

# CITY OF PITTSBURGH BUREAU OF EMS



## Prehospital Infection Control Guidelines

Updated: 27 March 2020

The contents contained within are subject to change based on published guidelines, information and the needs of the department and the public

## Contents

### Table of Contents

**COVID-19 UPDATE 3 – PATIENT SCREENING**

**MEMO 030520 – POISON CONTROL SCREENING**

**MEMO 030820 – NO TRANSPORT FOR SUSPECTED COVID-19 PATIENTS**

**PPE INITIAL ACTIONS**

**PPE GUIDANCE CHART**

**COVID-19 UPDATE 6 – PROPER UTILIZATION OF PPE**

**COVID-19 UPDATE 8 – CDC EXPOSURE RISK**

**COVID-19 UPDATE 10 – STAFF SCREENING CHECKLIST**

**COVID-19 UPDATE 11 – PPE FOR HIGH RISK PROCEDURES**

**COVID-19 UPDATE 12 – MAXIMUM PROTECTION PPE STRATEGY**

**COVID-19 UPDATE 13 – CONSERVATION OF PPE**

**BASE PPE DONNING/DOFFING PROCEDURES**

**HIGH RISK PPE TRANSITION FROM BASE PPE**

**HIGH RISK PPE DONNING**

**HIGH RISK PPE DOFFING**

**MAXIMUM PROTECTION PPE DONNING**

**MAXIMUM PROTECTION PPE DOFFING**

# Pittsburgh EMS

## Infectious Disease Advisory 14: COVID-2019 Screening Update - 3

Effective March 27, 2020



This document updates screening for COVID-19 based on current findings from the outbreak in the United States:

**The presence of any one of the following findings is considered positive for COVID-19 at this point:**

- Fever (subjective or 38C/100.4F if measured)
- Cough
- Dyspnea
- Weakness
- General Malaise
- Diarrhea
- Close contact in the last 14 days with a person with test confirmed or suspected COVID-19

**Altered mental status, unconscious, cardiac arrest? Assume COVID-19 and wear  
High Risk PPE**



*Ronald V. Romano*  
Chief

# City of Pittsburgh Emergency Medical Services



*William Peduto*  
Mayor

**MEMO # 03052020**

**TO:** All Personnel  
**FROM:** Mark E Pinchalk, Assistant Chief  
**DATE:** March 23, 2020  
**SUBJECT:** **Poison Center Screening on Potential COVID-19 Cases**

Health professionals from the Pittsburgh Poison Center are now screening potential COVID-19 calls from the AC911 center to evaluate the risk that the caller actually has COVID-19 and if EMS response is required. The system works as follows:

1. 911 received call and screened for possible COVID-19
2. Call is dispatched
3. If the call was positive on 911 screening for COVID-19 the call is forwarded to the Pittsburgh Poison Center's COVID-19 Screening Center
  - a. **\*\*COVID\*\* will be put in the CAD comments**
4. The Poison Center will evaluate the patient's screening criteria for COVID-19, high risk factors and medical complaints and grade the call:
  - a. **White: Fails criteria for COVID-19 (eligible for home care – No EMS evaluation)**
  - b. **Green: COVID-19 criteria for COVID-19 but no high risk history or symptoms (eligible for home care – no EMS evaluation)**
  - c. **Yellow: COVID-19 criteria and high risk history or complaints (requires EMS evaluation)**
  - d. **Red: COVID-19 criteria and dyspnea or ALOC (requires transport)**
5. White & Green cases may have the EMS response terminated by the Poison Center if the patient agrees. Otherwise, EMS must respond and evaluate the patient

**To make the system work the responding unit must call the Poison Center at the number below about 5 minutes after the call is dispatched – do not delay your response for this. Give the call taker your unit number and address you are responding to. They will advise the results of the screening and if you need to continue your response. If the advised you that you can disregard advised dispatch of this.**

**Pittsburgh Poison Center COVID-19 Screening Line**  
**412-647-2023**



*Ronald V. Romano*  
Chief

# City of Pittsburgh Emergency Medical Services



*William Peduto*  
Mayor

**MEMO # 03082020**

**TO:** All Personnel  
**FROM:** Mark E Pinchalk, Assistant Chief  
**DATE:** March 30, 2020  
**SUBJECT:** **Evaluation of Suspected COVID-19 Patients for No Transport**

