Spokane Regional EMS

COVID-19
Medical Group Recommendations

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April 9, 2020

Updates

April 9, 2020

- **Corrected bleach disinfection concentration**
- **Added "Universal precautions" language to dispatch protocol**
- **Added warning against the use of alcohol and chlorine-based disinfection methods on N95 respirators**
- **Due to the CDC's Level 3 travel warning, members returning from ANY international travel are considered a travel exposure**
- **Added hospital alert language: "Advanced Isolation Procedures" communicates to the destination hospital that the patient requires increased precautions for an infectious disease**
- **Additional clarification for discontinuing SVN and CPAP before transferring from the ambulance to the emergency department room in the "Airway Management" section**

March 30, 2020

- Clarified Echo response language
- Added language to "Airway management" section recommending "if a high risk procedure is anticipated or performed, all EMS providers need to use an N95 regardless of distance from the patient. Aerosol spread distance is not well known at this time."
- Added updated COVID-19 screening questions and quick reference guide
- Added point of contact recommendations

March 25, 2020

- Updated Full Staffing Plan guidelines and flowchart
- Updated Alternate Staffing Plan guidelines and flowchart
- Removal of the return to work flowchart
- Added potential "stay-at-home" pandemic triage guidelines from the Spokane County EMS & Trauma Care Council
- Added Spokane Regional Health District recommendations for return to work following positive COVID-19 test

March 23, 2020

- Updated quarantine location language
- Added recommended response PPE level chart
- Updated dispatch information regarding the removal of the 36 Pandemic criteria

March 22, 2020

- Updated return to work guidelines
- Updated CPR PPE guidelines.
- Added proper cleaning and disinfecting procedures for linen and cloth based products.
- Added clarification to the proper time to use an N95 mask and how to properly store for multiple uses.
- Updated reporting requirements and added ESO walkthrough to help properly record and track COVID-19 responses and PPE use.

March 19, 2020

- Clarified advanced airway management section. Bag-valve ventilation is performed after successful intubation, as normal, with the use of an inline HEPA filter, if available. Also, added clarity in distinguishing acute exacerbations of chronic conditions such as CHF, COPD, and asthma from new onset symptoms consistent with COVID-19.
- Safety 1 is no longer added to 36 Pandemic responses.

March 18, 2020

- Added clarification of SVN and CPAP recommendations the recommendation to discontinue SVN treatment and place a mask on the patient prior to entering the emergency department in the “Special considerations regarding airway management” section.
- Clarified language and added “subjective symptoms of fever” to the pre-shift screening / self-screening criteria, and the exposure definition of symptomatic member.
- Updated current dispatch instructions for 36 Pandemic Disease responses to include “have the patient meet EMS at the threshold of the front door” when they arrive.
- Added “Cleaning and Disinfecting Procedures” section.
- Added the ability to document specific PPE use for each responder in ESO under “Personnel”.
- Updated return-to-work requirement for symptomatic members to include facemask use upon return.
- Added “Quarantine and Isolation Recommendations.”
- Inclusion of supplemental material: Exposure flowchart, Return-to-work flowchart, PPE guidelines, Thermometer best practices.

COVID-19 Overview

What is a Novel Coronavirus?[1]

A novel coronavirus is a new coronavirus that has not been previously identified. The virus causing coronavirus disease 2019 (COVID-19), is not the same as the coronaviruses that commonly circulate among humans and cause mild illness, like the common cold.

A diagnosis with coronavirus 229E, NL63, OC43, or HKU1 is not the same as a COVID-19 diagnosis. Patients with COVID-19 will be evaluated and cared for differently than patients with common coronavirus diagnosis.

What is the Source of the Virus?

Coronaviruses are a large family of viruses. Some cause illness in people, and others, such as canine and feline coronaviruses, only infect animals. Rarely, animal coronaviruses that infect animals have emerged to infect people and can spread between people. This is suspected to have occurred for the virus that causes COVID-19. Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS) are two other examples of coronaviruses that originated from animals and then spread to people. More information about the source and spread of COVID-19 is available on the Situation Summary: Source and Spread of the Virus.

How Does the Virus Spread?

Early reports suggest person-to-person transmission most commonly happens during close exposure to a person infected with COVID-19, primarily via respiratory droplets produced when the infected person coughs or sneezes. Droplets can land in the mouths, noses, or eyes of people who are nearby or possibly be inhaled into the lungs of those within close proximity. The contribution of small respirable particles, sometimes called aerosols or droplet nuclei, to close proximity transmission is currently uncertain. However, airborne transmission from person-to-person over long distances is unlikely.[2]

[1] https://www.cdc.gov/coronavirus/2019-ncov/faq.html
[2] https://www.cdc.gov/coronavirus/2019-ncov/infection-control/control-recommendations.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fhcp%2Finfection-control.html

When is Someone Infectious?

