

Environmental Cleaning, Waste and Linen Guidance

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Environmental Cleaning

Non Bio-mode Areas

- Staff members performing environmental cleaning and disinfection in rooms with Airborne + Contact + Eye Protection (red sign) should wear the PPE indicated on the [isolation sign](#) when in the patient's room while the patient is present, and until the recommended room turn over time has elapsed. See details below.
- The PPE indicated on the [isolation sign](#) when in the patient's room while the patient is present, and before the recommended room turn over time has elapsed. See details on specific times for different areas below.
- After the recommended room turn over time has elapsed, staff members performing environmental cleaning and disinfection should wear double gloves, yellow isolation gown with face mask and face shield (to protect from contaminated surfaces and potential for splashes of chemical cleaning products onto face).

Bio-mode Areas

- Staff members performing environmental cleaning and disinfection in bio-mode areas will wear:
 - Airborne protection (PAPR, Drager half face respirator or N-95 respirator) while in the common areas.
 - PPE for Airborne + Contact + Eye Protection (double gloves, yellow isolation gown and PAPR or N-95/Drager half-face respirator with face shield) when cleaning patient rooms.

Cleaning Protocols

- The CDC recommends using the routine protocols used at the facility for cleaning. For additional information, refer to the [CDC website](#).

Cleaning Products

- Products that meet EPA's criteria for use against SARS-CoV-2, the novel coronavirus that causes the disease COVID-19. At minimum, EPA-registered cleaning products with label claims against human coronaviruses should be used for cleaning equipment and surfaces potentially contaminated with COVID-19.
 - [KBO-256 Label](#)
 - [East Baltimore Campus Disinfection Products: Can I Use It for COVID-19](#)
 - [Johns Hopkins Health System Disinfection Product Template](#)

No Touch Decontamination Technologies

- Technologies such as UVC-Light and vaporized hydrogen peroxide (Bioquell) may be used but are not necessary to kill the virus on surfaces and may add to room turnover time. If used, the room must be manually cleaned per the usual protocol prior to utilizing the technology.

Room Turnover Time

- The CDC guidance on the recommended length of time to elapse, with door closed, before staff enter a room without respiratory protection, or other patients are placed in the room, depends on the number of air changes per hour for the room. Infection prevention representatives should work with engineering to identify the number of air exchanges per hour in order to determine how long to let the room sit to achieve 99.9% airborne-contaminant removal based on [this table](#) from CDC. In addition, the room should undergo appropriate cleaning and surface disinfection before it is returned to routine. Room cleaning may be performed by staff wearing airborne and contact with eye protection PPE before the turn over time has elapsed or by staff wearing contact precautions PPE after turn over time has elapsed. For room turnover times used at The Johns Hopkins Hospital, refer to the table below.

Room Turnover Times for The Johns Hopkins Hospital			
Location	Air Changes/ Hour (ach)	Pressure	Room Turn Over Time
Units			
Airborne Infection Isolation Room (AIIR) on all units, including Biomode units	12 ach	Negative	45 minutes
Standard Patient room (Non-AIIR) including in Biomode Units	6 ach	Negative	1 hour 30 minutes
Emergency Departments			
ED Triage and Waiting Room	12 ach	Negative	45 minutes
ED Standard Rooms in Biomode Area (non-AIIR)	6 ach	Negative	1 hour 30 minutes ¹
Ped Ed Trauma Rooms	+12 ach	Negative	45 minutes
Radiology			
CT and MRI Rooms (if patient is wearing a mask)	Varied	Negative	PUI: 0 minutes COVID-19 positive patient: 45 minutes
Outpatient Areas²	2 ach	Neutral	2 hours ³
<p><i>1: Turn over time can be reduced to 45 minutes by placing a HEPA filter in room.</i></p> <p><i>2: e.g., JHOC and Community Physician Offices</i></p> <p><i>3: If an aerosolizing procedure is performed, room turn over time is 4 hours</i></p> <p><i>Note: For areas seeing only patients with PUIs and COVID positive patients, no room turnover time is needed for staff cleaning the room if they are wearing airborne PPE (N95, PAPR, or Draeger). The room must sit prior to the next patient's admission.</i></p>			

Waste

Current guidelines from the [CDC](#) indicate that waste from confirmed COVID-19 patients and patients under investigation (PUIs) should be disposed of in accordance with routine procedures. Stericycle, our medical waste contractor, had initially added additional guidance but has since recommended all waste generated from areas caring for confirmed COVID-19 patients, including isolation rooms and laboratory areas be treated using routine procedures.

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General Hospital Waste (including used PPE)

- Use the normal procedure

Red-bag Waste

- Use the normal procedure. Dispose of waste items into a red bag. Tie off the red bag properly (when two-thirds full, close the red bag using an [overhand knot](#)). Red-bag waste includes but is not limited to: bandages, dressings, swabs, gloves, etc. soaked or dripping with blood or other body fluids.

Sharps Waste (single-use and reusable)

- Close sharps containers per manufacturer's instructions. Seal reusable containers with a red cap.
- Reusable sharps containers generated in isolation rooms of COVID-19 patients must be removed by hospital staff and stored in the designated area until Stericycle technicians pick up. Please note, Stericycle in-service technicians will not enter COVID-19 confirmed patient isolation rooms and will not change out sharps containers.
- Stericycle strongly recommends use of single-use (disposable) sharps containers in areas involving management of COVID-19 patients. The unit will order disposable sharps containers for each room and secure it in the room.
- Sharps waste includes needles, syringes, broken glass, scalpels, culture slides, culture dishes, broken capillary tubes, broken rigid plastic and exposed ends of dental wires.
- No loose sharps are permitted outside of sharps containers.
- When the container is two-thirds full, the container will be sealed in the room, and then taken to the soiled utility room using routine infection control precautions for handling sharps container from patient rooms.
- EVC staff will remove the sharps container from the soiled utility room. Bagging is not required.

Pathological, Trace Chemotherapy and Pharmaceutical (hazardous, non-hazardous and controlled) Waste

- Follow current, standard procedures.

Laboratory Waste

- Follow current, standard procedures and any other additional CDC or local health department requirements.

Linens

Management of linens from patients positive for COVID-19 should be performed in accordance with routine protocols used at the facility. Each facility should work with linen services to ensure routine infection control precautions for disposal, collection and handling of linen are in place. For more information, refer to the [CDC website](#).

- Place soiled linens in linen bags. When the bag is full, tie it securely and deposit it into a cart.
- Double bagging is not necessary.
- Do not use linen chute in areas converted to negative pressure ("biomode"). Transport closed linen bags on a cart.
- Linen staff collecting soiled linen should do so according to standard protocol. Enhanced PPE is not indicated.
- Carts used to transport the closed soiled linen bags should be wiped off after linen is delivered (as per usual requirements for dirty linen carts).
- Laundry is cleaned either in-house or at an outside facility following routine protocols.
- Clean, covered linen is returned to the hospital and distributed as usual.

Reusable Pink Gowns

- Dirty linens and the used pink reusable gowns can go into the same blue plastic (dirty) linen bag. These items do not need to be doubled bagged. Once the bag is two-thirds full, or when too heavy, tie off the top of the linen bag and follow the protocol for soiled linen on your unit.