POLICY STATEMENT
The Tru-D Rapid Room Disinfection Device will not replace low level disinfection, but will be used as supplemental disinfection of environmental surfaces, equipment and rooms as indicated in the provisions as determined by the Infections Committee and when indicated in emergency upon approval by either hospital epidemiologists or the Director of Hospital Epidemiology in conjunction with the Director of Environmental Services (EVS). Only personnel specifically assigned and deemed competent may operate the Tru-D Rapid Room Disinfection device per the provisions below.

This supplemental disinfection reduces the transfer of infections and cross contamination of patients by effectively eliminating the biological reservoirs of contaminants found on surfaces within the hospital setting using ultraviolet (UV) light technology, specifically UV-C; thereby, providing a safer environment for patients, visitors, and our healthcare workforce.

AFFECTED STAKEHOLDERS
Indicate all entities and persons within the Enterprise that are affected by this policy:
☒ Hired Staff
☒ House Staff/Residents & Clinical Fellows
☒ Leased staff
☒ Medical Staff (includes Physicians, PAs, APNs)
☒ Vendors/Contractors
☐ Other:

DEFINITIONS

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disinfection</td>
<td>A process that eliminates many or all microorganisms except spores and is done with liquid chemicals or by pasteurization.</td>
</tr>
<tr>
<td>Low Level Disinfection</td>
<td>The elimination of most pathogenic bacteria.</td>
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<tr>
<td>Ultraviolet Light</td>
<td>Means “beyond violet” on the light spectrum; an invisible form of electromagnetic radiation with a shorter wavelength (than the light seen by humans). Ultraviolet light (UV) is classified as UV-A, UV-B, or UV-C, in order of decreasing wavelength.</td>
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</tbody>
</table>
Ultraviolet germicidal energy

The amount of energy from UV-C light to destroy pathogens. This is dependent upon time of exposure.

**PROCESS & PROCEDURES**

**Recommended usage:**

The Tru-D Rapid Room Disinfection Device will be deployed upon terminal cleaning of operating rooms involving select, high risk surgical cases (i.e. any orthopedic, trauma, or other implant related surgery) and other supporting areas with the ORs as much as feasible.

The Tru-D has two settings, “Spore-forming” and “Normal”. The following table defines indications for each setting and how responsible cleaning personnel within the operating rooms will identify what setting to select.

<table>
<thead>
<tr>
<th>Setting</th>
<th>“Spore-forming”</th>
<th>“Normal”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indications</td>
<td>Clostridium difficile or other spore-forming pathogens</td>
<td>Other MDROs, surgical procedure rooms or other routine disinfection</td>
</tr>
<tr>
<td>TBP Type</td>
<td>Enteric Contact (purple sign)</td>
<td>Contact (yellow sign)</td>
</tr>
<tr>
<td>TBP Sign</td>
<td>• Hands: Wash before entering room, upon exit &amp; as necessary with soap &amp; water (NO alcohol hand hygiene)</td>
<td>• Hands: Wash before entering room, upon exit &amp; as necessary.</td>
</tr>
<tr>
<td></td>
<td>• Gown: Wear to enter &amp; inside room.</td>
<td>• Gown: Wear to enter &amp; inside room.</td>
</tr>
<tr>
<td></td>
<td>• Gloves: Wear to enter &amp; inside room.</td>
<td>• Gloves: Wear to enter &amp; inside room.</td>
</tr>
<tr>
<td></td>
<td>• Mask: Not required.</td>
<td>• Mask: Not required.</td>
</tr>
<tr>
<td></td>
<td>• Room/Door: May remain open.</td>
<td>• Room/Door: May remain open.</td>
</tr>
<tr>
<td></td>
<td>• Cleaning: Hypochlorite (diluted bleach, 1:10) solution required.</td>
<td></td>
</tr>
</tbody>
</table>

**Training**

Competencies and task verification for all personnel involved with Tru-D Rapid Room Disinfection set-up, use, storage, and maintenance will be required initially and
annually. Competencies will include safety training on the avoidance of direct exposure to the ultraviolet light when deployed.

**Safety Precautions**

1. Ensure that no one is present in the space to be disinfected. In the unlikely event that Tru-D lamps are energized with people in the room, the Tru-D must be unplugged immediately. Under no circumstances should Tru-D be operated while people are still in the space.

2. Secure all entrances to the room. Place Tru-D removable covers with caution signage at each entrance. Use the iPod touch door guard sensor at the main entrance to the room – this will deactivate Tru-D if entry to the room is attempted during a Tru-D disinfection cycle. A barrier chain must be used at each entry point.

3. Plug Tru-D into a dedicated outlet with no other equipment plugged into it to prevent overloading the electrical circuit; the outlet location must be readily accessible in the event it is necessary to disconnect Tru-D during operation (i.e. nearest the door).

4. Ensure that the Tru-D voice command volume level is audible at all times when the operator is in the room; adjust the volume when necessary prior to energizing.

5. Charge the handheld remote during operation if the remote is within 25 meters.

6. Transport the Tru-D with the protective covers in place. Under no circumstances should Tru-D be moved once the cover panels are removed.

7. Avoid hitting the UV lamps with the Tru-D removable cover panels during removal/replacement.

8. Avoid touching the UV lamps with bare hands to prevent burns.

**Cleaning Procedure**

1. Operators must pre-clean the unit or room for visible soil and dust according to established protocols, using approved disinfection products.

