For rooms with privacy curtains, the curtains should be removed, placed in a plastic bag in the room and double bagged into a laundry bag with the assistance of another member of the ES staff standing at the door outside the room. The person outside the door should wear gloves. After completing the task this person should remove gloves, wash hands with an antimicrobial soap and water or apply an alcohol rub to their hands.
  - c. No cleaning of window curtains, ceiling or walls is necessary unless visibly soiled.
3. The check off form should be signed by the employee and by the supervisor.
- F. Cleaning and removal of equipment from patient rooms after discharge of patients
1. Wearing ABP PPE including 2 gowns and 2 pair of gloves, CES personnel will clean and disinfect the surfaces of all clinical equipment to be removed from the room.
  2. After cleaning and disinfection, the first pair of gloves will be removed and the equipment to be taken to CES will be pushed to the door of the room.
  3. The second pair of gloves, the goggles and the top gown will be removed.
  4. The equipment will be pushed from the room.
  5. Hands will be washed with an antimicrobial soap and water or an alcohol hand rub will be applied.
  6. The N-95 or surgical mask will then be removed.
  7. Hands will again be washed or an alcohol hand rub applied.
  8. A new set of gloves will be donned.
  9. Equipment will then be taken to CES.
- II. Cleaning and Decontamination in the Negative Pressure Zone in the Emergency Department (ED)
- A. ES administration will select two persons for cleaning and disinfection of examination rooms in the negative pressure zone in the ED.
  - B. These ES personnel will be trained to work safely and effectively in the negative pressure zone.
  - C. Personnel working in the negative pressure zone will wear All Barrier

Precautions (ABP) personal protective equipment (PPE).

1. N-95 mask (fit tested)
2. Goggles
3. Gown
4. Gloves

D. A cleaning cart will be dedicated to the area. It will be kept in the hall.

E. Cleaning Protocol

1. Cleaning materials will be taken from the cart into the room to be cleaned.
2. The door will be kept closed while the room is being cleaned.
3. The surfaces to be cleaned are listed on Appendix F. The surfaces cleaned must be checked off on the form and the form signed by the person doing the cleaning and by the supervisor.
4. When cleaning of a room has been completed, the door will be closed and the cleaning materials returned to the carts.
5. ES personnel must remain in the hall when waiting to clean the next vacant room. They must not enter the nursing station or other areas.
6. ES personnel need only to change gloves between rooms. Gloves should be removed so as to avoid touching the outside of the gloves.
7. Hands should be washed with an antimicrobial soap and water or an alcohol rub applied to the hands prior to donning a new set of gloves.

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**Appendix A**  
**Emerging Infectious Diseases**  
**Environmental Services**  
**Checklist for Daily Cleaning of Patient Rooms**

**Medical/Surgical areas (Non-ICU)**

Surface to be cleaned	<input checked="" type="checkbox"/> = Complete or NA = Not Applicable	
1. Bedrails, bed frame		
2. Bedside tables		
3. Over bed tables		
4. TV Controller		
5. Call button		
6. Telephone		
7. Lavatory surfaces		
a. Safety – pull up bars		
b. Faucets		
c. Commodes		
d. Shower		
8. Sharps containers		
9. Waste receptacles		
10. Headboard		
11. Footboard		
12. Door/door knobs		
13. Light Switches		
14. Soiled areas of walls & windows		
15. Television		
16. Exterior surfaces of drawers & closets		
17. Over-bed light		
18. Laundry hamper		
19. Floors		
20. Shelves		

Employee Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Supervisor Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Appendix B**

<b>Section: UTMB On-line Documentation</b> <b>Subject: Healthcare Epidemiology Policies and Procedures</b>  <b>Topic: 3.12 - Environmental Cleaning and Disinfection and Equipment Cleaning and Disinfection in Rooms Where Patients with an Emerging Infectious Disease (EID) are Hospitalized or Have Been Hospitalized or Treated</b>	<b>Policy 3.12</b>  <b>Revised 11.27.13</b> <b>2004- Author</b>
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**Emerging Infectious Diseases**  
**Clinical Equipment Services**  
**Checklist for Daily Cleaning of Patient Rooms**  
**Medical/Surgical Rooms (Non – ICU)**

Surface to be cleaned	<input checked="" type="checkbox"/> = Complete or NA = Not Applicable
1. IV pole and pump	<input type="checkbox"/>
2. IV tubing	<input type="checkbox"/>
3. Suction devices and tubing	<input type="checkbox"/>
4. Foley tubing and collection bag	<input type="checkbox"/>
5. Telemetry equipment	<input type="checkbox"/>
6. Orthopedic devices attached to the patient	<input type="checkbox"/>
7. Neurosurgery devices attached to the patient	<input type="checkbox"/>
8. Waste receptacles	<input type="checkbox"/>
9. Fans	<input type="checkbox"/>

Employee Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Supervisor Signature: \_\_\_\_\_ Date: \_\_\_\_\_

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**Appendix C**  
**Emerging Infectious Diseases**  
**Environmental Services Checklist for Daily Cleaning of Patient Rooms**  
**ICUs**

