

## HOME VISIT PPE PROCEDURE FOR PATIENTS WITH RESPIRATORY ILLNESSES

Brian Kerley, MD; Denise Marshall, MD; Lana Tan, MD (Co-Authors)

### PREAMBLE

*This document is intended to allow a health care worker to make a safe home visit to a patient with respiratory symptoms who may or may not have Covid-19. It is not intended to be a protocol for visits to lower risk patients (situations where the patient and everyone in their home pass screening). In lower risk situations, the provider is advised to consider what degree and amount of Personal Protective Equipment (PPE) to use. This may vary according to local protocol and availability of the various elements of PPE. It is also assumed that the provider knows how to correctly don PPE.*

### IMPORTANT!

- **ENSURE** you are **ACQUAINTED WITH** and **APPLY** your **regional and the provincial health authority and public health agency guidelines on WHEN AND WHEN NOT TO USE PPE**. See [http://www.health.gov.on.ca/en/pro/programs/publichealth/coronavirus/2019\\_guidance.aspx](http://www.health.gov.on.ca/en/pro/programs/publichealth/coronavirus/2019_guidance.aspx)
- **VIRTUAL VISITS are now the norm and home visits should only be done when absolutely necessary** (acquaint yourself with the province's guidelines and resources on this)
- **Monitor your local, provincial and national guidelines on an ongoing basis as these may shift as new things are learned and as guidelines and protocols are improved.**
- **Similarly, monitor the website of the Division of Palliative Care** ([fhs.mcmaster.ca/palliativecare/](https://fhs.mcmaster.ca/palliativecare/)) as these steps may undergo modifications in the days and weeks ahead. Please share any improvements you may see to the steps so we can continue improving to ensure the safety to patients and health care professionals. Please send suggestions to [palcare@mcmaster.ca](mailto:palcare@mcmaster.ca)

### GOAL OF THIS DOCUMENT

The steps described in this document are intended to help health professionals through the PPE process when a home visit is required (care cannot be done virtually) and provincial criteria are met for PPE to be used. The steps require that you are acquainted with the sequence of donning and doffing PPE. There are a number of different recommended sequences from various local, provincial, national and international organizations e.g. <https://youtu.be/bG6zISnenPg>

The joint statement issued on 30 March 2020, by the Chief Medical officer of Health of Ontario, the Ontario Ministry of Health, the Ministry of Labour, Training and Skills Development, and the Ontario Nursing Agency, which states: "The employers commit to provide all health care workers with information on safe utilization of all PPE and employees shall be appropriately trained to safely don and doff all of these supplies." This document has that in mind. The statements also include the following:

- #1: A point-of-care risk assessment (PCRA) must be performed before every patient interaction. If a health care worker determines, based on their professional and clinical judgement that health and safety measures may be required in the delivery of care to the patient, then the worker shall have access to the appropriate health and safety control measures, including an N95 respirator.
- #2: At a minimum, contact and droplet precautions must be used by health care workers for all interactions with suspected, presumed or confirmed COVID-19 patients. Contact and droplet precautions includes gloves, face shields or goggles, gowns, and surgical/procedure masks.
- #3: All health care workers who are within two metres of suspected, presumed or confirmed COVID-19 patients shall have access to appropriate PPE. This will include access to: surgical/procedure masks, fit tested NIOSH-approved N-95 respirators or approved equivalent or better protection, gloves, face shields with side protection (or goggles), impermeable or, at least, fluid resistant gowns.

## PROCEDURE

### Phase 1: PREPARING

1. As much as possible, prepare for the visit with a virtual visit or telephone call prior to going to the home. Do your history taking and as much discussion as you can over the phone or video, so that only a physical exam will take place in the home. Try to ensure that a family member will be in the home and will be able to help you exit the home safely afterwards.
2. Ask the family to put a large garbage bin lined with a garbage bag just inside the front door.
3. If they have a surgical mask, ask them to put it on the patient when you arrive.
4. If they have hand sanitizer, ask them to have the patient do hand hygiene when you arrive.
5. Ask the family to keep pets and children in a confined area, away from the front door where you will set up your workstation, and ask them to ask other people not to visit while you are there.
6. Print 2 copies of the DOFFING PPE CUE SHEET, one for outside the door, one for inside the door.
7. Bring with you a container of alcohol based hand rub (ABHR)<sup>1</sup>, a container of viral wipes, a green garbage bag, a small plastic grocery bag (for carrying everything into the house) and 2 empty pails, one labelled CLEAN and one DIRTY (a lid for the dirty pail would ideal), an extra earloop mask for the patient in case they don't have one, and the 2 copies of the DOFFING PPE CUE SHEET (See Appendices) as well as your PPE<sup>2</sup>. Bring extra gloves in case of a glove tear while donning.