2. Once the cleaning and disinfection are complete and liquid based disinfectant products are dry, the operator will run Tru-D for one complete cycle.

3. Linens should NOT be placed on the beds until after the Tru-D treatment.

4. Operating Instructions provided with the Tru-D by its manufacturer are to be strictly adhered to, especially with respect to room setup and actual operation of the device. A copy of the operating instructions must be kept with the device.

5. Personal protective equipment and other safety requirements will be adhered to when cleaning the room of patients on Contact or Enteric Contact Precautions as per policy.

   a. Gloves and protective clothing should be worn at all times.
b. Hands should be washed upon every entry and every exit from the targeted space.

**Room Preparation**

1. Identify the primary entrance and lock/secure all other entrances if possible to prevent entry during disinfection. Otherwise, the employment of a barrier is required to prevent entry while the Tru-D is in use.

2. Do not cover windows during disinfection as glass safely blocks all UV-C germicidal energy which is invisible. The ‘blue glow’ created by Tru-D is harmless, visible light.

3. Place Tru-D near the center of the room.

4. Ensure that all objects in room are positioned for optimal exposure.
   a. Place high touch movable objects as close to Tru-D as practical.
   b. Open all drawers (bottom drawer fully open, higher drawers partially opened to allow equal exposure to all drawers), extend trays, to expose as much surface area as possible.
   c. Unplug telephone and place handset/receiver next to phone on table to ensure optimal exposure.
   d. Pull privacy curtain back so as not to obstruct any items.

5. Plug cord into a dedicated outlet that is not simultaneously powering another electrical device. Once plugged in, the device will announce… “Tru-D system is active”.

6. Carefully remove the removable cover panels from Tru-D.

7. Place the cover panels outside of the door with caution signs facing out into the hallway, with straps secured and off the floor.

8. Check again to ensure that there is no one in the room to be disinfected.

9. Close door to the room. If using Tru-D in the patient room, close the door to the previously disinfected bathroom.

10. Turn the iPod touch door guard on. Tap the Tru-D icon. A green “ready” icon will be visible.

11. Place barrier chain across the door frame using the magnets attached to the chain. If there is more than one door entrance to the room, use barrier chains on secondary doors as well.

   *All doors must be closed, with a safety barrier in place.*
Operating the TRU-D

1. Turn on the handheld remote with button on the side of the remote. Tap the Tru-D icon.
2. Use stylus provided or retracted pen to make selections on the handheld remote screen.
3. If screen is dirty, use soft cloth to clean.
5. Select “Spore-forming organisms” if the patient is on Enteric Contact Precautions or select “Normal”.
6. Tap “Next.”
7. Enter activation password (default setting is 1234).
8. Enter room number.
9. Enter operator name.
10. Tap sound check and listen for the audible “volume test, can you hear me now.”
11. Ensure that the following requirements are met:
a. The room is vacated and secure.
b. You are qualified and authorized to activate this unit.
c. Electrical Circuit powering the unit has been located.
d. Door sensor and safety barriers have been properly placed.

12. If all of the above conditions have been met, check the box next to each requirement and continue to the next screen.

13. Press Start at the bottom of the screen.

14. Press the abort button on the handheld remote or the iPod door guard if the Tru-D needs to stop for any reason during the cycle.

15. Place the handheld remote in the back of the Tru-D removable cover panel for the duration of the cycle. The handheld must be within 25 meters of Tru-D during operation to maintain communication or the disinfection cycle will be terminated.
   a. The cycle will run until all eight zones reach DONE. At this point, the Tru-D will turn off. (Depending on the room’s UV reflective properties, this process may take approximately 45-60 minutes for an operating room and 10-15 minutes for a bathroom.)

**Upon completion of the disinfection cycle**

1. Press the finish button on the handheld remote.
2. Press the exit button.
3. Press the off button to turn off the handheld remote.
4. Remove the door sensor to the room and turn it off. Failure to turn the door sensor off may result in a dead battery, which will prevent Tru-D from operating at the next cycle. Always check and replace dead batteries in the door sensor prior to each use of Tru-D.
5. Wash/sanitize hands upon entering the room.
6. Replace Tru-D removable cover panels and secure the Velcro straps.
7. Unplug Tru-D from the outlet.
8. Secure the power cord.
9. Document the disinfection cycle in the Tru-D unit’s disinfection log. The log stays with each unit until a new log is needed. Used logs are archived in the office of Environmental Services.
10. Remove Tru-D from the room.
11. Store Tru-D in a secure, designated area. Confirm the handheld remote is turned off and place on the charger between uses.
12. Refer to the manufacturer’s instruction manual for further details or troubleshooting.

The operator may choose to cancel the disinfection process at any time during the disinfection cycle for immediate entrance or emergency use. Even though it may not be thoroughly disinfected by the Tru-D, the room may be occupied immediately and is deemed for safe for use.

If the disinfection operation is interrupted for any reason, the remote screen will display the disinfection progress of each sensor at the time of interruption. The operator may choose to resume disinfection from the interruption point, or begin the entire disinfection process over.

REFERENCES, SUPPORTING DOCUMENTS, AND TOOLS
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RELATED POLICIES
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APPROVED BY
Chief Executive Officer, AU Medical Center Date: 10/23/2016