I have seen some units recommend no transport to suspected COVID-19 patients recently. This is a valid part of our Force Protection and Operational Plan. It is important that we do this in a safe and consistent manner. We will be trialing telemedicine this week with the ECHO units and then with the regular field units, so follow this evaluation procedure for now:

**Patient with suspected COVID-19/positive screening:**

Evaluate Vital Signs; these findings must be present to consider recommending no transport:

- SpO2 94% or greater
- Respiratory rate 20 or less
- No complaints of dyspnea
- Heart rate 100 or less
- SBP 100 or greater
- Normal Mental Status

Evaluate for High Risk Factors – if vitals are ok could still be eligible after consult with the MD:

- Age 50 or greater
- Long term care/nursing home resident
- Diabetes
- Cardiac Disease/Hypertension/Diabetes/Respiratory Disease
- Cancer/Immunosuppression/HIV/Organ Transplant
- Pregnant
- Any other condition compromising respiratory function/ability to clear secretions

After evaluation if you feel the patient is eligible for no transport consult command and request the Faculty Physician. **If the patient stays home have them call 211 to get enrolled in monitoring via the Allegheny County Health Department.**

## PPE Initial Actions

### **PPE: Check your unit at the start of the shift to ensure you have adequate PPE**

- Personally issued PPE Kit (N-95 mask, eye protection & gloves)
- PPE on unit: N-95 and surgical masks (one box each), gloves & eye protection
- Vehicle Infectious Disease PPE Kit

### **Updates to PPE Options listed in “Initial Actions”:**

**Patients with “mild symptoms” – no high risk procedures anticipated. Patient should be ambulatory and not need to be carried from the residence**

- Driver will not don biohazard suit: PPE will be N-95 Mask, Eye Protection & Gloves
- Driver should avoid direct contact with the patient – partner will don full PPE ensemble, wrap the patient in the biohazard sheet and secure to the stretcher
- Driver assists with stretcher loading without touching the patient
- Driver doffs PPE in a trash bag, uses hand sanitizer and enters the cab of the vehicle (make sure to dispose of this bag in a RED BAG at the hospital)
- Driver dons N-95 mask, eye protection and gloves on hospital arrival to assist removing the stretcher.

### **Initial Actions to Take for Patient Evaluation and Infection Control**

1. Have a high index of suspicion when dispatched to any call for:
  - Fever
  - Cough
  - Dyspnea or other respiratory based complaints
  - General illness
  - Diarrhea
2. ***911 PSAP Screening for high risk patients is currently active with referral to the Poison Control Center for additional evaluation***
3. Before entering the call location don Base PPE
  - Surgical Mask
  - Gloves
  - Eye Protection
4. Maintain a six (6) foot standoff distance from the patient/other ill persons

5. If screening is positive for potential 2019-nCoV upgrade your PPE (High Risk PPE) prior to making patient contact unless immediate resuscitation is required:
  - Don N-95 mask
  - Don goggles
  - Don biohazard suit or gown
  - Double glove
6. Screen for symptoms and travel/contact history
  - If negative stay in base PPE and manage the case
  - ***If positive symptoms/travel history for 2019-nCoV give an immediate notification to the receiving facility via Medic Command on Dispatch 2***
7. Place a surgical or O2 mask on the patient
8. **DO NOT transport any family members/close contacts of the patient who are not ill in the ambulance – they should self isolate at the residence**
  - If it becomes necessary to do this (minor children, etc.) the contacts should be transported in the patient module of the ambulance
9. Remove loose equipment from the patient compartment of the ambulance and store elsewhere
10. Close all patient module cabinet doors and the door to the front of the unit
11. Place the patient on the stretcher and wrap in a biohazard or regular sheet
  - **Avoid placing patient(s) on the bench seat to avoid cross contamination**
12. Open windows/run patient module ventilation fan
13. Minimum crew complement in the patient module during transport
14. Avoid cross contamination of surfaces (radio, ect.) – double glove, remove the outer set of gloves and don a clean outer glove before touching the equipment
15. Administer nebulized medications only if indicated by the presence of respiratory distress or SpO2 < 94%
  - **Administer only via O2 mask or CPAP**