Surface to be cleaned	☑ = Complete or NA = Not Applicable
1. Waste receptacles	<input type="checkbox"/>
2. Soiled areas on walls and windows	<input type="checkbox"/>
3. Bedside table	<input type="checkbox"/>
4. Over bed table	<input type="checkbox"/>
5. Bedrails, bed frame	<input type="checkbox"/>
6. Headboard	<input type="checkbox"/>
7. Footboard	<input type="checkbox"/>
8. Over bed light	<input type="checkbox"/>
9. Laundry Hamper	<input type="checkbox"/>
10. Doors/door handles	<input type="checkbox"/>
11. Lavatory	<input type="checkbox"/>
a. Commode	<input type="checkbox"/>
b. Safety bars	<input type="checkbox"/>
c. Faucets	<input type="checkbox"/>
d. Shower	<input type="checkbox"/>
12. Sharps Containers	<input type="checkbox"/>
13. Shelves	<input type="checkbox"/>
14. Telephone outside the room	<input type="checkbox"/>
15. Light Switches	<input type="checkbox"/>
16. Television	<input type="checkbox"/>
17. Floors	<input type="checkbox"/>
18. Exterior surfaces of drawers & closets	<input type="checkbox"/>
19. TV Controller	<input type="checkbox"/>
20. Code Call Button	<input type="checkbox"/>

Employee Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Supervisor Signature: \_\_\_\_\_ Date: \_\_\_\_\_

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**Appendix D**  
**Emerging Infectious Diseases**  
**Clinical Equipment Services**  
**Checklist for Daily Cleaning of Patient Rooms**

**ICUs**

Surface to be cleaned	☑ = Complete or NA = Not Applicable
1. IV pole and pump	<input type="checkbox"/>
2. IV tubing	<input type="checkbox"/>
3. Foley drainage tubing and bag	<input type="checkbox"/>
4. Pressure monitoring system	<input type="checkbox"/>
5. Ventilator and ventilator tubing	<input type="checkbox"/>
6. Monitor	<input type="checkbox"/>
7. Chest tubing and drainage bag	<input type="checkbox"/>
8. Abdominal drains and collection bags	<input type="checkbox"/>
9. Ventriculostomy tubing and collection bags	<input type="checkbox"/>
10. Monitor leads	<input type="checkbox"/>
11. Suction devices and collection containers	<input type="checkbox"/>
12. Fans	<input type="checkbox"/>

Employee Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Supervisor Signature: \_\_\_\_\_ Date: \_\_\_\_\_

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**Appendix E**  
**Emerging Infectious Diseases**  
**Environmental Services Cleaning Checklist**  
**Terminal Cleaning – All Rooms**

Surface to be cleaned	☑ = Complete or NA = Not Applicable
1. Chairs	<input type="checkbox"/>
2. Areas of soilage on walls and windows	<input type="checkbox"/>
3. Light switches	<input type="checkbox"/>
4. Over bed table including framework	<input type="checkbox"/>
5. Television	<input type="checkbox"/>
6. Pillow cover	<input type="checkbox"/>
7. Headboard of bed	<input type="checkbox"/>
8. Footboard of bed	<input type="checkbox"/>
9. Mattress cover	<input type="checkbox"/>
10. Bedrails	<input type="checkbox"/>
11. Bed frame	<input type="checkbox"/>
12. Casters on bed and over bed table	<input type="checkbox"/>
13. Telephone	<input type="checkbox"/>
14. Bedside Table	<input type="checkbox"/>
15. External surfaces of drawers and closets	<input type="checkbox"/>
16. Over bed light	<input type="checkbox"/>
17. Bathroom	<input type="checkbox"/>
a. Pull up bars	<input type="checkbox"/>
b. Commode	<input type="checkbox"/>
c. Shower	<input type="checkbox"/>
d. Faucets	<input type="checkbox"/>
18. Floors	<input type="checkbox"/>
19. Laundry hamper	<input type="checkbox"/>
20. Doors/door handles	<input type="checkbox"/>
21. Waste receptacles	<input type="checkbox"/>
22. Sharps Container	<input type="checkbox"/>
23. Shelves	<input type="checkbox"/>
24. TV Controller	<input type="checkbox"/>
25. Code Call button	<input type="checkbox"/>

Employee Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Supervisor Signature: \_\_\_\_\_ Date: \_\_\_\_\_

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**Appendix F**  
**Emerging Infectious Diseases**  
**Environmental Services Cleaning Checklist**

**Emergency Department**

<b>Surface to be cleaned</b>	<input checked="" type="checkbox"/> = Complete or NA = Not Applicable
1. Bedrails, bed frame	<input type="checkbox"/>
2. Examination tables	<input type="checkbox"/>
3. Desk	<input type="checkbox"/>
4. Sink	<input type="checkbox"/>
5. Sharps Container	<input type="checkbox"/>
6. Waste receptacles	<input type="checkbox"/>
7. Door	<input type="checkbox"/>
8. Floor	<input type="checkbox"/>
9. Soiled areas of walls	<input type="checkbox"/>

Employee Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Supervisor Signature: \_\_\_\_\_ Date: \_\_\_\_\_