

PPE Donning Procedures - Powered Air-Purifying Respirator (PAPR) | (Inpatient/Outpatient)



Identify Your PAPR Type



3M™ Versaflo™

Options for air flow speed, audible/vibrational alarm for battery/filter/fan malfunctions. Detailed instructions can be found in this document (pages 9 & 10).



AirBoss® (SafetyTech) FlexAir™

The unit has an audible alarm for low battery (intermittent) and low air flow (constant).

Detailed instructions for use of each of these PAPRs can be found online at <https://www.safety.duke.edu/occupational-hygiene-safety/personal-protective-equipment/respiratory-protection>

1



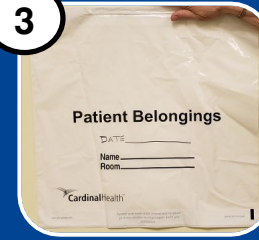
If possible, ensure you have an observation buddy established before donning PPE. PPE can be donned in the hallway or anteroom depending on where your isolation cart is located.

2



Remove all non-essential items and put long hair up in a bun.

3



Take a designated plastic bag (e.g., patient belongings bag) and write your full name and date in preparation for storage of the PAPR headgear.

4



Perform hand hygiene.

5



Inspect the PAPR components for damage prior to use. A high-efficiency particulate air (HEPA) filter (**PURPLE** label) should be provided for airborne pathogens protection. Filters are changed by Clinical Engineering (CE) when indicated, not between every use.



6



Check air flow!

Turn on a charged motor/blower.

With the air flow indicator, check the air flow of the motor/blower.

Then, attach the breathing tube and check the air flow again.

⚠ If air flow is not above the minimum level identified on the air flow indicator, do NOT use the motor/blower! Remove it from use. If minimum air flow is achieved, proceed with these PAPR instructions.

7

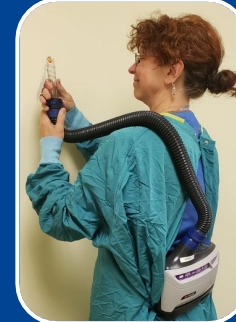


Turn ON the motor/blower.

Don the motor/blower with the breathing tube.

The motor/blower should be around the waist and at the back.

8



Don the gown.

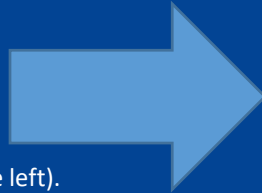
Close the back of the gown over the PAPR motor/blower (see left).

The air flow MUST be checked a second time at the breathing tube.



If air flow is not above the minimum level identified on the air flow indicator, expose the motor/blower by tucking the gown underneath (see right). Recheck the air flow. If minimum air flow is achieved, proceed with PAPR instructions. If air flow is inadequate, remove PAPR from use.

Continue to the instructions "Donning Loose-Fitting Headgear for PAPRs (Inpatient/Outpatient)".



DukeHealth

Donning Loose-Fitting Headgear for PAPRs | (Inpatient/Outpatient)



There are three general types of loose-fitting headgear for PAPRs:

- A. Headcover
- B. Hood with *single* shroud
- C. Hood with *double* shroud

Regardless of the PAPR headgear that you use, follow these important steps.



If the headgear is new, remove the protective film on the visor.



If the headgear is equipped with an adjustable plastic suspension, it may be adjusted to achieve a comfortable fit.



Prior to donning the headgear, ensure that the breathing tube is attached, the motor/blower is worn at the back and turned ON.

5

To continue donning/doffing your headgear, proceed to the color-coordinated section that matches your headgear type.

A

B

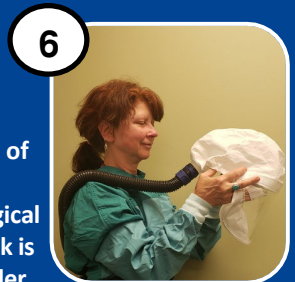
C



A

HEADCOVER

During times of universal masking: surgical /earloop mask is required under PAPR headgear.



With the breathing tube attached and laying over your shoulder, bring the headcover to your front.



Pull the headcover over your head so the visor is in front of your face. The comfort pad should be worn at the forehead, just above the eyebrows.



To ensure the best fit, the elastic edge of the headcover should contact your face under the chin, and in front of the ears. The headcover **should not** cover the ears.



Air will flow around the face. This is a properly fitting headcover.



Perform hand hygiene. Don gloves. Tuck the gown cuff under the glove cuff. Have buddy complete one full check of PPE. Enter the patient room.