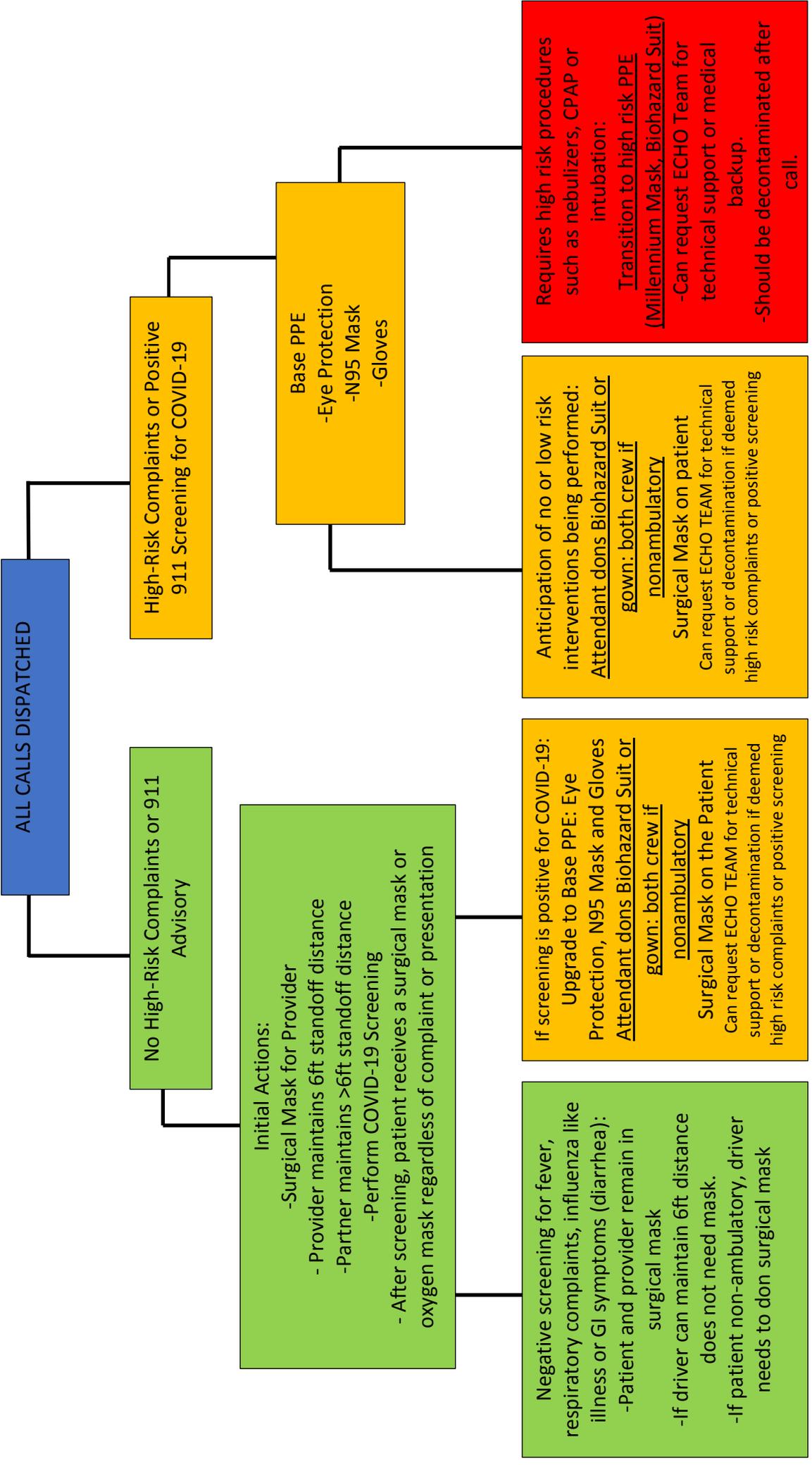
16. Keep in mind that any airway procedures will increase the risk of aerosoling the virus and increase the exposure risk – use High Risk PPE with APR:
  - **Basic Airway Management**
  - **Suctioning**
  - **Placing an Airway Adjunct**
  - **Bronchodilator administration**
  - **CPAP administration**
  - **Positive Pressure Ventilation**
  - **King Airway Placement**
  - **Intubation**
  
