

BIDMC COVID-19 Preparedness

Operating Room Staff In-situ Interprofessional Simulation Training

Simulation Scenario Checklists:

1. Preoperative huddle and OR set up for a **suspected/COVID-19+ patient**
2. **Donning & Doffing PPE**
3. Transfer of **suspected/ COVID19+ patient** from the ICU to the OR
4. Airway management with **enhanced infection control measures** (*previously: symptomatic/low risk/ruled-out patients*)
5. **GI:** Management of a GI procedure/ERCP (incl. prone positioning)

Preoperative huddle and OR set up for a suspected/COVID-19+ patient Simulation 1 - Checklist

Preoperative huddle

1. **Confirm team members names and roles, all must be present for huddle**
 - Designated OR COVID team leader
 - Primary surgical or procedural team
 - Primary anesthesia team, incl. anesthesia technician
 - Primary OR team
 - Respiratory therapist (*not needed for pre-operative huddle, just confirm pager/contact number*)
 - Confirm who is the primary ICU contact
 - Confirm which members of the team will be **inside** the room (keep this to a minimum)
 - Confirm which members of the team will be **outside** the room (circulating and anesthesia runners)
 - Confirm phone numbers:
 - Phone inside OR:
 - Phone outside OR (communicate with coordinator):
2. **As a team, discuss and allocate the following tasks:**
 - Allocate a person to call:
 - Infection control (*only if clarification required on covid status*)
 - EVS (*inform them of the case start*)
 - Confirm OR equipment:
 - Necessary surgical equipment to be prepared **inside** OR
 - Possible surgical equipment to be available **outside** the room
 - Confirm Anesthesia equipment:
 - Necessary anesthesia equipment **inside** OR
 - Possible anesthesia equipment to be available **outside** the room
 - Confirm members of the transport team:
 - Team leader (will call/hold elevators/wipe down)
 - RT (ventilator)
 - Anesthesiologist (head of bed)
 - Surgical attending or resident (end of bed)
 - *Extra member (ICU nurse or circulating nurse, depending extra equipment and staffing levels)*
 - *Airway Team Member – optional*
 - Confirm equipment required for transport:
 - Standard transport equipment & emergency drugs
 - **ICU ventilator + Kelly clamp + HME filter**
 - PPE
 - Confirm each team member can adhere to **Special flu droplet and contact precautions** and don and doff the necessary PPE (see PPE poster)
 - Confirm what PPE will be worn by each team member during the transfer
 - Confirm what PPE will be worn by each team member inside the OR
3. **Print and display signage outside OR (refer to STOP and PPE Posters)**

Preparation inside the OR

1. Remove unnecessary equipment from the OR
 - Remove all surgical and anesthetic equipment that will not be required for the case
2. Cover equipment that will not be used
 - Use large plastic orthopedic drapes and cover anesthesia machine and Omnicell workstation
3. Prepare necessary equipment:
 - Anesthesia airway equipment: prepare and place on designated COVID anesthesia airway trolley
 - Anesthesia medications: prepare and place on designated medication trolley



PPE for the Transfer of Patients with Suspected/Confirmed COVID-19

Simulation 2 - Checklist





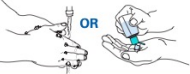
Please use BIDMC - PPE donning and doffing poster (below)

Beth Israel Lahey Health

Sequence for Putting On

Personal Protective Equipment (PPE) for Patients on Special Flu Droplet and Contact Precautions

The type of PPE used will vary based on the level of precautions required, such as standard and contact, droplet or airborne infection isolation precautions. The procedure for putting on and removing PPE should be tailored to the specific type of PPE.

1. RESPIRATORY AND EYE PROTECTION	
Routine care: Mask with Eye Protection	
Aerosol-generating procedures: N95 Respirator with Eye Protection <ul style="list-style-type: none"> Secure elastic bands at middle of head and at neck Fit flexible band to nose bridge Fit snug to face and below chin Ensure respirator fit -OR- PAPR	 
2. GOWN (Blue Gowns)	
<ul style="list-style-type: none"> Fully cover torso from neck to knees and arms to wrists Wrap around the back Fasten in back of neck and waist 	
3. HAND HYGIENE	
4. GLOVES <ul style="list-style-type: none"> Extend to cover wrist of isolation gown Double glove 	

Use Safe Work Practices to Protect Yourself and Limit the Spread of Contamination

- Keep hands away from face
- Limit surfaces touched
- Change gloves once torn or heavily contaminated
- Perform hand hygiene


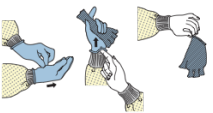
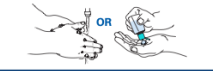
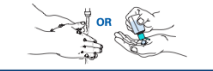




Adapted from CDC Poster: Revised (CHE 2020.0319, Flu and Norovirus)/management(2019-20)/PPE

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Sequence For Safely Removing

Personal Protective Equipment (PPE) For Patients On Special Flu Droplet And Contact Precautions

Outside surfaces of gloves, gown, sleeves, mask and respirator are contaminated! If your hands become contaminated during PPE removal, immediately wash your hands or use an alcohol-based hand sanitizer.

