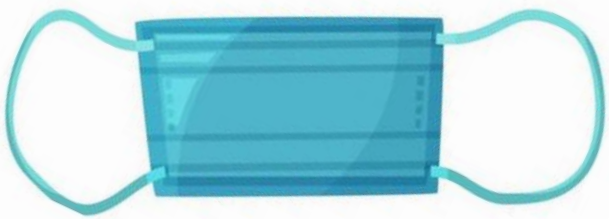
COVID-19: Just In Time Training for Healthcare Workers

- **Who this is for:** All healthcare workers in direct contact with patient(s) or patient care areas.
- **What this is for:** To ensure appropriate safety measures regarding PPE are in place for healthcare workers while caring for confirmed/ PUI COVID-19 patients, including conservation of supplies.
- **How to use this information:** Entity leadership will be responsible for communicating, educating, deploying and monitoring that strategies are in place.

COVID-19: Just In Time Training for Healthcare Workers

Staff Training on the Safe Use of Mask and Respirators



Procedure/Surgical Mask (Face masks)



Respirator: N95/PAPR/"N99"

BHSF Environmental Health & Safety and Emergency Preparedness Dept.
BHSF Infection Prevention and Control

COVID-19: Just In Time Training for Healthcare Workers

Understanding the Difference





	Procedure/Surgical Mask	N95 Respirator
Intended Use and Purpose	Fluid resistant and provides wearer protection against droplets, splashes, or sprays of bodily or other hazardous fluids. Protects the patient from the wearer's respiratory emissions.	Reduces wearer's exposure to particles including small particle aerosols and large droplets (only non-oil aerosols).
Fit Testing Requirement	No	Yes
Use Limitations	Disposable (NOTE: reference PPE conservation guideline)*	

*CDC: COVID-19, Strategy for Optimizing the Supply of PPE

Procedure/Surgical Masks

Procedure Masks

Procedural masks are traditionally characterized by an ear loop attachment and intended for use outside of the Operating Room. Learn more about our offerings below



Surgical Mask

Surgical masks are traditionally characterized by surgical ties and closeness of fit. Recommended for use in the Operating Room. Learn more about our offerings below.



- Procedure and Surgical masks are generally used to reduce the risk of pathogen transfer between individuals.
- Masks accomplish this by covering the mucous membranes of the nose, mouth, lungs with filtering materials and eyes where applicable with a visor.
- They can be used as protection for asymptomatic individuals or as a way to contain droplets from symptomatic individuals.

Respirators

N95 *(Health Care)*	Other Air Purifying Respirators (APR)	
 3M N95 Respirator	 3M N95 (Industrial #8511)*	 Powered Air Purifying Respirator (PAPR) HANDS-ON TRAINING REQUIRED
 Kimberly Clarke N95 Respirator	 *Honeywell Reusable Half-Face Respirator "N99 Half-Face"*	

*CDC: COVID-19, Strategy for Optimizing the Supply of PPE

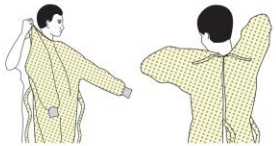
Donning

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



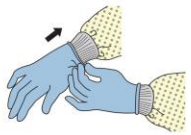
3. GOGGLES OR FACE SHIELD

- 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

CS250672-E

How to Don a Mask

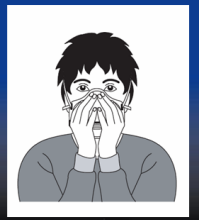
- Place over nose, mouth and chin
- Fit flexible nose piece over nose bridge
- Secure on head with ties or elastic
- Adjust to fit



PPE Use in Healthcare Settings

How to Don a Particulate Respirator

- Select a fit tested respirator
- Place over nose, mouth and chin
- Fit flexible nose piece over nose bridge
- Secure on head with elastic
- Adjust to fit
- Perform a fit check –
  - Inhale – respirator should collapse
  - Exhale – check for leakage around face