17. Wipe up any visible body fluid/respiratory secretions contamination with a bleach wipe.
  
18. After loading the patient in the ambulance the driver should doff their PPE (partner will assist as needed)
  - **On ED arrival the driver should re-don: Gloves, N-95 mask and Eye Protection to assist taking the patient into the ED**

### **Post ED arrival:**

1. Follow ED instructions on patient transfer
2. Open all doors of the ambulance and allow to “air out”
3. While in PPE change your outergloves and wipe down any non disposable medical equipment that touched the patient with a bleach or viricidal wipe.
4. Proceed to the PPE doffing procedure (below)
  - Check with the ED for a safe doffing location
5. Dispose of PPE, trash and linens as designated at the ED, preferably in a red biohazard bag
6. Contact your District Chief to have the ambulance module and cab decontaminated via SNIPER system
  - This should be done at the receiving ED

# Pittsburgh EMS PPE Guidance- COVID-19

## Updated 03/24/2020



# Pittsburgh EMS



## COVID-19 Infectious Disease Advisory Update 6:

### Review of Appropriate PPE use for COVID-19

Issued March 14, 2020

***It is imperative that personnel adhere to proper PPE Guidelines during this COVID-19 Pandemic Event. Failure to do so will result in EMS personnel becoming ill, your family members or significant other becoming exposed and the ability of Pittsburgh EMS to accomplish our response objectives being compromised:***

Operational Situation	Required PPE
Staying > 6 feet from a suspected patient and avoiding and closer contact	None
Working within 6 feet of a suspected patient for screening, movement to the stretcher, movement into the ambulance or movement into the ED <b>No direct contact anticipated</b>	Base PPE: <ul style="list-style-type: none"> <li>• Gloves</li> <li>• N-95 Mask</li> <li>• Eye Protection</li> </ul>
Direct contact with a patient with a negative screening or considered to be low risk for COVID-19 but with a fever or respiratory symptoms.	Base PPE: <ul style="list-style-type: none"> <li>• Gloves</li> <li>• N-95 Mask</li> <li>• Eye Protection</li> </ul>
Direct contact with a patient with a positive screening or who you consider to be high risk for COVID-19. Patient attendant riding with a positive or high risk patient in the ambulance	High Risk PPE > add to Base PPE: <ul style="list-style-type: none"> <li>• Biohazard Suit</li> <li>• Double Glove</li> <li>• Goggles</li> <li>• Overboots</li> </ul>
Very high risk medical procedures: <ul style="list-style-type: none"> <li>• Nebulized medications</li> <li>• CPAP</li> <li>• Basic or advanced airway interventions</li> </ul>	High Risk PPE + replace N-95 mask/Goggles with Millennium Mask with P-100 filter or CBRN filter

# Pittsburgh EMS



## COVID-19 Infectious Disease Advisory Update 8:

CDC: Interim U.S. Guidance for Risk Assessment and Public Health Management of Healthcare Personnel with Potential Exposure in a Healthcare Setting to Patients with Coronavirus Disease (COVID-19)

See below for the latest CDC evaluation of health care provider risk when exposed to a *confirmed* COVID-19 patient with suboptimal PPE in a close contact scenario (< 6 feet from the patient)

Note in all scenarios two things greatly lower the risk level: you wearing a N-95 mask and the patient wearing a surgical mask.

*The patient wearing a mask reduces your risk one level across the board.*

The CDC does not give a clear definition of close contact time: State and County DOH are using: < 6 feet for > 2-3 minutes.