INSIDE OPERATING ROOM	
1. GOWN	
<ul style="list-style-type: none"> Grasp the front of the gown with gloved hands Pull the gown away from the body until attachments break While removing gown, roll inside out into a bundle, touching only the outside of the gown with gloved hands Discard the gown into a waste container 	
2. GLOVES	
<ul style="list-style-type: none"> Using a gloved hand, grasp the palm area of the other gloved hand and peel off first glove Hold removed glove in gloved hand Slide fingers of ungloved hand under remaining glove at wrist and peel off second glove over first glove Discard gloves in a waste container in patient room 	
3. HAND HYGIENE	
	
4. MASK WITH EYE PROTECTION	
<ul style="list-style-type: none"> Grasp bottom ties/mask elastics, followed by ties/elastics at the top Remove without touching the front of the mask Discard into designated bin if soiled OR implement reuse protocol 	
5. N95 RESPIRATOR or PAPR	
<ul style="list-style-type: none"> Grasp either bottom ties/mask elastics, followed by ties/elastics at the top Remove without touching front of the mask Discard into designated bin if soiled OR implement reuse protocol 	 <small>Please page EH&S at pager #33137 with PAPR questions.</small>
6. HAND HYGIENE	
	

Adapted from CDC Poster: Revised (CHE 2020.0319, Flu and Norovirus)/management(2019-20)/PPE

Transfer of suspected/COVID19+ patient from the ICU to the OR and Back Simulation 3 - checklist

Team leader:

- Team leader does NOT contact patient or surroundings
- Team leader helps to open doors/presses elevator buttons/wipe down surfaces

Steps to review outside the OR / Before going to ICU

- Identify team members
- Confirm patient ID
- Confirm the patient destination and the route
- Team leader verifies each member has on the appropriate PPE

Steps to review in ICU room, just before patient transfer:

- All IV lines, poles, pumps, monitors and ventilator are organized as usual
- Patient's ICU monitoring 'brick' is placed onto the transfer monitor
- Required infusions are running
- Emergency and intubation drugs are available
- Sedation has been optimized to prevent awareness
- Paralysis has been given (or considered)
- Verify adequate ventilation and oxygen level in tank
- Ensure Kelly clamp is out of packaging and clipped to patient's pillow
- Sedation is deepened/optimized
- Paralysis administered before leaving ICU
- Confirm the route
- Call OR/procedural room to confirm patient is en-route

Direct Transfer into the OR:

- Move the patient directly to the OR, do NOT stop in holding/PACU area
- Ensure someone is ahead to open doors/call the elevator
- Ensure obstacles are removed along the route
- Team leader enters elevator first, presses elevator buttons
- Wipe down surfaces (buttons) if contaminated
- Patient arrives into the OR

End of Simulation

Guidance for Management of Anesthesia & Airway Devices with Enhanced Infection Control Measures Simulation 4 - Checklist

Preparation of OR

Preoperative preparation of the OR to be carried out as usual, with the addition of the following items:

- Sealed specimen bag (2x small or 1x large)
- Large cassette bag/large plastic bag
- Pre-prepared long piece of tape to secure the ETT

PPE during airway management

1. For intubation

- PPE for anesthesia provider: N95 respiratory + eye protection + double gloves
- PPE for nursing staff/assistant: N95 respiratory + eye protection + double gloves

2. For insertion of LMA/iGel

- PPE for anesthesia provider: N95 respiratory + eye protection + double gloves
- PPE for nursing staff/assistant: N95 respiratory + eye protection + gloves

Induction of General Anesthesia

1. For intubation

- Perform RSI, no mask ventilation
- Primary anesthesiologist: preoxygenates as usual
- Second anesthesiologist (assistant 1): administers drugs, holds biohazard bag open
- OR nurse (assistant 2): removes stylet and places into biohazard bag
- Immediately after ETT is inserted:
 - i. Used laryngoscope placed into biohazard bag by primary anesthesiologist
 - ii. Outside/dirty gloves removed
- OR nurse inflates ETT cuff
- Circuit connected to ETT
- Apply PPV only once ETT cuff inflated
- Secure ETT as usual with tape

2. For insertion of LMA/iGel

- Perform RSI, no mask ventilation
- Primary anesthesiologist: preoxygenates as usual
- Second anesthesiologist (assistant 1): administers drugs
- Immediately after iGel inserted:
 - i. Outside/dirty gloves removed
- Circuit connected to iGel
- PPV as usual
- Secure iGel as usual with tape

Post Extubation management:

- Routine extubation planning, suctioning, full NMB reversal and antiemetics given
- Consider blue chuck/towel to Dispose of used airway supplies (ETT, temp probe, bite block, OPA, NG/OG tube, suction) in the plastic cassette bag
- Roll up bag and discard.
- Do NOT throw away the laryngoscopes, keep them in the sealed specimen bag (technicians to collect & clean)

**GI & COVID: Management of a GI procedure/ERCP (incl. prone positioning)
Simulation 5 – Checklist**

(See workflow for GI – separate attachment)