The onset and duration of viral shedding and period of infectiousness for COVID-19 are not yet known. It is possible that SARS-CoV-2 RNA may be detectable in the upper or lower respiratory tract for weeks after illness onset, similar to infection with MERS-CoV and SARS-CoV. However, detection of viral RNA does not necessarily mean that infectious virus is present. Asymptomatic infection with SARS-CoV-2 has been reported, but it is not yet known what role asymptomatic infection plays in transmission. Similarly, the role of pre-symptomatic transmission (infection detection during the incubation period prior to illness onset) is unknown. Existing literature regarding SARS-CoV-2 and other coronaviruses (e.g. MERS-CoV, SARS-CoV) suggest that the incubation period may range from 2–14 days.

What are the symptoms of COVID-19?

Common signs of infection include respiratory symptoms, fever, and cough, shortness of breath and breathing difficulties. In more severe cases, infection can cause pneumonia, severe acute respiratory syndrome, kidney failure and even death. Reported illnesses have ranged from mild symptoms to severe illness and death for confirmed coronavirus disease 2019 (COVID-19) cases. The following symptoms *may appear 2-14 days after exposure:* fever, cough, and/or shortness of breath.

How is COVID-19 different from the Flu?

Although the two illnesses appear similar, they are caused by two different viruses. While there are vaccines for the flu, based on the particular strains of influenza prevalent for that season, there is no current vaccine or anti-viral medication found to be effective against COVID-19. The COVID-19 situation is changing rapidly. Since this disease is caused by a new virus, people do not have immunity to it, and a vaccine may be many months away. Doctors and scientists are working on estimating the mortality rate of COVID-19, but at present, it is thought to be higher than that of most strains of the flu.[3]

[3] (Centers for Disease Control and Prevention, n.d.) (World Health Organization, n.d.) (Johns Hopkins Medicine, n.d.)

Definitions

Prolonged exposure: Generally greater than 10 minutes. Clinical symptoms of patient and type of interaction remain important. (e.g., did the patient cough directly into the face of the EMS provider)

Close contact: Person being within 6 feet of a COVID-19 case for a prolonged period of time or unprotected direct contact with secretions or excretions.

Non-work exposure: When a member is exposed in a non-work setting to a person under investigation (PUI) or a person with a positive COVID-19 test.

Fever: Temperature ≥100.0°F or subjective fever. Note that temperature may be intermittent or may not be present in some patients. (e.g., elderly, immunocompromised or those taking NSAIDs)

Self-monitoring: EMS provider should monitor themselves twice daily for fever and remain alert for symptoms of acute respiratory infection.

Respirator: A personal protective device that covers at least nose and mouth; N95/N100.

Facemask: A mask that covers at least the nose and mouth and helps block respiratory secretions.

Person under investigation: A person presenting with signs and symptoms as follows:

- Temperature 100.0°F; or subjective symptoms of fever.
- Symptoms of acute respiratory illness (cough, difficulty breathing, sore throat); or
- Having prolonged close contact with a person under investigation or a positive COVID-19 case who was not wearing the recommended PPE.[4]

POC: Point of contact. This can be a single person or an entire team, depending on the needs of the organization. A single point of contact helps streamline communication between members and the organization.

Hotline: A 24/7 staffed phone number which can assist members who become sick, or answer questions regarding exposures.

Advanced Isolation Procedure: Term used to communicate to the destination hospital that the patient requires increased precautions for an infectious disease.

[4] https://www.cdc.gov/coronavirus/2019-ncov/hcp/clinical-criteria.html

Pre-Response

Pre-Shift Screening

All personnel should assess their temperature at the start of shift and every 12 hours thereafter. A temperature over 100.0° F, subjective symptoms of fever, or the presence of a cough, sore throat, or respiratory symptoms such as shortness of breath categorizes the individual as a person under investigation (PUI). The member will need to initiate quarantine procedures.[5]

All personnel are encouraged and may be required as per directives from individual agencies to wear a facemask at all times while in firehouses and spaces where co-habitation is required for daily operations (please refer to guidance on reuse of facemask).

Station and Apparatus Cleaning

Daily: Along with regular station and apparatus cleaning, a focused daily sanitization of commonly touched surfaces needs to occur.