DONNING PROCEDURE COMPLETE

THIS HEADCOVER IS TOO SMALL FOR THE USER

A properly fitting hood will be comfortable to wear and protect the user as intended. In these photos, the small circumference of the head suspension does not allow the comfort pad to be worn at the forehead. Additionally, the visor is too close to the face.

Donning Loose-Fitting Headgear for PAPRs | (Inpatient/Outpatient)



B

HOOD WITH SINGLE SHROUD



During times of universal masking surgical/earloop mask is required under PAPR headgear.

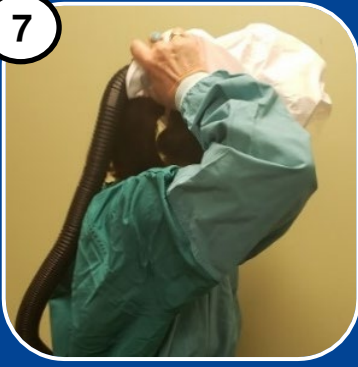


6



With the breathing tube attached and laying over your shoulder, bring the single shroud hood to your front.
Gather the shroud to expose the hood opening.

7



Pull the hood over your head so the visor is in front of your face.
The comfort pad should be worn at the forehead, just above the eyebrows.

8



The elastic edge of the hood should contact your face under the chin, and above the ears.
You should feel air flowing around the face.

9



Adjust the single shroud so that it drapes over the shoulders.
The single shroud is designed to lie OUTSIDE the protective garment being worn, NOT INSIDE.



10



Perform hand hygiene.
Don gloves. Tuck the gown cuff under the glove cuff.
Have buddy complete one full check of PPE. Enter the patient room.

DONNING PROCEDURE COMPLETE

C

HOOD WITH DOUBLE SHROUD



During times of universal masking: surgical/earloop mask is required under PAPR headgear.



6



The double shroud hood has an inner soft shroud that goes UNDER the protective garment and an outer shroud that lays OVER the protective garment.

7



With the breathing tube attached and laying over your shoulder, bring the hood to your front.
Gather the shrouds at the back of the hood and under the breathing tube connection to expose the hood opening.

8



Pull the hood over your head so the visor is in front of your face. The comfort pad should be worn at the forehead, above the eyebrows.
You should feel air flowing around the face.

9



Grab the inner shroud in the front.



Tuck the inner shroud in and around the FRONT, BACK, and SIDES of your protective gear.



The inner shroud should be tucked into your protective gear all around the neck.

10



Adjust the outer shroud so that it drapes over the shoulders, OUTSIDE of your protective gear.

11



Perform hand hygiene.
Don gloves. Tuck the gown cuff under the glove cuff.
Have buddy complete one full check of PPE. Enter the patient room.

DONNING PROCEDURE COMPLETE



DukeHealth

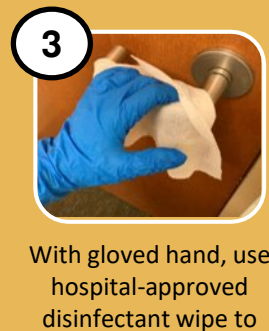
Doffing & Disinfection Instructions* for Loose-Fitting *Head Cover* | (PAPR NO Anteroom)



1
Remove gown by grasping at the shoulder as far away from the face as possible, roll inside out, and dispose of gown and gloves in the designated receptacle/bag.



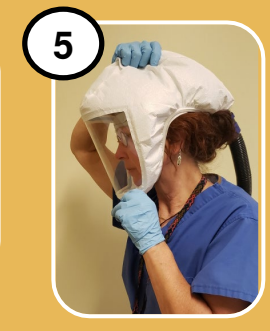
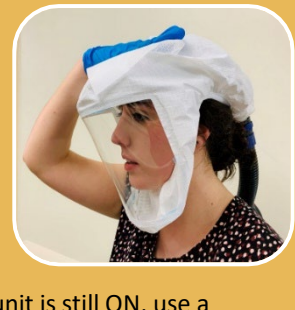
2
Perform hand hygiene. Don a new pair of gloves.



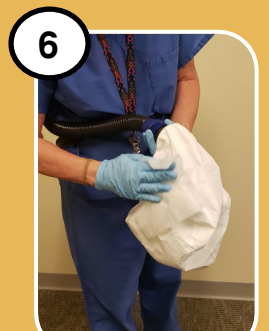
3
With gloved hand, use hospital-approved disinfectant wipe to open the door, exit the space, and close the door behind you with the same disinfectant wipe.



4
While the PAPR unit is still ON, use a hospital approved disinfectant wipe to disinfect the front, top, sides and back of the head cover.
Discard wipe(s).