PPE Use in Healthcare Settings

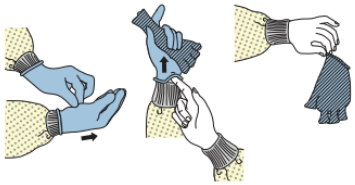
Doffing

HOW TO SAFELY REMOVE PERSONAL PROTECTIVE EQUIPMENT (PPE) EXAMPLE 1

There are a variety of ways to safely remove PPE without contaminating your clothing, skin, or mucous membranes with potentially infectious materials. Here is one example. **Remove all PPE before exiting the patient room** except a respirator, if worn. Remove the respirator **after** leaving the patient room and closing the door. Remove PPE in the following sequence:

1. GLOVES

- Outside of gloves are contaminated!
- If your hands get contaminated during glove removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Using a gloved hand, grasp the palm area of the other gloved hand and peel off first glove
- Hold removed glove in gloved hand
- Slide fingers of ungloved hand under remaining glove at wrist and peel off second glove over first glove
- Discard gloves in an infectious* waste container



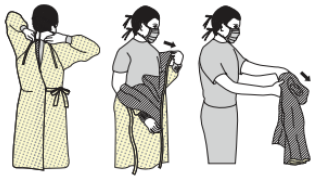
2. GOGGLES OR FACE SHIELD

- Outside of goggles or face shield are contaminated!
- If your hands get contaminated during goggle or face shield removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Remove goggles or face shield from the back by lifting head band or ear pieces
- If the item is reusable, place in designated receptacle for reprocessing. Otherwise, discard in an infectious* waste container



3. GOWN

- Gown front and sleeves are contaminated!
- If your hands get contaminated during gown removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Unfasten gown ties, taking care that sleeves don't contact your body when reaching for ties
- Pull gown away from neck and shoulders, touching inside of gown only
- Turn gown inside out
- Fold or roll into a bundle and discard in an infectious* waste container

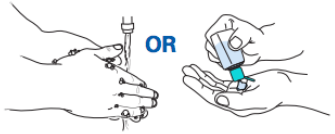


4. MASK OR RESPIRATOR

- Front of mask/respirator is contaminated — DO NOT TOUCH!
- If your hands get contaminated during mask/respirator removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Grasp bottom ties or elastics of the mask/respirator, then the ones at the top, and remove without touching the front
- Discard in an infectious* waste container



5. WASH HANDS OR USE AN ALCOHOL-BASED HAND SANITIZER IMMEDIATELY AFTER REMOVING ALL PPE



* An infectious waste container is used to dispose of PPE that is potentially contaminated with Ebola virus.

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

CDC

Removing a Mask



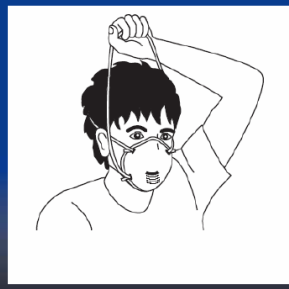
- Untie the bottom, then top, tie
- Remove from face
- Discard



PPE Use in Healthcare Settings

Removing a Particulate Respirator

- Lift the bottom elastic over your head first
- Then lift off the top elastic
- Discard



PPE Use in Healthcare Settings

Additional Doffing Guidance



- In patient care room doffing (gown and gloves) should happen at least 6 feet from the patient.
- Perform **hand hygiene** immediately before leaving the room.
- Perform **hand hygiene** immediately after leaving the room.
- Don a clean gown and gloves before entering the next patient room.

Tight Fitting Elastomeric Half Face Air Purifying Respirator: "N99"



“N99” Half Face Respirator: Abbreviated Don/ Doff Instructions



Step 1: Hold the mask to the face with one hand



Step 2: Apply the head strap comfortably over the head



Step 3: Remove any slack from the head strap (use pull tabs) but don’t tighten it yet



Step 4: Fasten the bottom elastic strap behind the neck (<u>under</u> any long hair)



Step 5: Incrementally tighten head straps with mask comfortably centered on the face



Step 6: Tighten neck straps until fit is snug and mask is comfortably centered on the face



Perform a seal check by inhaling & exhaling while covering exhalation port. Mask should seal tightly to face

<u>To doff the respirator</u>: With clean (or disinfected) gloves, unfasten the neck strap & pull the straps forward and up off the head. Avoid touching the mask with unprotected hands and perform hand hygiene after removal.