Social Distancing

The fire department is a place where we work and socialize with our department family. During this epidemic we need to work to modify our interactions and practices. The CDC recommends keeping a 6 foot distance from others. This may be impractical in the fire station and impossible on most apparatus. What we can do instead is try to take thoughtful steps to limit the chance of a virus spreading among our work family. Here is a list of suggestions as a starting point.

1. Avoid congregating at the kitchen table, especially at shift change when there is a denser population at the station.
2. Attempt to increase spacing between personnel at mealtime, such as sitting in alternate chairs.
3. Attempt to minimize close contact with department personnel outside your fire company or work group.
4. Avoid foods that involve many hands reaching into a shared container (for example, potato chips) or find a way of serving that limits cross contamination.
5. Wipe frequently touched surfaces down regularly.
6. Wash hands frequently.
7. Fewer high-fives, more elbow-bumps.
8. Use your discretion and judgement to make our workplaces as safe as possible.

[5] https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-risk-assesment-hcp.html

Dispatch

Dispatch is recommended to continue interrogating callers as usual. There will be increased awareness around the 26 General Sick criteria, with the following triggers identified as suspected COVID patients:

1. Flu-like symptoms, such as a fever, cough, shortness of breath, sore throat, runny nose, fatigue, or feeling generally ill.
   OR
2. The patient has had close contact to an individual who is known to have tested positive for COVID-19.

If Dispatch identifies a patient who meets the above criteria, they will attempt to instruct the patient to meet EMS at the threshold of their front door when they arrive. They will continue to add notes and advise crews of pertinent patient history, as available.

The 36 Pandemic Flu dispatch criteria is designed to be used to identify an emerging pandemic flu and relies heavily on travel information and contact with individuals with a known infectious disease. Based on our experience to this point, COVID-19 is at a level of prevalence in the community which requires less stringent criteria to be considered a potential hazard to crews. Therefore, the 36 Pandemic flu response code will be discontinued as it is no longer meeting the necessary requirements to identify potential COVID-19 patients.

When responding to a suspected COVID-19 patient, dispatch will notify crews within the dispatch notes and via pagers with “Potential COVID-19 Patient” and by verbally stating “Use Universal Precautions” in the short report update.

> *Please increase your suspicion of COVID-19 in the community to patients with any of the following symptoms: flu-like symptoms, such as a fever, cough, shortness of breath, sore throat, runny nose, fatigue, or feeling generally ill.*

EMS Response

All EMS Responses:

1. PPE minimum for all providers:
    - Gloves
    - Standard eye protection
    - Facemask for anyone with patient contact
2. If possible, perform a single provider door triage / room scan / 6 ft of separation. When practical maintain contact with crew members. Use caution if a crew member is operating alone, beyond the line of sight.
3. Screen for COVID-19 risk criteria:
    - Has the patient experienced a fever or respiratory symptoms (cough, dyspnea, etc) in the last 72 hours?

      OR
    - Has the patient had close contact with a COVID-19-confirmed patient or a patient under testing for COVID-19?
4. If patient screens positive for COVID-19 risk criteria, consider them a suspected COVID-19 patient and increase PPE level, if needed.
5. Perform source control on all patients who have experienced respiratory symptoms or fever in the last 72 hours by placing a facemask on the patient.
    - Nasal cannula can be placed underneath the facemask
    - An oxygen mask can substitute for a mask in patients requiring oxygen concentrations greater than 6 lpm
6. Encourage standard infection control measures throughout the patient encounter.

These are minimum PPE recommendations. EMS providers may increase their level of PPE based on their discretion and patient presentation.

COVID-19 Screening Questions for EMS Providers:

Screening questions to be asked on **ALL** calls during initial patient interview, while staying >6ft away, if possible:

1. Do you have a fever?
2. Do you have any symptoms of a fever such as body aches or chills?
3. Do you have a sore throat, cough, and/or difficulty breathing?
4. Does anyone here have any of the symptoms I have just asked about?
5. Is anyone here under quarantine for any reason?

If yes to **ANY** of these, if there is a language barrier, or if the patient is unconscious, then facemask, standard eye protection, faceshield (or goggles), gloves, and gown (or Level B PPE) must be worn, at a minimum.

If they feel it is appropriate, a provider may switch to an N95 at their discretion, so long as it is safe to do so.

If in doubt, err on the side of caution and use an N95

If there is a potential for a high risk procedure: gloves, standard eye protection, faceshield (or goggles), gown (or Level B PPE), and an **N95** must be worn by **ALL** personnel. High risk procedures include: BVM, CPAP, SVN, intubation, and suctioning.