### Phase 2: ENTERING THE HOME

1. Call the house from the driveway and announce your presence. Confirm that the family has a mask for the patient. If so, you do not need to bring a spare mask into the house.
2. Don PPE outside the home, leave the empty pails outside the door with lid(s) off, with the CLEAN pail closest to the door so that it can be easily reached from the threshold. Put one of the cue sheets on the ground next to the pails, secured so it doesn't blow away, and enter the home carrying the grocery bag containing the green garbage bag, viral wipes, ABHR, the spare mask (if needed) and your equipment. Put the unopened garbage bag flat on the floor next to the garbage bin, and put the viral wipes, the ABHR and the second copy of the DOFFING PPE CUE SHEET on it. Discard the grocery bag into the garbage bin.

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<sup>1</sup> ABHR=Alcohol based hand rub, which must be at least 60% ethanol.

<sup>2</sup> PPE = Personal Protective Equipment, and in this instance will include an impervious gown, a mask (a surgical mask will suffice, unless there will be aerosol generating procedures in the home such as suctioning of secretions, CPAP, BIPAP or high flow oxygen, in which case an N95 respirator is needed), eye protection (goggles, visor, or a mask with an integrated visor) and gloves

3. Ask the patient to put on the earloop mask and do hand hygiene with their own ABHR if they have not already done so, but do NOT offer your own ABHR for this purpose.
4. Perform the physical exam.

### Phase 3: LEAVING THE HOME

1. With full PPE still on, move to the front door and perform hand hygiene on your gloves with the ABHR (remember, you have now contaminated the ABHR container).
2. With a viral wipe, clean the inside door handle. After a minute, repeat with a second wipe.
3. Touching only the clean door handle, open the door, then with a viral wipe, clean your stethoscope and any other equipment such as a pulse oximeter, the ABHR bottle and then the viral wipe container, one at a time, in that order, and after cleaning each item, drop it in the clean bucket outside the door, touching only the cleaned door handle. Keep the ABHR accessible, you will need it several more times.
4. Doff gown and gloves inside the front door and put in the big garbage can. Don't push down.
5. Exit the house leaving behind the DOFFING PPE CUE SHEET and the flat garbage bag on the floor. Touch only the cleaned door handle.
6. Hand hygiene with ABHR.
7. If wearing goggles and separate mask, remove goggles by touching only the most posterior parts of the arms, and place in the DIRTY empty bucket.
8. Remove your mask touching only the back of the earloops, and hand it back in the house for someone to put in the garbage (don't touch the door), or if no assistant is available, put it in an outside garbage can if there is one—if not, in the DIRTY bucket with the goggles. Consider the emerging idea that it may be prudent to save your mask, as techniques for reprocessing paper masks may be coming. If so, place it in the DIRTY bucket to bring with you for later reprocessing.
9. Hand hygiene with ABHR
10. Put the lid on the dirty bucket. Don't touch the goggles or mask. Leave the outdoor copy of the DOFFING PPE CUE SHEET behind. Pack your car.

### Phase 4: AFTER THE VISIT AND REPROCESSING

1. At your clinical base, don fresh vinyl exam gloves and eye protection if available. A face shield is ideal. Consider wearing a washable cloth gown also, in case of a splash.
2. Wipe all your equipment a second time with viral wipes and wipe out the clean bucket.
3. Prepare a solution of 10% bleach, that is, 1 part household bleach to 9 parts water. E.g. 250 ml bleach added to 2250 ml of water, or 1 cup bleach to 9 cups water.
4. With PPE still on, open the "DIRTY" bucket, remove any masks and place in garbage, making sure you don't touch the outside of the garbage bag/box with the masks or gloves as these are considered contaminated. Consider placing the mask in a paper bag (such as a large leaf bag) for storage and potential future reprocessing.
5. Put some dish soap and water carefully in the DIRTY bucket so as not to splash

6. Wash goggles, rinse with water then place in 10% bleach solution to soak for 15 minutes.
7. Wash out the bucket thoroughly then viral wipe it. Viral wipe the dishsoap bottle and your faceshield.
8. Remove vinyl exam gloves and dispose in garbage, and remove gown if worn.
9. Hand hygiene with ABHR.