“N99” Instructions

1. Please follow your <u>entity/unit-specific check out/in and cleaning</u> instructions.
2. Remove your respirator, over your head and straight down.
3. Before and after use wipe the outside of the mask with approved wipe (approved EPA disinfectant).
4. At end of day (after use): take the respirator apart & clean all pieces thoroughly with approved wipe. Wash with soap and water and dry the parts before returning. <u>Do NOT allow the filters to get wet!</u>
5. If placing a respirator inside a bag for storage, please use a paper bag.
6. *Report any broken or damaged pieces, or any other issues with the respirator to the Charge Nurse.*

PLEASE help protect our patients and co-workers by following instructions! Do not omit any part of the process.



Reusable “N-99” Respirator Filter Cartridge Change outs

*CDC guidance states:

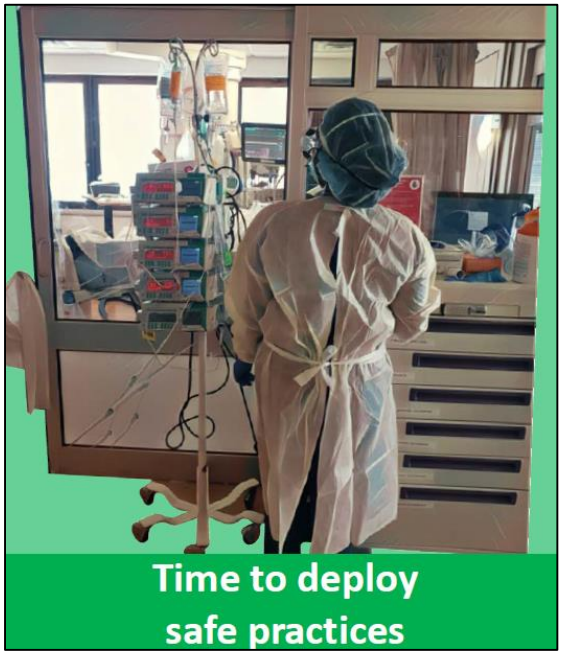
“Provided the cartridge integrity and filter have not been compromised, current practice shows that conservatively, the filters could be used for at least one year.[18]”

Baptist Health facilities will reassess filter replacement needs in 30 day increments and replace filters as needed but filter cartridges will not be used for longer than the CDC recommendation of 12 months.

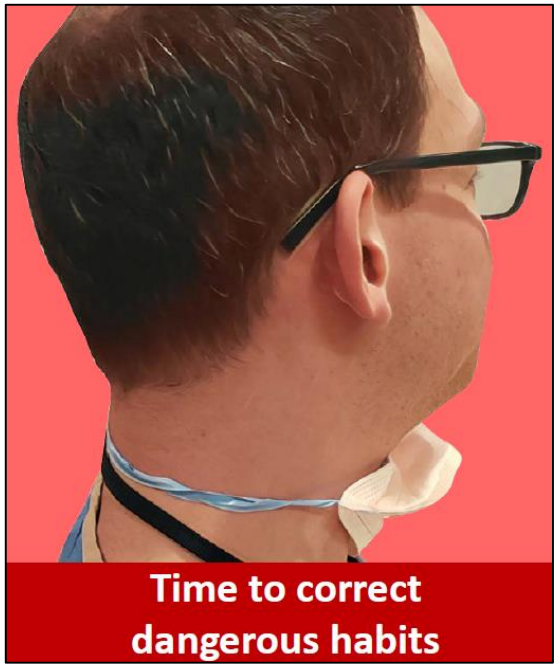
- These reusable respirators will be provided to patient care areas with high use of N95 respirators.
- Due to unfiltered exhalation ports on the “N99” respirators they are **not to be used** in situations where contamination of a sterile field must be avoided.
- In order to prevent liquids from entering and damaging the filter cartridges and affecting the life of the filter material, the “N99” respirators **are not to be used during aerosol-generating procedures without an appropriate face shield.**
- Similar to the N95 respirators, the “N99” respirators are NEVER to be used by a patient.

