

April 2020

# **ILC Dover Sentinel XL HP PAPR System**

Harbor UCLA Medical Center

South Bay Disaster Resource Center  
4-3-2020

## Section 1: Plan Overview

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- Goals of Plan
  - To create a standardized format to integrate ILC Dover PAPR into PPE supply for Work Force Members (WFM) during or after AGPs or in airborne precautions (in addition to N-95 + facial protection, MaxAir PAPRs, and CAPRs).
  - To provide information to WFMs on how to Don, Doff, Decontaminate, and store ILC Dover PAPRs in the ED.
  - To provide standardized non-verbal communication signs for use while wearing the ILC Dover.
- Planning Assumptions
  - Large volume of COVID-suspected patients in coming weeks and frequent need to perform Aerosol-Generating Procedures (AGPs)
  - Anticipated shortage of functioning CAPRs and DLC shields appropriate for intubation.
  - ILC Dover PAPR provides additional option for airborne PPE.
  - WFMs will complete a mandatory in-person training on appropriate donning, doffing, and operation of ILC Dover PAPR before using in clinical areas.
  - WFMs who use ILC Dover PAPRs will be responsible for proper cleaning, decontamination and storage after each use.
- Limitations of Patient Care when using
  - Hearing and communicating are significantly more difficult while wearing this PAPR. Have a plan before entering the patient's room.

## Section 2: Storage & Charging

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- Storage Locations
  - A designated charging and storage location must be selected and maintained by unit managers. Storage area should be accessible to appropriate staff and also appropriate to secure the equipment. Appropriate electrical power supply should be approved/provided by Facilities prior to use.
- Logging/Recording Use
  - A sign-out sheet will be hung next to each PAPR system; any WFM using the PAPR must sign it out first with a witness name.
  - Once PAPR has been decontaminated after use, WFM must record that they returned the PAPR, again with a witness signature
- Demobilization
  - If no ILC Dover PAPRs have been used for 4 days (per review of the log), they will be removed from the clinical area and returned to the Disaster Cache. This will be organized under the authority and direction of Disaster Directorship: Shira Schlesinger and Essence Wilson.

### Section 3: Staff Roles and Responsibilities

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- Who should be using the ILC Dover PAPRs
  - Nurses, Respiratory Technicians, Resident and Attending Physicians, Radiology Staff in ED/ICU areas where chest xrays are necessary in the context of AGPs.
- Training Required for PAPR use
  - Each user must watch the following video on Assembly of the PAPR system
    - <https://www.youtube.com/watch?v=4MuxjW0ZK4o>
  - Each user must read through the following User Instruction Manual on Assembly, Operation, Donning, and Doffing
    - [https://www.ilcdover.com/wp-content/uploads/2018/03/S-4014\\_1.pdf](https://www.ilcdover.com/wp-content/uploads/2018/03/S-4014_1.pdf)
    - Each WFM intending to use the ILC Dover must complete an in-person training session with a Nurse or Physician Educator on the proper donning, doffing, and operation of the ILC Dover PAPR, as well as the decontamination process and hand signals to be used, before using in clinical practice.
    - The Nurse or Physician Educator will complete a performance checklist during training; a 100% score is required to pass. If the WFM does not pass the training, he/she may repeat the performance checklist until achieving a 100% score.
    - Upon completion of training, WFM name will be added to ledger of Approved Users that should be kept with the PAPR systems.
- Checking equipment before use
  - WFM must use the attached checklist to verify appropriate function of the PAPR before each use.
- Other PPE to use with the ILC Dover PAPR
  - WFM should wear a surgical mask under PAPR hood (to limit potential contamination of hood from WFM droplets).
  - Gloves and Gown are required in addition to the PAPR system at all times.
- Donning the ILC Dover PAPR
  - Donning should be supervised by another “buddy” Nurse, RT, or MD as instructed during the mandatory training session. Buddy must also complete the training.
- Doffing and Replacing the ILC Dover PAPR
  - Doffing will be assisted by a “buddy” Nurse, RT, or MD as instructed during the mandatory training session.
  - Doffing buddy should be wearing a minimum of surgical mask, face shield/goggles, and gloves when assisting with hood and PAPR removal.
  - PAPR blower unit and hood should be immediately cleaned after removal with IPC-approved PDI Sani wipes or Cavi-wipes (or similar product).
  - After cleaning, the battery pack will be plugged back into the charger.
  - A witness will sign the Check-Out form attesting that hood and PAPR blower cleaning was performed appropriately prior to return to storage location.

