

- I. Introduction:** Per Occupational Safety and Health Administration standards, respiratory protection must be provided for employees who are unable to utilize an N95 respirator or in the event that N95 masks are unavailable. Respiratory protection will be provided by a controlled air purifying respirator (CAPR) in these instances. Anyone wearing a CAPR must have a medical evaluation. If you have been fit tested for an N95, you have already received a medical evaluation.

Purpose: The purpose of this Standard Operating Procedure is to outline the steps necessary for staff to take to obtain a CAPR. This standard operating procedure also provides additional resources for utilization procedures such as donning and doffing and battery care.

Scope: Ann & Robert H. Lurie Children's Hospital of Chicago

Definitions: **CAPR:** Controlled Air Purifying Respirator

- II. Responsibilities:** Helmet inspection: The Healthcare Technology Management Department (HTM), will perform preventative maintenance once a year per manufacturer's specifications. HTM will change helmet filter when indicated by LED light on helmet. User or unit Charge RN to notify HTM if yellow light LED light is illuminated and do not use helmet for patient use

III. Obtaining a CAPR

In the event that a CAPR is needed on a floor where CAPRs are not currently stocked, please contact the Patient Access Center (PAC) at 74112 or page at 74112. The Health Care Worker (HCW) will have to pick up CAPR at the Patient Access office (12-574)

Materials provided:

- Helmet
- Battery pack X 2
- Battery charger
- 2 disposable lens cuffs (either medium/large or small medium)

PAC staff will note individual's name, date and patient initials, bed space where CAPR will be utilized and Crothall number in helmet on CAPR inventory record. See Appendix A. COVID-19 PPE spotters will need to be notified and supply additional disposable lens cuffs if needed.

Staff obtaining CAPR should check the preventative maintenance sticker and notify HTM if sticker is out of date

IV. Returning a CAPR

Once the CAPR is no longer needed, operator of CAPR must return helmet, batteries and charger to PAC after appropriate disinfection. PAC staff will document on CAPR Inventory Record date and time of CAPR return.

V. Educational Resources

1. MaxAIR CAPR Donning and Doffing Videos on WeLearn
2. Demonstration by an individual who is qualified to train on the use of CAPR's

3. Lurie Children's PPE videos

VI. Utilization Procedures

Donning Procedure for Airborne/Contact Plus Isolation-CAPR

Supplies Needed:

- Gown
- Gloves
- CAPR helmet
- CAPR cuff
- Bouffant hat (buffer between HCW head and comfort strip for multiple HCW use)

Procedure:

1. Perform hand hygiene
2. Don belt and wrap excess belt around waist and tuck in
3. Don Bouffant hat
4. Attach battery to left side of belt
 - a. Complete the following steps:
 - i. Plug in helmet to battery
 - ii. Test helmet
 - iii. Size helmet to head and unplug from battery
 - iv. Snap cuff into place on helmet
5. Don clean gown fully covering your torso neck to knees, arms to end of wrists
6. Thread battery cord through front of neck hole in gown
7. Plug cord into battery and put helmet and cuff on
 - i. Secure cuff under chin
8. Wrap gown ties around in the back, and tie at the back of the waist
9. Don your gloves. Extend gloves to cover wrist of your isolation gown

Doffing procedure for Airborne/Contact Plus Isolation-CAPR

1. Remove gloves. Grasp the outer edge near your wrist and peel away from your hand, turning the gloves inside out and dispose in regular waste bin
2. Perform hand hygiene
3. Remove gown. Peel away from you, starting from the neck and moving toward the shoulder turning the contaminated outside toward the inside. Fold or roll into a bundle and discard. in regular waste bin
4. Perform hand hygiene
5. Remove disposable lens cuff (DLC) by grasping the side of the attachment holes and remove lens cuff by pulling outward and forward away and clear from the helmet
6. Dispose of disposable lens cuff in regular waste bin

7. Loosen the helmet headband by turning the knob (rear ratchet suspension knob) counterclockwise
8. Lift the helmet up and off the head
9. Remove bouffant hat
10. Remove battery from belt or pocket and disconnect power cord from battery
11. Perform hand hygiene

If comfort strip integrity is compromised, please dispose

Disinfection of MaxAir CAPR system using Hospital Approved Disinfectant

1. Perform hand hygiene
2. Don new pair of gloves
3. Begin by cleaning the inside of the helmet, wiping the liner, and rear headband closed cell foam cushion for the designated wet time of the disinfectant (Purple PDI wipes=2 minutes, Bleach=1 minute)
4. Wipe battery and battery cord for the designated wet time of the disinfectant (Purple PDI wipes=2 minutes, Bleach=1 minute)
5. Wipe all outer surfaces including filter cover and cap for the designated wet time of the disinfectant (Purple PDI wipes=2 minutes, Bleach=1 minute)
6. Wipe surface that the dirty helmet and battery were placed on and all other high touch surfaces for the designated wet time of the disinfectant (Purple PDI wipes=2 minutes, Bleach=1 minute)
7. Remove gloves and dispose in regular waste bin
8. Perform hand hygiene after glove removal

Charging battery

1. Be sure the charger is connected to a working outlet
2. The chargers green LED will illuminate when it is connected to a working outlet
3. Connect the battery to the charger. If the LED light remains green after a few seconds, the battery is sufficiently charged for reuse
4. If the chargers LED light is red within a few seconds of connecting the battery, the battery is being charged
5. When charging is complete, the chargers LED will be green, and the battery can be disconnected and is ready for use with the CAPR system

Reviewed by: Kim Taylor, BSN, RN
Kaitlin Koralik, BSN, RN, CCRN
Natsumi Shiotani, HTM, Kelly Harris, HTM
Genevieve Frey, CCU Nursing Director
Anna O'Donnell, MSN, RN, CIC, FAPIC, Director of Infection Prevention and Control
Shelly Uttley, RN Director of Environmental Safety

Appendix A:

CAPR Inventory Record

<u>Name</u>	<u>Date/time checked out</u>	<u>Patient initials & room number</u>	<u>Crothall ID number</u>	<u>Date/Time returned</u>	<u>PAC Staff initials</u>