*Elastomeric Respirators: Strategies During Conventional and Surge Demand Situations
https://www.cdc.gov/coronavirus/2019-ncov/hcp/elastomeric-respirators-strategy/index.html#ftn-18
Accessed July 11, 2020

PPE Conservation







Strategies to Conserve PPE usage

- Minimize the number of individuals who need to use respiratory and eye protection through the preferential use of engineering (e.g. placing patients in isolation rooms) and administrative controls (e.g., cohorting providers, placing a mask on the patient)

- Use alternatives to N95 respirators such as the “N99” respirators, where appropriate*;

- Implement practices allowing **extended use and/or limited reuse of N95 respirators**, when acceptable.

*These reusable respirators will be provided to patient care areas with high use of N95 respirators. The “N99” respirators are not to be used by staff that are concerned about contaminating a sterile field. In addition, in order to prevent liquids from entering the filters and affecting the life of the filters, the “N99” respirators are not to be used during aerosol-generating procedures without an appropriate face shield. Similar to the N95 respirators, the “N99” respirators are NEVER to be used by a patient.

Extended Use and Limited Reuse

Disposable Respirators (N95s) and Protective Eyewear

Purpose:

- To prevent a shortage or exhaust our supply of respirators and eye protection.
- To ensure that our staff have access to the necessary supplies to perform patient care safely.

Definitions:

- **Extended use** refers to the practice of wearing the same N95 respirator/ eye protection for repeated encounters with several patients, without removal between encounters. Eye protection may be left in place with the N95 respirator for extended use.

- **Limited Reuse** refers to the practice of using the same N95 respirator for multiple encounters with patients but removing it ('doffing') between at least some of the encounters. **The N95 respirator is stored in a paper bag between encounters and reused (up to 1 shift).** Re-use of full face shields and goggles will be permitted. Disinfection will be required between uses.

Extended Use and Limited Reuse

Disposable Respirators (N95s) and Protective Eyewear

Guiding Principles:

- **Extended use is preferred over re-use** on the assumption that it is safer for the employee to leave their respirator and eye protection in place, to reduce the risk of self-contamination through frequent donning and doffing of the same equipment.
- N95s and eye protection can be re-used in a careful and limited way during periods of short supply.
- Guidance is for reuse by a single person (no sharing). This principle applies to disposable N95 respirators and non-reusable eye protection. **Reusable "N99" respirators may be shared by multiple health care personnel after proper cleaning and disinfection.**
- Disposable N95 respirators worn for COVID-19 patients may be re-used or worn for extended use as long as they continue to provide a proper seal, were not worn during an aerosol generating procedure or have reached the end of their use by being soiled, and damaged or moist.
- Limit room traffic where possible by ensuring that only those essential for patient care enter the room; strategies include bundling of care, limiting or avoiding bedside clinical teaching, limiting operating room traffic, and use of telemedicine where possible.