Remember your fundamentals: > 6 foot standoff distance; Base PPE; Mask on the patient

Epidemiologic risk factors	Exposure category	Recommended Monitoring for COVID-19 (until 14 days after last potential exposure)	Work Restrictions for Asymptomatic HCP
<u>Prolonged close contact with a COVID-19 patient who was wearing a facemask (i.e., source control)</u>			
HCP PPE: None	Medium	Active	Exclude from work for 14 days after last exposure
HCP PPE: Not wearing a facemask or respirator	Medium	Active	Exclude from work for 14 days after last exposure
HCP PPE: Not wearing eye protection	Low	Self with delegated supervision	None
HCP PPE: Not wearing gown or gloves <sup>a</sup>	Low	Self with delegated supervision	None
HCP PPE: Wearing all recommended PPE (except wearing a facemask instead of a respirator)	Low	Self with delegated supervision	None

# Pittsburgh EMS



## COVID-19 Infectious Disease Advisory Update 8:

CDC: Interim U.S. Guidance for Risk Assessment and Public Health Management of Healthcare Personnel with Potential Exposure in a Healthcare Setting to Patients with Coronavirus Disease (COVID-19)

Epidemiologic risk factors	Exposure category	Recommended Monitoring for COVID-19 (until 14 days after last potential exposure)	Work Restrictions for Asymptomatic
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Prolonged close contact with a COVID-19 patient who was not wearing a facemask (i.e., no source control)

HCP PPE: None	High	Active	Exclude from work for 14 days after last exposure
HCP PPE: Not wearing a facemask or respirator	High	Active	Exclude from work for 14 days after last exposure
HCP PPE: Not wearing eye protection <sup>b</sup>	Medium	Active	Exclude from work for 14 days after last exposure
HCP PPE: Not wearing gown or gloves <sup>a,b</sup>	Low	Self with delegated supervision	None
HCP PPE: Wearing all recommended PPE (except wearing a facemask instead of a respirator) <sup>b</sup>	Low	Self with delegated supervision	None

HCP=healthcare personnel; PPE=personal protective equipment

<sup>a</sup>The risk category for these rows would be elevated by one level if HCP had extensive body contact with the patients (e.g., rolling the patient).

<sup>b</sup>The risk category for these rows would be elevated by one level if HCP performed or were present for a procedure likely to generate higher concentrations of respiratory secretions or aerosols (e.g., cardiopulmonary resuscitation, intubation, extubation, bronchoscopy, nebulizer therapy, sputum induction). For example, HCP who were wearing a gown, gloves, eye protection and a facemask (instead of a respirator) during an aerosol-generating procedure would be considered to have a medium-risk

# Pittsburgh EMS

## COVID-19 Infectious Disease Advisory Update 10: Protective Staff Screenings

Issued March 19, 2020



All personnel: Effective 0600 on Friday March 20 will be doing Protective Staff Screenings at the start of each shift. If you have OT personnel coming in at 1200 or 2400 additional screening for that person(s) should be done then.

The screening questions are noted below. If any questions are YES take an oral temperature on that person and contact your District Chief. We are working to put this on the I-Pad for electronic submission. Until that time call your district chief with the screening results – either all No or if you have a positive:



WILLIAM PEDUTO  
MAYOR

RONALD ROMANO  
CHIEF

CITY OF PITTSBURGH  
BUREAU OF EMERGENCY MEDICAL SERVICES  
EMERGENCY MEDICAL SERVICES HEADQUARTERS

COVID-19 DAILY STAFF SCREENING CHECKLIST

At the beginning of each shift, all personnel will be screened and this form will be submitted.  
Any positive findings will be immediately reported to the on-duty District Chief.

COVID-19 STAFF SCREENING CHECKLIST

Crew Member #1			
Rank/Name	T _____		
Are any of the following present?		<u>YES</u>	<u>NO</u>
Fever? (Subjective or Measured)		<input type="checkbox"/>	<input type="checkbox"/>
Taking Antipyretics? (Tylenol, Ibuprofen, Etc..)		<input type="checkbox"/>	<input type="checkbox"/>
Cough?		<input type="checkbox"/>	<input type="checkbox"/>
Difficulty Breathing?		<input type="checkbox"/>	<input type="checkbox"/>
Muscle Aches and/or Unusual Fatigue?		<input type="checkbox"/>	<input type="checkbox"/>
Crew Member #2			
Rank/Name	T _____		
Are any of the following present?		<u>YES</u>	<u>NO</u>
Fever? (Subjective or Measured)		<input type="checkbox"/>	<input type="checkbox"/>
Taking Antipyretics? (Tylenol, Ibuprofen, Etc..)		<input type="checkbox"/>	<input type="checkbox"/>
Cough?		<input type="checkbox"/>	<input type="checkbox"/>
Difficulty Breathing?		<input type="checkbox"/>	<input type="checkbox"/>
Muscle Aches and/or Unusual Fatigue?		<input type="checkbox"/>	<input type="checkbox"/>
Form Completed and Submitted by:	T _____		