**Notes:**

- a. You could consider bins lined with garbage bags instead of buckets, but you would need to exercise caution in tying and untying the bags so as not to aerosolize virus with a puff of air as you gather the bag. You would need to have gloves on for closing and opening the bags and it would require hand hygiene after each step.
- b. You may need to modify your exit procedure, particularly the LEAVING HOME Step 3, depending on the configuration of the front door or doors of the house. This is where assistance from a family member is valuable.
- c. You may need to modify this procedure if you need to do multiple visits without returning to home or office in between. You will need several sets of PPE (one for each visit) and you will need to give your equipment a second wipe before the next visit (two wipes at least a few minutes apart are recommended). This will also require vinyl exam gloves (so you will need to bring those with you in the car) and hand hygiene afterwards. If supplies of PPE are limited, it may be possible to use the same mask and eye protection for several successive visits, provided you do not touch either item while you are not wearing gloves, and provided that you can safely drive your car with both items on. Once they are removed, there is a risk of contaminating the skin when they are re-applied, so once removed they should be discarded or reprocessed as appropriate.

(The Hamilton-Niagara-Haldimand-Brant LHIN suggests not using bleach when cleaning the goggles. Note though that Health Canada and the Centers for Disease Control (CDC) in the USA recommend using bleach because a) it gets into the hinges, louvers, cracks and nooks of goggles that are difficult to reach with viral wipes; and b) it conserves the viral wipes as these are in short supply.)

**References:**

1. NETC Hand Hygiene and PPE video: <https://youtu.be/bG6zISnenPg>
2. The CDC Donning and Doffing PPE protocol
3. The Ontario Public Health Donning and Doffing PPE protocol
4. The HHS donning and doffing PPE protocol
5. Public Health Canada for reprocessing eyewear: <https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/health-professionals/interim-guidance-cases-contacts.html>
6. OMA PPE recommendations: [http://fhs.mcmaster.ca/palliativecare/documents/OMAPPE\\_Recommendations\\_FINAL.pdf](http://fhs.mcmaster.ca/palliativecare/documents/OMAPPE_Recommendations_FINAL.pdf)
7. IPAC document: <https://www.publichealthontario.ca/-/media/documents/ncov/updated-ipac-measures-covid-19.pdf?la=en>
8. 8. Personal Protective Equipment (PPE) use during the COVID-19 Pandemic: [https://www.oha.com/Bulletins/Personal%20Protective%20Equipment%20use-COVID-19\\_Released\\_March\\_30\\_2020.pdf](https://www.oha.com/Bulletins/Personal%20Protective%20Equipment%20use-COVID-19_Released_March_30_2020.pdf)

## **APPENDICES FOLLOW**

THE FOLLOWING APPENDICES, ARE A STEP BY STEP BREAKDOWN OF EACH PHASE OF THE PROCESS DESCRIBED IN THE PREVIOUS 2 PAGES.

It includes the DOFFING PPE CUE SHEET that you should print off separately for the home visit, and the REPROCESSING CUE SHEET that you should print and post in your reprocessing area.

## HOME VISIT PPE PROCEDURE

### Phase 1: PREPARATION

1. As much as possible, prepare for the visit with a virtual visit or telephone call prior to going to the home. Do your history taking and as much discussion as you can over the phone or video, so that only a physical exam will take place in the home. Try to ensure that a family member will be in the home and will be able to help you exit the home safely afterwards.
2. Ask the family to put a large garbage bin lined with a garbage bag just inside the front door.
3. If they have a surgical mask, ask them to put it on the patient when you arrive.
4. If they have hand sanitizer, ask them to have the patient do hand hygiene when you arrive.
5. Ask the family to keep pets and children in a confined area, away from the front door where you will set up your workstation, and ask them to ask other people not to visit while you are there.
6. Print 2 copies of the DOFFING PPE CUE SHEET, one for outside the door, one for inside the door.
8. Bring with you a container of ABHR, a container of viral wipes, a green garbage bag, a small plastic grocery bag (for carrying everything into the house) and 2 empty pails, one labelled CLEAN and one DIRTY (a lid for the dirty pail would ideal), an extra earloop mask for the patient in case they don't have one, and the 2 copies of the DOFFING PPE CUE SHEET as well as your PPE<sup>3</sup>. Consider bringing extra gloves in case of a glove tear while donning.