EMS Response to suspected or known COVID-19 Patients (Positive Screening from Dispatch or Initial History):

1. Throughout the encounter, take steps to limit the number of personnel in contact with the patient.
    - Only those providers working in close proximity (<6ft) with the suspected COVID-19 patient are required to don the higher level PPE; gloves, facemask or N95, standard eye protection, faceshield (or goggles[6]) and gown (or Level B PPE).
    - All other providers should maintain appropriate separation AND continue to wear the minimum level of PPE if potential for patient contact exists.

2. If possible, apply a facemask to the patient for source control.
    - A nasal cannula can be applied underneath the facemask
    - An oxygen mask can substitute for a facemask in patients requiring oxygen concentrations greater than 6 lpm
3. PPE minimum for standard encounter with suspected COVID-19 patient:
    - Gloves
    - Standard eye protection with faceshield (or goggles)
    - Facemask or N95 respirator (or greater)
    - Gown or level B PPE
4. PPE minimum for high risk encounter[7] with suspected COVID-19 patient:
    - Gloves
    - Standard eye protection with faceshield (or goggles)
    - N95 respirator (or greater)
    - Gown or level B PPE

These are minimum PPE recommendations. EMS providers may increase their level of PPE based on their discretion and patient presentation.

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[6] Goggles may be worn in place of standard eye protection with face shield. PPE type and availability will vary based on agency.

[7] High risk encounters include procedures likely to generate higher concentrations of respiratory secretions or aerosols, including cardiopulmonary resuscitation, BVM, intubation, CPAP, SVN, suctioning, etc. If a high risk procedure is anticipated or performed, all EMS providers need to use an N95 regardless of distance from the patient. Aerosol spread distance is not well known at this time.

Airway Management:

Special considerations regarding airway management for confirmed or suspected COVID-19 patients*:

- Providers treating any patient requiring airway management, or participating in high risk procedures that generate aerosols, must be in the highest level of PPE including N95 respirator (or greater)[8]. This level of PPE must be established prior to beginning any high risk procedure.
- Avoid nasal cannula concentrations higher than 6 lpm.
- Avoid small volume nebulizer (SVN) use, if patient condition allows, in favor of patient supplied metered dose inhalers (MDI) for albuterol or atrovent administration.
- Aerosol generating procedures such as nebulizer treatments and CPAP should be discontinued before moving the patient from the ambulance to the hospital room. Receiving hospital staff should be consulted prior to restarting these aerosol generating procedures.
- Avoid the use of CPAP. Consider delaying advanced airway management procedures to definitive destination, if patient condition allows. If respiratory failure is imminent, proceed to RSI.
- Endotracheal intubation should be performed by the provider most experienced in airway management, if practical.
- Intubation should be performed as a "rapid sequence induction." BVM should not be used during preoxygenation or the intubation procedure. A nonrebreather should be utilized for preoxygenation, followed by induction and paralysis. Following successful intubation, bag-valve ventilation should be performed as normal.
- Intubation with video laryngoscopy is preferred in order to increase provider-patient distance.
- If available, an inline HEPA filter should be utilized when ventilating via bag-valve.
- If a high risk procedure is anticipated or performed, all EMS providers need to use an N95 regardless of distance from the patient. Aerosol spread distance is not well known at this time.

** The definition of suspected COVID-19 patients will change based on the prevalence of the disease in our community. Please use provider judgement as your best determinant for distinguishing acute exacerbations of chronic conditions such as CHF, COPD, and asthma from new onset symptoms consistent with COVID-19.*

[8] High risk encounters include procedures likely to generate higher concentrations of respiratory secretions or aerosols, including cardiopulmonary resuscitation, BVM, intubation, CPAP, nebulizer therapy, suctioning, etc.

Hospital Alert Language

Suspected or known COVID-19 patients must have appropriate infection control precautions in place prior to arrival at the Emergency Department. This information should be included in the initial communication with the destination hospital. During communication with the destination hospital, either by telephone or radio, EMS will provide all standard patient information and state that **ADVANCED ISOLATION PROCEDURES** need to be taken.

When caring for a patient with a high degree of suspicion for COVID-19, EMS providers should take appropriate steps to minimize exposure risk while transferring the patient into the hospital. EMS should ensure source control is applied to the patient with either a facemask or nonrebreather (NRB) mask, depending on oxygen needs. Aerosol generating procedures such as nebulizer treatments and CPAP should be discontinued before moving the patient from the ambulance to the hospital room. Receiving hospital staff should be consulted prior to restarting these aerosol generating procedures.