# Pittsburgh EMS



## COVID-19 Infectious Disease Advisory Update 11: PPE for High Risk Respiratory Procedures

We have been tracking PPE use on high risk call determinates. We seem to be pretty good with following the infection control plan for general illness “sick person” calls. We are not doing as well for calls for cases with high risk airway procedures, specifically: Nebulized Medication Administration, CPAP usage and PPV-BVM.

***The following infection control procedures are always mandatory when administering nebulized medication, applying CPAP, providing PPV-BVM or other airway procedures. It does not matter if the patient has a positive COVID-19 screening or not:***

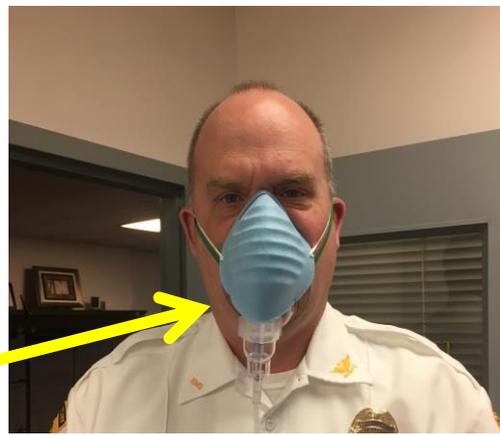
### Nebulized medications:

- Minimum PPE is N-95 Mask, Gloves and Goggles + gown or biohazard suit
- **Strongly recommend you wear a Millennium Mask with CBRN or P-100 Filter**
  - Do not throw away the filter, it is good for out to 30 days
- Put the nebulizer on a mask
- Cover the mask with a surgical mask
- In the ambulance run the vent fan and open the windows
- On arrival at the hospital discontinue the nebulized medication and place on an O2 mask on the patient
- Call and Assessment ECHO Unit for Decon support.

### CPAP, PPV-BVM, other airway procedures:

- Follow the guidelines above, strong recommendation for a Millennium Mask APR in these situations
- Keep CPAP in place when entering the facility

**Always make sure to give early notification to the receiving facility when these procedures are being performed!**



Best  
PPE for  
this



Ok but  
not as  
good

# Pittsburgh EMS



## COVID-19 Infectious Disease Advisory Update 12: Maximum Protection PPE Strategy (24 March 2020)

*I want to thank everyone for going a great job executing the PPE plan at this point! We are providing this guidance to provide addition protection to personnel:*

Looking at data out of King County (Seattle) Washington there are cases for “routine” 911 calls (fall, GI complaints, vaginal bleeding etc.) without contact history or symptoms for COVID-19 that end up testing positive for the disease. It is believed the risk for transmission in these cases is low for EMS but we are taking these additional actions at this time:

1. Continue the current PPE plan: if high risk complaint or positive 911 screening for COVID-19 don Base PPE and manage per our current guidance

2. For cases with **NO** high risk complaints or 911 advisory the initial crew member seeing the patient should don a **Surgical Mask**, maintain a six (6) foot standoff distance and perform a COVID -19 screening. The partner should stay > 6 feet from the patient initially

- If the screening is negative for fever, respiratory complaint, influenza like illness or GI symptoms (diarrhea) remain in a surgical mask for the remainder of the call. If the screening is concerning for symptoms/history upgrade to base PPE
- If the screening is negative and the driver can stay six (6) feet away from the patient then the driver would not need to don a mask. If the patient is non ambulatory in this situation the driver should also don a surgical mask
- **Effective immediately all patients should have a surgical mask placed on them regardless of complaint/presentation (surgical or O2 mask)**

3. Assume patients who are unconscious or have Altered LOC have COVID-19 until proves otherwise and don at least PPE base on what interventions you need to perform.