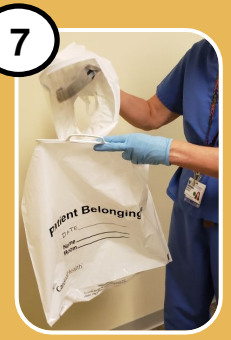


5
Lean forward slightly and remove the head cover by grabbing from top, tipping forward, and pulling away from face. Take care not to touch skin with head cover or breathing tube. Removing the hood while pulling it away from the face decreases the likelihood of the hood to touch the face.



6
While the head cover is still connected to the breathing tube, disinfect thoroughly with disinfectant wipe(s), specifically in areas hard to reach during the first wipe down (e.g., where the breathing tube connects to the head cover).
Discard wipe(s).

During times of universal masking keep surgical/earloop mask on.



7
Disconnect the head cover from the breathing tube and place in designated plastic bag (e.g., patient belongings bag) labeled with your full name.



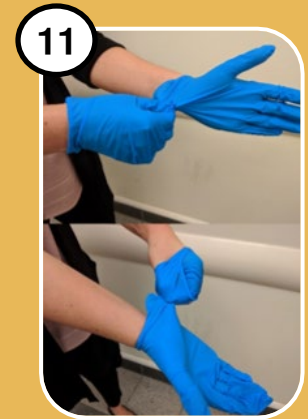
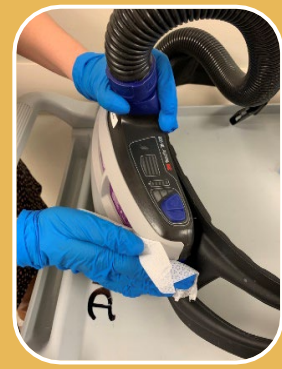
8
Turn off the PAPR. While gloves are still ON, perform hand hygiene.



9
Unbuckle the PAPR motor/blower from waist.



10
Use disinfectant wipe(s) to thoroughly disinfect the outside of the motor/blower and breathing tube.
Discard wipe(s).



11
Remove gloves using proper technique. Discard gloves.



12
Perform hand hygiene.

13
Store the PAPR components in designated area.
Charge PAPR battery for next user.

DOFFING PROCEDURE COMPLETE



Doffing & Disinfection Instructions for Loose-Fitting *Single- or Double-Shrouded Hoods* | (PAPR NO Anteroom)



1

While gloves are still ON, perform hand hygiene using hospital-approved hand sanitizer.



2

While the PAPR unit is still ON, with a gloved hand use a hospital approved disinfectant wipe to disinfect the front, top, sides, back and outer areas of the hood and shroud.

Discard wipe(s).



3

Remove gown by grasping at the shoulder as far away from the face as possible, roll inside out, and dispose of gown in the designated receptacle/bag.



4

Perform hand hygiene.
Don a new pair of gloves.



5

With gloved hand, use hospital-approved disinfectant wipe to open the door, exit the space, and close the door behind you with the same disinfectant wipe.

Discard wipe.



6

Lean slightly forward and sideways to remove the hood by grabbing from top, tipping forward, and pulling away from face. Take care not to touch your skin with the breathing tube or hood. Removing the hood while pulling it away from the face decreases the likelihood of the hood to touch the face.



During times of universal masking keep surgical/earloop mask on.

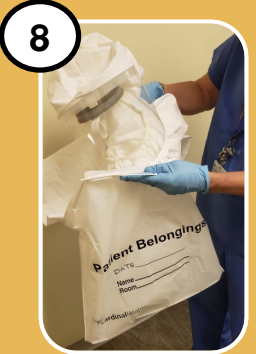




7

While the hood is still connected to the breathing tube, disinfect thoroughly with disinfectant wipe(s), specifically in areas hard to reach during the first wipe down (e.g., breathing tube connection to the hood, back of shroud).

Discard wipe(s).



8

Disconnect the hood from the breathing tube and place in designated plastic bag (e.g., patient belongings bag) labeled with your full name.



9

Turn off the PAPR.

While gloves are still ON, perform hand hygiene.



10

Unbuckle the PAPR motor/blower from waist.



11

Use disinfectant wipe(s) to thoroughly disinfect the outside of the motor/blower and breathing tube.

Discard wipe(s).



12

Remove gloves using proper technique.

Discard gloves.



13

Perform hand hygiene.

14

Store the PAPR components in designated area.

Charge PAPR battery for next user.

DOFFING PROCEDURE COMPLETE



Doffing & Disinfection Instructions* for Loose-Fitting Head Cover | (PAPR with Anteroom)



With gloved hand, use hospital-approved disinfectant wipe to wipe the door handle and open the door, enter the anteroom, close the door behind you.