CPR Guidelines: Active Echo Call with CPR

Initial minimum required PPE while responding to Cardiac Arrest:

- Gloves
- N95
- Standard eye protection
- Faceshield (or goggles[9])
- Gown (or Level B PPE)

"Level Red" PPE should be worn until an appropriate medical screening can be completed and patient's risk for COVID-19 can be assessed.

If responders are able to determine that COVID-19 is not suspected or known, they may reduce the level of PPE at their discretion.

Gloves, standard eye protection, and facemask are always required.

[9] Goggles may be worn in place of standard eye protection with faceshield. PPE type and availability will vary based on agency.

Gown-Donning Procedure

Remember MEGG**:**

Mask:

1. Place mask on face and hold on nose with finger
2. Place top strap behind head above ears
3. Place lower strap behind head below ears
4. Use both hands to tighten straps
5. Form mask to bridge of nose
6. Ensure seal and retighten as necessary

Eyes: put on standard eye protection with addition of faceshield (or goggles) for suspected COVID-19 patients

Gown: Put on gown, tying in back

Gloves: Put gloves on, ensuring gloves cover sleeves of gown

Gown-Doffing Procedure

Remember GGEM (reverse of donning):

1. The goal of doffing is to safely remove PPE without contaminating your clothing, skin, or mucous membranes with potentially infectious material.
2. Visually inspect for gross contamination.
3. **G**own: Remove gown and gloves by grasping the gown with gloved hands and pulling away from your body, rolling the gown inside-out into a bundle.
4. **G**loves: Remove gloves, inside-out. Dispose of glove and gown in waste container.
5. **E**yes: Remove face shield (or goggles) and standard eye protection.
6. **M**ask: Remove mask or respirator.
7. Wash hands or use alcohol-based hand sanitizer.

Use of Level B PPE in Lieu of Gown

If gowns are unavailable, Level B jacket and pants can be substituted.

Donning of Level B jacket and pants:

1. Take black and yellow tub off apparatus:
    i. Empty contents of tub.
    ii. Place tub in a suitable decon/doffing location.
    iii. Place garbage bag and Red Bag near tub.
    iv. Place disinfectant spray bottle and wipes near tub.
2. Put Level B pants on, over your station uniform.
3. Put Level B jacket on.
4. Put on facemask or N95 respirator, as appropriate.
5. Put on standard eye protection and faceshield (or goggles)
6. Put on gloves.
7. Care for patient.

Doffing of Level B jacket and pants:

1. Move to Doffing area.
2. Place non-disposable medical equipment in an area away from doffing location for 2nd crewmember to disinfect.
3. Without touching inside of jacket, remove jacket:
    i. Use 2nd crewmember if needed.
    ii. Place jacket in garbage bag for later decon.
4. Remove level B pants:
    i. Undo buckles.
    ii. Remove pants without touching inside of pants.
    iii. Place in garbage bag for later decon.
5. Remove gloves.
6. Remove faceshield or goggles:
    i. If disposable, place in red bag.
    ii. If reusable, place in garbage bag for later decon.
7. Remove facemask or N95 respirator and place in red bag.
8. Wash hands or use alcohol-based hand sanitizer.

Facemask/N95 Respirator Reuse:

1. Reuse of facemasks is acceptable and the mask can be stored on or with the provider between incidents.
    a. **Note:** Gross contamination or damage to the mask warrants replacement.
2. **DO NOT** use alcohol and chlorine-based disinfection methods. Evidence indicates these chemicals will remove the static charge in the microfibers of N95 respirators, reducing filtration efficiency. In addition, chlorine also retains gas after decontamination and these fumes may be harmful.
3. Reuse of N95 respirators is acceptable following patient care that has not generated high concentrations of respiratory secretions or aerosols.
    i. Gross contamination or damage to the N95 warrants replacement.
    ii. Dispose of N95 respirators after high risk encounters.
    iii. Storage should be in a closed container which does not compromise the shape of the mask and provides for ventilation (e.g., perforated plastic container or paper bag).
    iv. N95 respirators should be limited to 5 reuses or 8-hours of continuous use.