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<sup>3</sup> PPE = Personal Protective Equipment, and in this instance will include an impervious gown, a mask (a surgical mask will suffice, unless there will be aerosol generating procedures in the home such as suctioning of secretions, CPAP, BIPAP or high flow oxygen, in which case an N95 respirator is needed), eye protection (goggles, visor, or a mask with an integrated visor) and gloves

# Hand Hygiene

**Palms**

**Backs of hands**

**Fingers interlaced**

**Thumbs**

**Cupped fingers**

**Tips of fingers**

**Rub till done**

Ref: Ebola Training and Education Center <https://youtu.be/bG6zISnenPg>

## HOME VISIT PPE PROCEDURE

### **Phase 2: ENTERING THE HOME**

1. Call the house from the driveway and announce your presence. Confirm that the family has a mask for the patient. If so, you do not need to bring a spare mask into the house.
2. Don PPE outside the home, leave the empty pails outside the door with lid(s) off, with the CLEAN pail closest to the door so that it can be easily reached from the threshold. Put one of the cue sheets on the ground next to the pails, secured so it doesn't blow away, and enter the home carrying the grocery bag containing the green garbage bag, viral wipes, ABHR, the spare mask (if needed) and your equipment . Put the unopened garbage bag flat on the floor next to the garbage bin, and put the viral wipes, the ABHR and the second copy of the DOFFING PPE CUE SHEET on it. Discard the grocery bag into the garbage bin.

## DOFFING PPE CUE SHEET

1. **Hand hygiene on gloves**
2. **With a viral wipe, clean the inside door handle. After a minute repeat with a second wipe.**
3. **Open door touching only the clean handle.**
4. **Wipe your stethoscope and any other equipment such as a pulse oximeter, the ABHR bottle, then the viral wipe container, one at a time, in that order, and after cleaning each item, drop it in the CLEAN bucket outside the door. Keep the ABHR accessible, you will need it several more times.**
5. **Do off gown and gloves inside the front door and put in big garbage can. Don't push down.**
6. **Exit house, leaving behind this cue sheet and the flat garbage bag on the floor. Touch only the clean door handle**
7. **Hand hygiene.**
8. **If wearing goggles and separate mask, remove goggles by touching only the most posterior parts of the arms, and place in the empty "DIRTY" bucket.**
9. **Remove mask by touching only the elastic loops and hand it to assistant inside the door, or put in outside garbage, or put in DIRTY bucket for reprocessing.**
10. **Hand hygiene.**
11. **Put the lid on the dirty bucket. Don't touch the goggles or mask. Leave this cue sheet behind.**
12. **Pack your car.**

## HOME VISIT PPE PROCEDURE

### Phase 4: AFTER THE VISIT

## REPROCESSING CUE SHEET

- 1. At home or workplace, don fresh vinyl exam gloves, faceshield and consider cloth gown.**
- 2. Wipe your equipment a second time with viral wipes and wipe out the clean bucket.**
- 3. Prepare a solution of 10% bleach, that is, 1 part household bleach to 9 parts water. E.g. 1 cup bleach to 9 cups water.**
- 4. With PPE still on, open the “DIRTY” bucket, remove any masks and place in garbage or paper bag for later reprocessing.**
- 5. Put some dish soap and water carefully in the bucket so as not to splash.**
- 6. Wash goggles, rinse with water then place in 10% bleach solution to soak.**
- 7. Wash out the bucket thoroughly then viral wipe it. Wipe dishsoap bottle and faceshield.**
- 8. Remove vinyl exam gloves, and gown if worn.**
- 9. Hand hygiene with ABHR.**