Discard wipe.



Remove gown by grasping at the shoulder as far away from the face as possible, roll inside out, and dispose of gown and gloves in the designated receptacle/bag.



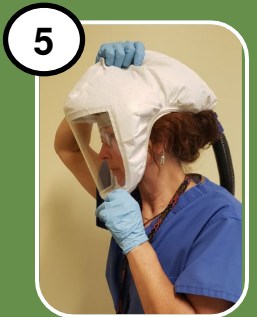
Perform hand hygiene.

Don a new pair of gloves.

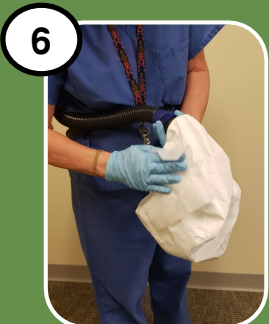


While the PAPR unit is still ON, use a hospital approved disinfectant wipe to disinfect the front, top, sides and back of the head cover.

Discard wipe(s).



Lean forward slightly and remove the head cover by grabbing from top, tipping forward, and pulling away from face. Take care not to touch skin with head cover or breathing tube. Removing the hood while pulling it away from the face decreases the likelihood of the hood to touch the face.



While the head cover is still connected to the breathing tube, disinfect thoroughly with disinfectant wipe(s), specifically in areas hard to reach during the first wipe down (e.g., where the breathing tube connects to the head cover).

Discard wipe(s).

During times of universal masking keep surgical/earloop mask on.



Disconnect the head cover from the breathing tube and place in designated plastic bag (e.g., patient belongings bag) labeled with your full name and date.



Turn off the PAPR motor/blower.

While gloves are still on, perform hand hygiene.

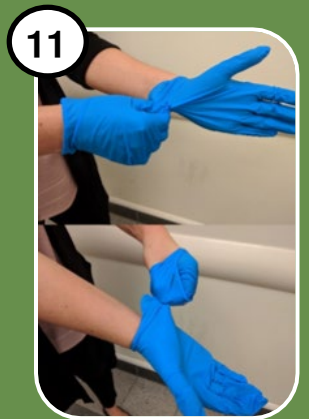


Unbuckle the PAPR motor/blower from waist.



Use disinfectant wipe(s) to thoroughly disinfect the outside of the motor/blower and breathing tube.

Discard wipe(s).



Remove gloves using proper technique.

Discard gloves.



Perform hand hygiene.

Store the PAPR components in designated area.

Charge PAPR battery for next user.

DOFFING PROCEDURE COMPLETE



Doffing & Disinfection Instructions for Loose-Fitting *Single- or Double-Shrouded Hoods* | (PAPR with Anteroom)



With gloved hand, use hospital-approved disinfectant wipe to wipe the door handle and open the door, walk into the anteroom, close the door behind you.

Discard wipe.



While the PAPR unit is still ON, with a gloved hand use a hospital approved disinfectant wipe to disinfect the front, top, sides, back and outer areas of the hood and shroud.

Discard wipe(s).



Remove gown by grasping at the shoulder as far away from the face as possible, roll inside out, and dispose of gown and gloves in the designated receptacle/bag.



Perform hand hygiene.

Don a new pair of gloves.



Lean slightly forward and sideways to remove the hood by grabbing from top, tipping forward, and pulling away from face. Take care not to touch your skin with the breathing tube or hood. Removing the hood while pulling it away from the face decreases the likelihood of the hood to touch the face.

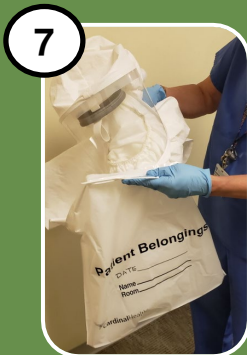


During times of universal masking keep surgical/earloop mask on.



While the hood is still connected to the breathing tube, disinfect thoroughly with disinfectant wipe(s), specifically in areas hard to reach during the first wipe down (e.g., breathing tube connection to the hood, back of shroud).

Discard wipe(s).



Disconnect the hood from the breathing tube and place in designated plastic bag (e.g., patient belongings bag) labeled with your full name and date.



Turn off PAPR motor/blower.

While gloves are still on, perform hand hygiene.



Unbuckle the PAPR motor/blower from waist.



Use disinfectant wipe(s) to thoroughly disinfect the outside of the motor/blower and breathing tube on a clean surface.

Discard wipe(s).



Remove gloves using proper technique.

Discard gloves.



Perform hand hygiene.

Store the PAPR components in designated area.

Charge PAPR battery for next user.