    Note: A use-count system can be helpful, such as marking a piece of tape on the storage container.
4. If perforated plastic containers are used for N95 storage, personnel should disinfect the inside of the container, allowing for appropriate dry time prior to storing the N95.[10]

[10] https://www.cdc.gov/niosh/topics/hcwcontrols/recommendedguidanceextuse.html

Cleaning and Disinfecting Procedures

The following are general guidelines for cleaning and disinfecting EMS equipment after treating a suspected or known COVID-19 patient:

- If possible, members should attempt to clean and disinfect equipment on scene, prior to storing equipment back on an apparatus.
- When cleaning and disinfecting equipment, it is recommended to perform this task outside, away from concentrated, potentially infectious particles inside a patient's initial contact setting or treatment area.
- When cleaning and disinfecting equipment used during patient care of a suspected COVID-19 patient, members shall wear gloves, facemask, standard eye protection, faceshield (or goggles), and gown.
- Ensure that environmental cleaning and disinfection procedures are followed consistently and correctly, to include the provision of adequate ventilation when chemicals are in use.
- All surfaces that may have come in contact with the patient or materials contaminated during patient care (e.g., stretcher, rails, control panels, floors, walls, work surfaces) should be thoroughly cleaned and disinfected using an EPA-registered hospital grade disinfectant in accordance with the product label.
- Clean and disinfect reusable patient-care equipment before use on another patient, according to manufacturer's instructions.
- Follow standard operating procedures for the containment and disposal of used PPE and regulated medical waste.
- Products with EPA-approved emerging viral pathogens claims are recommended for use against SARS-CoV-2 (COVID-19)[11,12]

[11] https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-for-ems.html
[12] https://www.cdc.gov/infectioncontrol/guidelines/disinfection/disinfection-methods/chemical.html

Current Recommended Disinfecting Products

1. **Clorox® Disinfecting Wipes:**[13]

- Wipe surface to be disinfected.
- Keep surface wet for 4 minutes.
- Let surface dry.
- For highly soiled surfaces, clean excess dirt first.
- For items that come in contact with food or mouths rinse with warm water and let air-dry.

2. **Bleach:**[14]

- Prepare a bleach solution using one of the following mixes:
  - 1/3 cup (79 ml) bleach per gallon of water

    OR

  - 4 teaspoons (20 ml) bleach per quart of water
- Pre-wash surface.
- Mop or wipe with a bleach solution.
- Allow solution to contact the surface for 5 minutes.
- Rinse with warm water and let air-dry.

Note: Bleach solutions in tap water at a pH >8 stored at room temperature (23°C) in closed, opaque plastic containers can lose up to 40%–50% of their free available chlorine level over one month.[15]

[13] https://www.clorox.com/how-to/disinfecting-sanitizing/cold-flu-other-diseases/help-prevent-the-spread-of- the-human-novel-coronavirus-2019-ncov/
[14] https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/cleaning-disinfection.html
[15] https://www.cdc.gov/infectioncontrol/guidelines/disinfection/disinfection-methods/chemical.html

3. Sani-Cloth® Plus Germicidal Disposable Cloth:[16]

- Wipe surface to be disinfected.
- Keep surface wet for 4 minutes.
- Let surface dry.
- For highly soiled surfaces, clean excess dirt first.
- For items that come in contact with food or mouths rinse with warm water and let air-dry.

Note: If disinfectant product to be used is not listed here:

Current guidelines recommend an approved EPA-registered disinfectant that has qualified under EPA's emerging viral pathogens program for use against SARS-CoV-2 as listed in List N: Disinfectants for Use Against SARS-CoV-2.[17] Follow manufacturer's recommendations when using.

[16] https://pdihc.com/products/environment-of-care/sani-cloth-plus-germicidal-disposable-cloth/
[17] https://www.epa.gov/pesticide-registrati on/list-n-disinfectants-use-against-sars-cov-2

Cleaning and Disinfecting Clothing, Towels, Linens, and other Laundered Items

The following are general guidelines for cleaning and disinfecting re-usable facemasks, clothing, towels, linens, and other cloth items after they come into contact with a suspected COVID-19 patient:

- Members with a suspicion of gross uniform contamination or obvious particulate exposure, following a high risk encounter with a suspected COVID-19 patient, should follow the on scene doffing procedure, don clean clothing on scene, and immediately wash contaminated clothing after returning to the station.
- When cleaning and disinfecting cloth-based items, it is recommended that members wear disposable gloves.
    - If using reusable gloves, those gloves should be dedicated for cleaning and disinfection of surfaces for COVID-19 and should not be used for other household purposes. Wash hands immediately after gloves are removed.
    - If no gloves are used when handling dirty laundry, be sure to wash hands thoroughly afterwards.
- If possible, do not shake dirty laundry. This will minimize the possibility of dispersing virus through the air.
- It is recommended that members launder items as appropriate in accordance with the manufacturer's instructions.
    - If possible, launder items using the warmest appropriate water setting for the items and dry items completely. Dirty laundry from an ill person can be washed with other people's items.
    - Recent research has shown that the virus can be killed with a combination of heat and time:
        - 90 minutes at 132° F, 60 minutes at 152° F, or 30 minutes at 167° F [18]
- Clean and disinfect clothes hampers according to guidance above for surfaces. If possible, consider placing a bag liner that is either disposable (can be thrown away) or can be laundered.[19,20]

