



COVID-19 DONNING AND DOFFING PPE

By Akilah Muhammad, RN, BSN

Standard Precautions For All Patients

- Hand Hygiene
- Respiratory Hygiene
- Appropriate Personal Protective Equipment (PPE)
- WHO's MY 5 Moments for Hand Hygiene

Properly Wearing a Mask

- Hand Hygiene
- Inspect Mask
- Ensure Proper Fit
- Do Not Touch While Wearing
 - Properly Discard After Use

PPE for Aerosol-Generating Procedures

- Requires Adequately Ventilated Room
 - Requires Airborne Precautions
 - Eye Protection
 - Long-Sleeved Gown
 - Gloves

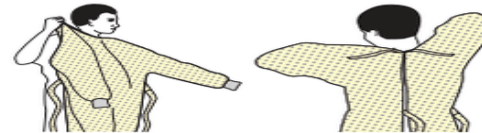
Donning (Applying) PPE

SEQUENCE FOR PUTTING ON PERSONAL PROTECTIVE EQUIPMENT (PPE)

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. GOWN

- Fully cover torso from neck to knees, arms to end of wrists, and wrap around the back
- Fasten in back of neck and waist



2. MASK OR RESPIRATOR

- Secure ties or elastic bands at middle of head and neck
- Fit flexible band to nose bridge
- Fit snug to face and below chin
- Fit-check respirator



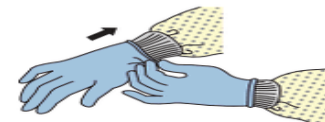
3. GOGGLES OR FACE SHIELD

- Place over face and eyes and adjust to fit



4. GLOVES

- Extend to cover wrist of isolation gown



USE SAFE WORK PRACTICES TO PROTECT YOURSELF AND LIMIT THE SPREAD OF CONTAMINATION

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



This Photo by Unknown Author is licensed under [CC BY-ND](#)


Doffing (Removing) PPE

SEQUENCE FOR REMOVING PERSONAL PROTECTIVE EQUIPMENT (PPE)

Except for respirator, remove PPE at doorway or in anteroom. Remove respirator after leaving patient room and closing door.


1. GLOVES

- Outside of gloves is contaminated!
- Grasp outside of glove with opposite gloved hand; peel off
- Hold removed glove in gloved hand
- Slide fingers of ungloved hand under remaining glove at wrist
- Peel glove off over first gloved
- Discard gloves in waste container




2. GOGGLES OR FACE SHIELD

- Outside of goggles or face shield is contaminated!
- To remove, handle by head band or ear pieces
- Place in designated receptacle for reprocessing or in waste container




3. GOWN

- Gown front and sleeves are contaminated!
- Unfasten ties
- Pull away from neck and shoulders, touching inside of gown only
- Turn gown inside out
- Fold or roll into a bundle and discard




4. MASK OR RESPIRATOR

- Front of mask/respirator is contaminated — DO NOT TOUCH!
- Grasp bottom, then top ties or elastics and remove
- Discard in waste container



PERFORM HAND HYGIENE BETWEEN STEPS IF HANDS BECOME CONTAMINATED AND IMMEDIATELY AFTER REMOVING ALL PPE



This Photo by Unknown Author is licensed under [CC BY-SA-NC](https://creativecommons.org/licenses/by-sa/4.0/)

PPE Video Presentation



PPE Supply Shortage

- Reuse of PPE
- Use of Masks Past Date of Expiration



Optimizing PPEs

- Administrative Controls
- Environmental and Engineering Controls

Tracking PPE Supply

Box 1. Average Consumption of PPE in Boxes (Burn Rate) per Day				Box 2. Average Consumption of PPE in Boxes (Burn Rate) per Day			
Type of PPE	Size/Brand	(boxes/day)	(boxes/day)	Type of PPE	Size/Brand	(boxes/day)	(boxes/day)
Gowns	Size 1	1.00	1.00	Gowns	Size 1		
Gloves	small	1.50	13.00	Gloves	small		
	medium	6.00					
	large	4.50					
	extra large	1.00					
Respirators	3M 1860	2.50	6.50	Respirators	3M 1860		
	North 7130	1.50					
	3M 8210	2.50					
Surgical Masks		1.00	1.00	Surgical Masks			
Face Shields		2.00	2.00	Face Shields			
		1				1	
		2				2	
Other		3		Other		3	
Other		4		Other		4	
Other		5		Other		5	

Questions



[This Photo](#) by Unknown Author is licensed under [CC BY-SA-NC](#)

References

Strategies for optimizing the supply of N95 Respirators: COVID-19|CDC. (2020, April 2). Retrieved June 22, 2020, from <https://www.cdc.gov/coronavirus/2019-ncov/hcp/respirators-strategy/index.html#crisis>

Rational use of personal protective equipment for coronavirus disease 2019. (2020, February 27). Retrieved June 22, 2020, from [https://www.who.int/publications/i/item/rational-use-of-personal-protective-equipment-for-coronavirus-disease-\(covid-19\)-and-considerations-during-severe-shortages](https://www.who.int/publications/i/item/rational-use-of-personal-protective-equipment-for-coronavirus-disease-(covid-19)-and-considerations-during-severe-shortages)

Infection prevention and control during health care when novel coronavirus (nCOV) infection is suspected. (2020, January 25). Retrieved June 22, 2020, from [https://www.who.int/publications/i/item/infection-prevention-and-control-during-health-care-when-novel-coronavirus-\(ncov\)-infection-is-suspected-20200125](https://www.who.int/publications/i/item/infection-prevention-and-control-during-health-care-when-novel-coronavirus-(ncov)-infection-is-suspected-20200125)