#### **Section 4: – Communications**

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- Communicating with team members when wearing the PAPR
  - It is difficult to hear and be heard while wearing the hoods; do not take the hood off or reach your hand into the hooded area at any time after donning
  - Established plan for patient care prior to entering the patient's room
  - Use hand signals or a wipe board for any essential communication in the room
- Situations where the ILC Dover PAPR should not be used
  - Any situation not requiring airborne precautions
  - Any situation where verbal communication is essential
  - Any situation with an uncooperative or potentially violent patient

#### **Section 5: Cleaning PAPRs After Use and Damage to PAPRs**

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- The blower and hood should be cleaned immediately after use with IPC-approved disinfecting wipes as instructed during the training session.
- If any damage occurs to any part of the PAPR system while in the patient room, the WFM should immediately signal to the outside observer and exit the area.
- Any damaged PAPR should be decontaminated as usual but not be replaced for further use; the WFM who first detects the damage/malfunction must report this immediately to the Overall Charge Nurse (OCN)

#### **Section 6: Appendices**

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- Appendix A: Equipment/Supplies List
  - Sentinel XL Clear Hood
  - Breathing Hose
  - High Efficiency Particulate Air Filters (2)
  - Blower Plug (1)
  - PAPR Blower with battery pack and Quick Release Belt and Clip
  - PAPR Charger
  - Flow Meter
- Appendix B: Checklists for Donning/Doffing
  - Donning & Doffing Checklists
- Appendix C: Log Forms
  - Respirator Log.xlsx
- Appendix D: ILC Dover PAPR Manufacturer References

## Airborne Precautions with ILC Dover PAPR

### Donning Sequence

#### *Pre-Check*

Inspect blower unit for damage.

Ensure both HEPA filters are securely attached to each side of the blower and a “plug” is present in the bottom of the blower.

Turn blower ON & Check air flow: Attach air flow meter to blower hose connector, hold upright, turn blower ON. A short beep should sound and the red LED light should illuminate continuously. Ensure upper portion of the black cone is above the indication line on flow meter, indicating ready for use. Audible beeping and blinking red LED light indicates low battery. Turn OFF.

#### *Donning PPE*

Perform Hand Hygiene. Don clean facemask to wear under hood.

Check that breathing hose is securely attached to male connectors on head cover and PAPR blower. If not attached, tightly screw breathing hose to the male connections.

Snap buckle closed around waist and properly adjust waist strap to snug fit with PAPR blower at low back.

Don isolation gown over PAPR belt.

Don double gloves.

Turn PAPR power ON.

Open clear hood opening and place hood over head.

Tuck inner skirts (2) into PPE gown.

Smooth outer skirt in place.

Have Buddy check PAPR hood and skirt.

## **Airborne Precautions with ILC Dover PAPR** **Doffing Sequence**

**ALWAYS have a Buddy help you DOFF your PPE & PAPR**

**REMOVE** outer gloves and gown and throw away inside room.

Perform **HAND HYGIENE with alcohol foam** on inner gloves.

Step out of the room.

**Buddy** in PPE should **WIPE** hood and hose with disinfectant wipes.

Unclip PAPR blower unit and hand to Buddy. **Do Not turn off PAPR.**

**Buddy** should **WIPE** PAPR blower with disinfectant wipes.

**REMOVE 2<sup>nd</sup> set of GLOVES.**

Perform **HAND HYGIENE with alcohol foam cleanser.**

Put on new gloves.

Lean forward and **REMOVE PAPR hood** by lifting up from within bibs. Place on cart/bucket.

Turn off PAPR blower.

**Wearer** should **WIPE inside and outside of hood** and PAPR blower with disinfectant.

**RETURN** PAPR to storage area and complete log.

Perform **HAND HYGIENE with SOAP and WATER** for 20 seconds

Appendix C: PAPER Use Log Form

See attached