[18] https://pubmed.ncbi.nlm.nih.gov/14631830/
[19] https://www.cdc.gov/coronavirus/2019-ncov/prepare/cleaning-disinfection.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fcommunity%2Fhome%2Fcleaning-disinfection.html
[20] https://www.cdc.gov/coronavirus/2019-ncov/infection-control/control-recommendations.html

SCBA Regulator Disinfecting Procedures

Disinfecting procedures for the SCOTT regulator:
This procedure has been recommended by SCOTT, and may not be appropriate for all SCBA devices. Please refer to your manufacturer's recommendations and department protocols for proper cleaning details.

Per manufacturer's recommendations, all personnel shall regularly disinfect the shared SCOTT SCBA regulators to reduce potential for spreading colds and viruses during morning checks and operational use.

SCOTT recommends a **1-ml/cc to 30 oz.** warm water solution for disinfecting regulators using a spray bottle.
When using a standard 32-ounce spray bottle:

- Take a standard 5-ml syringe and fill it with 1-ml of bleach.
- Fill the spray bottle with 30-oz of warm water and 1-ml of bleach.
- Mix the solution and you're ready to disinfect the regulators.

The solution should be left on the regulator for 2-minutes and then rinsed.

Ensure the spray bottles to be compliant with Labor and Industries marking requirements or immediately empty & rinse the un-labeled spray bottle.

Regulator Cleaning Steps

- Remove the mask-mounted regulator from the facepiece by pulling back on the retaining latch and rotating the regulator one-quarter turn clockwise.
- Using a sponge or soft cloth and the recommended sanitizing or disinfecting cleaner, wipe the external surfaces of the regulator.
- Inspect the inside of the regulator assembly through the regulator opening. If excessive dirt or soil is present, forward the regulator assembly to Scott Safety-trained authorized personnel for thorough cleaning.
- Depress the air-saver/donning switch. Close the purge knob by turning it fully clockwise.
- Using a spray bottle, apply the recommended sanitizing or disinfecting cleaner (1-ml bleach to 30-oz warm water) to the surfaces of the regulator opening and the immediate area

around the opening. Be sure to saturate the internal components completely with the cleaning solution.

- Set the regulator aside for the required contact time prior to rinsing. The 1-ml bleach to 30-oz warm water solution require a 2-minute contact time.
- Using gently running tap water or a spray bottle with drinking water, rinse the regulator inside and out.
- Shake excess water out of regulator. Completely air dry the regulator before use.
    - Note: To speed drying of the regulator, gently blow dry with clean, dry breathing air of 30 psi maximum. Do not use shop air or any other air containing lubricants or moisture.
- If the regulator was disconnected from the air supply for cleaning, reconnect and open the purge valve to remove any moisture from regulator spray bar. Close the purge valve.
- Perform a regulator check after each cleaning.

Post Response

Reporting Requirements

During the COVID-19 pandemic there will need to be additional documentation. Thorough documentation will help track the progress of the disease and help us be more proactive with regard to our own safety and the safety of our communities.

- **Station logbooks or EHR tracking:** Used to document the use of PPE on calls with elevated risk.
- **Potential Infectious Disease Exposure Form:** If potential exposure forms are available, they should be used for any exposures considered “Medium” or “High.”
- **ESO:** New sections which pertain to COVID-19 response:
  - All crew members now require specification of what PPE they wear on every call.
    - *Incident tab/Personnel section/PPE drop-down under each name*
  - The Clinical Impression (primary or secondary) now has three COVID-19 related options which will help with tracking:
    - COVID-19 confirmed by testing
    - COVID-19 exposure to confirmed patient
    - COVID-19 suspected – no known exposure
    - *Narrative tab/Impression section/Primary Impression*
  - Under the “Forms” tab there is a box entitled “Outbreak Screening” with questions regarding symptoms and recent contact with other symptomatic people. This form is a requirement for completing any report during the pandemic.
    - Onset of symptoms
    - Symptoms checklist
    - History of illness contact
    - *Forms tab/Outbreak Screening box*