Extended Use and Limited Reuse

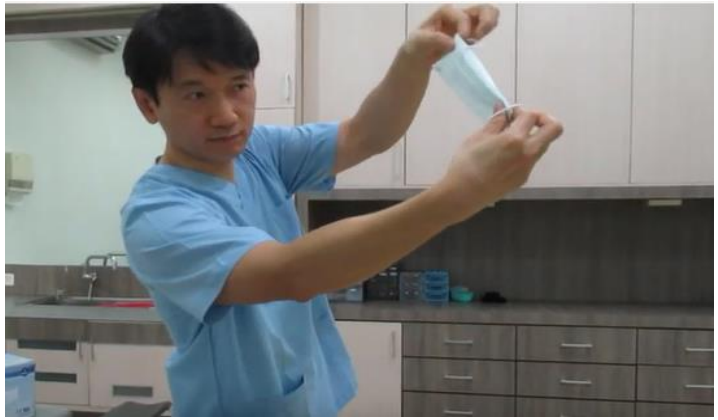
General Guidelines

- **N95/"N99" Respirators:** Fit-test required prior to initial use of both respirators.
- Extended use or re-use is not recommended if worn during an aerosol generating procedure or if the N95 respirator has reached the end of its use through being damaged or moistened. **NOTE: "N99" respirators are reusable following proper cleaning and disinfection.**
- All supplies of N95/N99 respirators and eye protection will be stored in a secured area (designated areas in your department) and will be issued to staff with an appropriately handled **paper bag** or container that allows breathability.
- Label the N95 respirator and paper storage bag with the user's name and unit before using to prevent reuse by another individual. **Labeling the N95: Write your name, employee ID number, and date of first use on the N95 respirator.**
- **Eye protection**: Re-use of full-face shields is permitted when following approved disinfection guidelines. *NOTE: full face shields with foam material should be assigned and reused same individual. Label the full-face shield across the top with name prior to first use.*

Remove Facemasks







How to remove Facemask

To remove facemask with intent to reuse:

1. Perform hand hygiene
2. Remove mask

- Ear-Loop Mask Style: Remove mask by holding the ear loops. The front is contaminated, so remove slowly and carefully.

- Tie Back: Remove mask by untying lower ties FIRST. Untie upper ties last. The front is contaminated, so remove slowly and carefully. Ensure ties do not fall into clean interior side of mask.

3. After removing mask, visually inspect for contamination, distortion in shape/form. If soiled, torn, or saturated the mask should be discarded.
4. If the mask is NOT visibly soiled, torn, or saturated, pinch the inside, fold and carefully store in the provided paper bag (label with your name, and “front” and “back” on the two sides. Insert mask so that the front of the mask faces the side of the bag labelled “front.”
5. Perform hand hygiene.

Re-apply Facemask







How to re-apply Facemask

How to re-apply Facemask:

1. Perform hand hygiene
2. Grasp mask

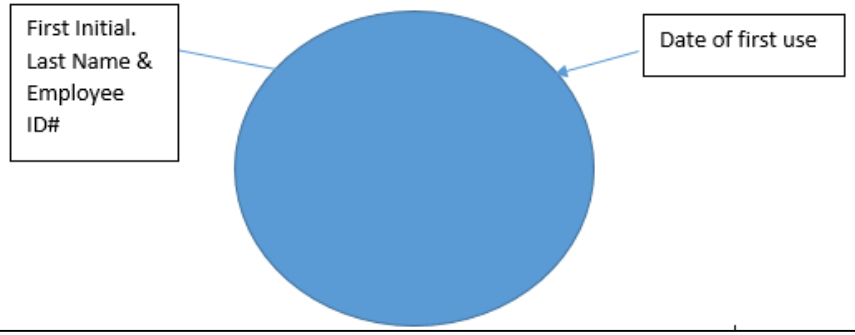
   - Pinch mask at the ear loops or grasp upper ties
3. Place over face

   - For ear-loop style mask: Secure ear loops behind the ears. Secure mask.