This strategy will strain our supply of surgical mask down the road so try to conserve the mask if possible.

- Reuse the mask unless it has visible contamination on it, becomes damaged or otherwise unwearable
- Store in a paper bag between calls. We are sending more of these out if you don't have one already.

**Remember Mask on YOU!**

**Mask on the patient!**



# Pittsburgh EMS



## COVID-19 Infectious Disease Advisory Update 13: Conservation of PPE (25 March 2020)

Most of you are doing a great job with the PPE/Infection Control Plan. If you pay attention to detail and follow the plan you should not get exposed at work.

While emphasizing proper PPE use we need to be careful that we use the PPE wisely to conserve our supply to last for the next 6 to 8 weeks:

### Surgical Masks (CDC/NIOSH Guidelines):

Try to reuse your surgical mask for a full shift if you can. You can reuse the mask if:

- It is not contaminated or soiled
- It is not damaged and still fits properly

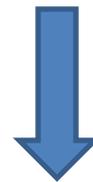
**Store the mask in a paper bag (being issued in < 24 hours) and wear gloves when donning/doffing**

### N-95 Masks (CDC/NIOSH Guidelines):

Dispose of if used on a high risk call Otherwise, if only used for screening with no high risk procedures reuse per these guidelines:

**Wear a surgical mask over the N-95 Mask to protect it and reuse if:**

- It is not contaminated or soiled
- It is not damaged
- It continues to fit and function properly
- **Store in a paper bag and wear gloves when donning/doffing**



# Pittsburgh EMS



## COVID-19 Infectious Disease Advisory Update 13: Conservation of PPE (25 March 2020)

### Millennium Mask APR

You can use the P-100 filter in your APR cartridge for 30 days unless water/liquid gets inside the filter

- After calls wipe the mask and external parts of the filter down with a MSA Disinfectant wipe
- Take care not to get fluids into the cartridge opening, wipe around it or cover with a piece of tape during cleaning



### Eye protection:

Unless grossly contaminated or damaged put clean gloves on after doffing and wipe the eye protection down with a bleach or disinfectant wipe and allow to air dry.

## **Donning/Doffing Procedures for Base PPE**

### **Donning Procedures for Base PPE:**

- 1. Don N-95 Mask**
- 2. Don eye protection**
- 3. Don Gloves**

### **Doffing Procedures for Base PPE:**

- 1. Clean gloves with disinfectant wipe or hand sanitizer**
- 2. Remove gloves**
- 3. Don clean gloves**
- 4. Remove eye protection down and away from face**
- 5. Clean gloves with disinfectant wipe or hand sanitizer**
- 6. Remove N-95 Mask down and away from face**
- 7. Clean gloves with disinfectant wipe or hand sanitizer**
- 8. Remove gloves**
- 9. Wash hands with soap and water or hand sanitizer**

## **Donning Procedures for Base to High Risk PPE Transition**

### **Donning Procedures when already in Base PPE:**

- 1. Clean gloves with disinfectant or hand sanitizer**
- 2. Remove gloves**
- 3. Don clean gloves**
- 4. If not already wearing goggles remove eye protection**
- 5. Clean gloves**
- 6. Remove gloves**
- 7. Wash hands with hand sanitizer**
- 8. Remove uniform shirt, excess items from belt and personal effects from pockets.**
- 9. Don the biohazard suit:**
  - a. Place boot covers over your shoes/boots to facilitate getting them into the suit**
  - b. If you can't fit your boots/shoes in the suit, remove them and place HazMat boots on over the feet of the suit**
- 10. Don inner gloves**
  - a. Place the "thumb loop" on the cuff of the biohazard suit over your thumb**
- 11. Don goggles**
- 12. Place hood over your head and zipper up suit to neck**
  - a. Pull protective seal off zipper cover and seal flap over zipper**
- 13. Don outer gloves and pull up over sleeves**