DOFFING PROCEDURE COMPLETE



DukeHealth

3M™ Versaflo™ Powered Air-Purifying Respirator (PAPR) Instructions



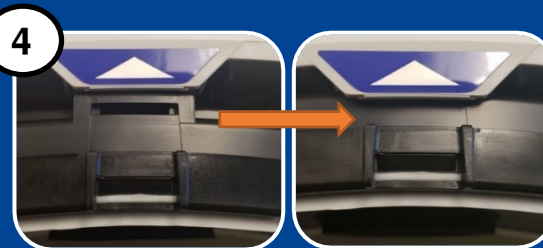
Inspect the PAPR components (motor/blower, breathing tube, battery, filter/filter cover, head gear) to ensure that no parts are missing or damaged.



Charge the battery in the battery charger cradle prior to use. Ensure the battery clicks into place. The cradle will indicate the status of the battery charge.



If using a filter cover, the size of the filter cover must match the size of the filter/cartridge provided to you for your specific job hazards. Chemical/HEPA cartridge shown at left (BLACK/PURPLE label) and HEPA filter shown at right (PURPLE label).



Insert filter/cartridge into filter cover. Ensure the latching tab snaps into place.



If installed correctly, the filter/cartridge label should appear in the window of the filter cover. HEPA filter shown (PURPLE).



Place the hinge side of the filter/cartridge into the motor/blower. A distinct click will be heard. Gently pull to ensure a firm connection.



Remove the battery pack from the charger cradle by pressing on the blue button.



Press the TEST button on the bottom to confirm sufficient charge.



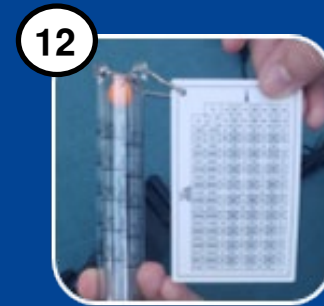
Attach the battery pack into the bottom of the motor/blower. A distinct click will be heard. Gently pull the battery to ensure it is firmly attached.



Turn the motor/blower ON. Let the unit run for 1 minute.



Insert the air flow indicator into the outlet on the motor/blower. With the air flow indicator in a vertical position, ensure the floating ball is at or above the minimum flow level for your zone on the attached chart.



If not above the minimum level, do NOT use the unit. Remove it from use and have it serviced. If minimum air flow is achieved, proceed with these PAPR instructions.



DukeHealth

3M™ Versaflo™ Powered Air-Purifying Respirator (PAPR) Instructions



13



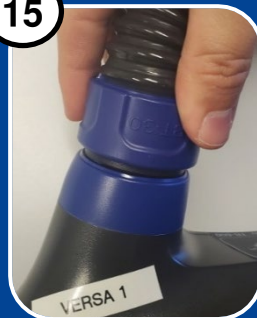
Perform a low flow alarm test by blocking air flow with your palm. The motor/blower unit should emit an audible alarm and show a flashing red light. In ~30 seconds If no alarm sounds, remove it from use and have it serviced. If the alarm sounds, proceed with these PAPR instructions.

14



Attach the breathing tube end (with metal prongs) to the motor/blower unit.

15



Twist ¼ turn clockwise to lock. Gently pull on the breathing tube to ensure a good connection.

16



Insert the air flow indicator into the outlet of the breathing tube. With the air flow indicator in a vertical position, ensure the floating ball is at or above the minimum flow level.

17



If not above the minimum level, re-inspect the breathing tube for blockage or damage. Replace the breathing tube if minimal air flow is not achievable. Turn motor/blower unit OFF to continue assembly.

18



Attach the breathing tube to the hood. Push the end of the breathing tube into the air inlet of the hood while pinching the blue clip. You will hear a click. Gently pull to confirm the breathing tube is secure.

19



Attach the motor/blower unit to the PAPR belt. Insert the prongs on the back of the motor/blower unit into the grommets on the belt. Slide the belt upward to secure into place.

20



Follow instructions for "PPE Donning Procedures - Powered Air-Purifying Respirator (PAPR)" (page 1 of this document).

21



Follow instructions for "Donning Loose-Fitting Headgear for PAPRs / (Inpatient/Outpatient)" on pages 2 & 3 of this document.

22



Once the PAPR has been donned, fan speed can be adjusted using the blue fan button adjacent to the power button (visible in step 10).

23



Ensure additional PPE is in place before starting work tasks.

24

Follow "Doffing and Disinfection Instructions" for head cover (pages 4 & 6) or shrouded hoods (pages 5 & 7) of this document upon completion of work tasks.



DukeHealth



During times of universal masking surgical/earloop mask is required under PAPR headgear.