   - For tie back style mask: Secure upper ties first, behind head. End by securing lower ties behind head.
4. Perform hand hygiene

Identification of N95 and Bag

1. Labeling by user prior to first use.









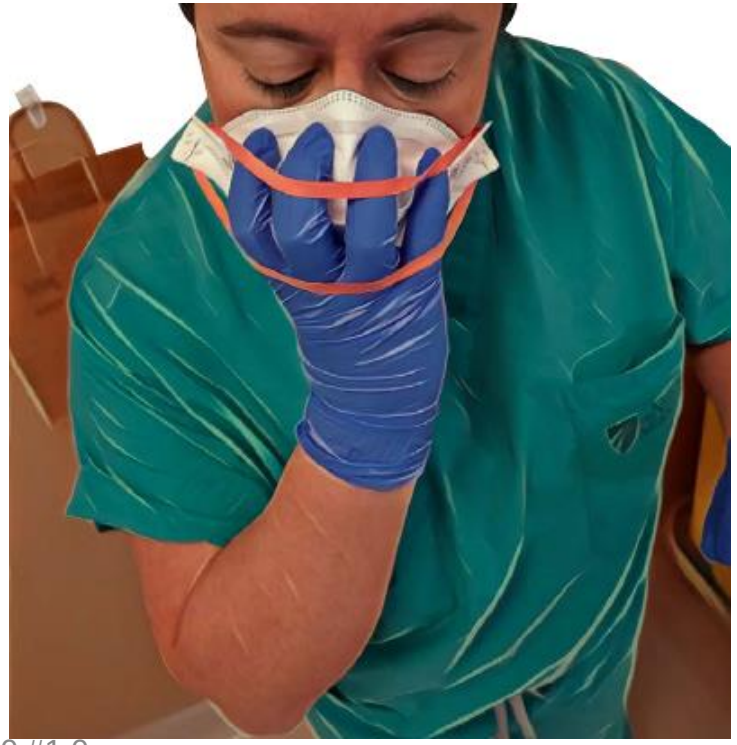
Storage using paper bag



N95 Reuse

- Store used N95s in clean **paper bag**
- Practice hand hygiene



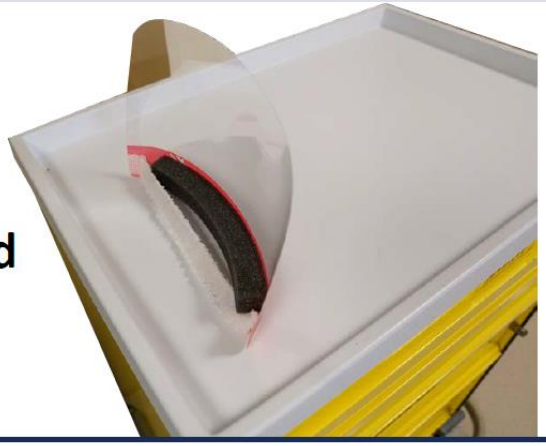


Eye Protection

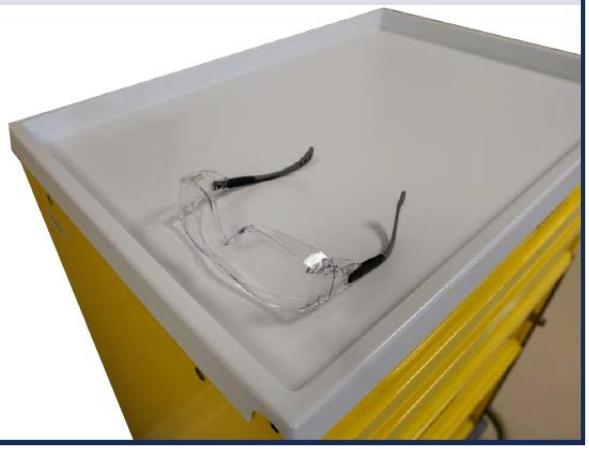
Eye Protection

Disinfect surface ❯ Doff ❯ Disinfect eye protection ❯ Store

Face shield



Goggles



Techniques vary







Additional Resources

- Please visit EBCC COVID-19 for more information

Questions

Any questions / concerns, please contact:

- **Your Leader,**
- **Your Safety Manager**
- **Your entity Infection Prevention and Control Team**

For any questions or feedback, please contact:

- **Infection Prevention and Control:** Anexis Lopez at 305-588-4053 or anexisgl@baptisthealth.net
- **Emergency Preparedness:** Luis Collado at 305-308-7704 or luiscol@baptisthealth.net