## **Donning Procedures for High Risk PPE (Biohazard Suit w/N95 Mask)**

### **Donning Procedure:**

- 1. Remove uniform shirt, excess items from belt and personal effects from pockets.**
- 2. Don the biohazard suit:**
  - a. Place boot covers over your shoes/boots to facilitate getting them into the suit**
  - b. If you can't fit your boots/shoes in the suit, remove them and place HazMat outer boots on over the feet of the suit**
- 3. Don inner gloves**
  - a. Place the "thumb loop" on the cuff of the biohazard suit over your thumb**
- 4. Don N-95 mask**
- 5. Don eye protection: *goggles preferred***
- 6. Place hood over your head and zipper up suit to neck**
  - a. Pull protective seal off zipper cover and seal flap over zipper**
- 7. Don outer gloves and pull up over sleeves**

## **Doffing Procedures for High Risk PPE (Biohazard Suit with N95)**

### **Doffing Procedure:**

- 1. Unbutton Over Boots**
- 2. Clean outer gloves with bleach wipe, disinfectant wipe or hand sanitizer as available and allow to air dry**
- 3. Carefully remove outer gloves**
  - Grasp each glove in the palm area and remove
- 4. Clean inner gloves with disinfectant/hand sanitizer**
- 5. With assistance of a partner or other person in PPE**
  - Undo zipper cover on the suit
  - Unzipper biohazard suit
  - Starting at the hood, roll back the suit so that it is turned inside-out across the arms, torso and down to the feet.
  - The assistant should only touch the outside of the suit
  - The doffer should try to only touch the inside of the suit
  - Step out of the suit
- 6. Clean inner gloves with disinfectant/hand sanitizer**
- 7. Remove eye protection**
  - Grasp at front and pull away from face
- 8. Clean inner gloves with disinfectant/hand sanitizer**
- 9. Remove N-95 mask**
  - Grasp at front and pull away from face
- 10. Clean inner gloves with disinfectant/hand sanitizer**
- 11. Carefully remove inner gloves**
  - Grasp palm of one glove with the opposite hand and remove
  - Slide fingers of ungloved hand under remaining glove at wrist and peel off over first glove
- 12. Perform hand hygiene**
- 13. Report patient contact and exposure level to your District Chief**
  - Complete infectious disease contact paperwork
- 14. Consider changing uniform**

## **Donning Procedures for Maximum Protection PPE**

### **Donning Procedure:**

- 1. Remove uniform shirt, excess items from belt and personal effects from pockets.**
- 2. Don Millennium Mask APR with P-100 or CBRN Filter**
- 3. Don the biohazard suit:**
  - a. Place boot covers over your shoes/boots to facilitate getting them into the suit**
  - b. If you can't fit your boots/shoes in the suit, remove them and place HazMat outer boots on over the feet of the suit**
- 4. Don inner gloves**
  - a. Place the "thumb loop" on the cuff of the biohazard suit over your thumb**
- 5. Place hood over your head and zipper up suit to neck**
  - a. Pull protective seal off zipper cover and seal flap over zipper**
- 6. Don outer gloves and pull up over sleeves**

## Doffing Procedures for Maximum Protection PPE

### Doffing Procedure:

1. Unbutton Over Boots
2. Clean outer gloves with bleach wipe, disinfectant wipe or hand sanitizer as available and allow to air dry
3. Carefully remove outer gloves
  - Grasp each glove in the palm area and remove
4. Clean inner gloves with disinfectant/hand sanitizer
5. Wipe down outer surfaces of the Mask/Filter with MSA approved disinfectant wipe
6. Clean inner gloves with disinfectant/hand sanitizer
7. With assistance of a partner or other person in PPE
  - Undo zipper cover on the suit
  - Unzipper biohazard suit
  - Starting at the hood, roll back the suit so that it is turned inside-out across the arms, torso and down to the feet.
  - The assistant should only touch the outside of the suit
  - The doffer should try to only touch the inside of the suit
  - Step out of the suit
8. Clean inner gloves with disinfectant/hand sanitizer
9. Remove Millennium Mask
  - Bend over and remove down and away from face
10. Clean inner gloves with disinfectant/hand sanitizer
11. Carefully remove inner gloves
  - Grasp palm of one glove with the opposite hand and remove
  - Slide fingers of ungloved hand under remaining glove at wrist and peel off over first glove
12. Perform hand hygiene
13. Report patient contact and exposure level to your District Chief
  - Complete infectious disease contact paperwork
14. Consider changing uniform