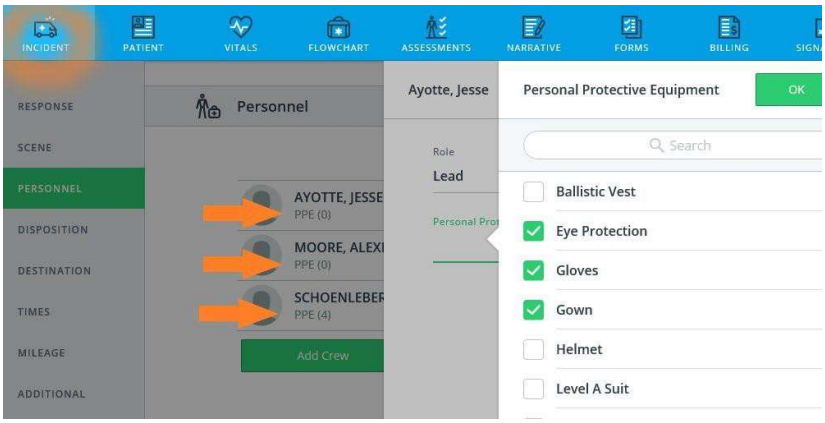
Non-ESO EHRs may also have COVID-19 tracking systems. Please be familiar with the EHR utilized by your agency.

Documentation of Incidents in ESO

Documentation of Personal Protective Equipment Worn

Direction: Required for all EMS incidents, for every crew member, throughout the pandemic. If PPE had been reused (e.g. not a new N95, or a reusable faceshield), document as applicable. This allows accurate tracking of PPE use.

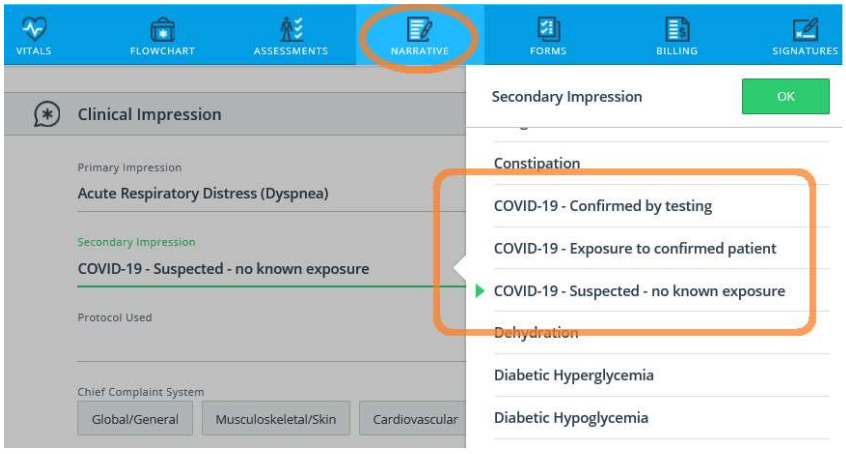
Location: Incident tab/Personnel section/each crew member (click "Edit")



Documentation of Clinical Impression

Direction: Select one of three COVID-19 options for the primary or secondary impression of the patient's primary problem, when appropriate. Often it will be most appropriate to document the primary impression as the patient's primary problem, with COVID-19 as a secondary impression. This will flag the incident for important review and statistics gathering.

Location: Narrative tab/Impression Section/Clinical Impression subsection/Primary of Secondary Impression

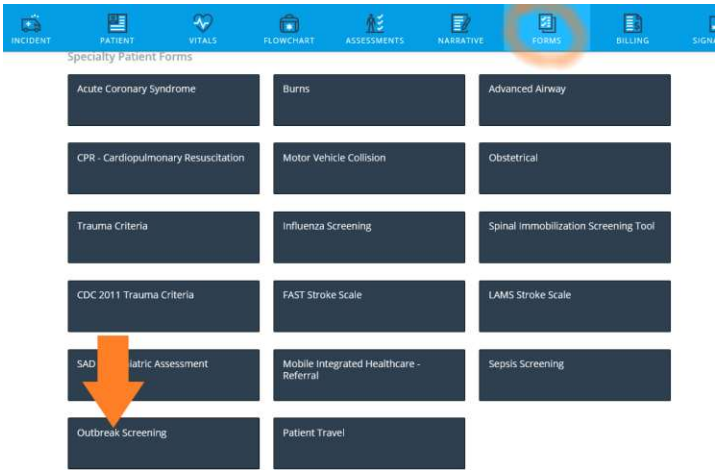


Documentation of Outbreak Screening

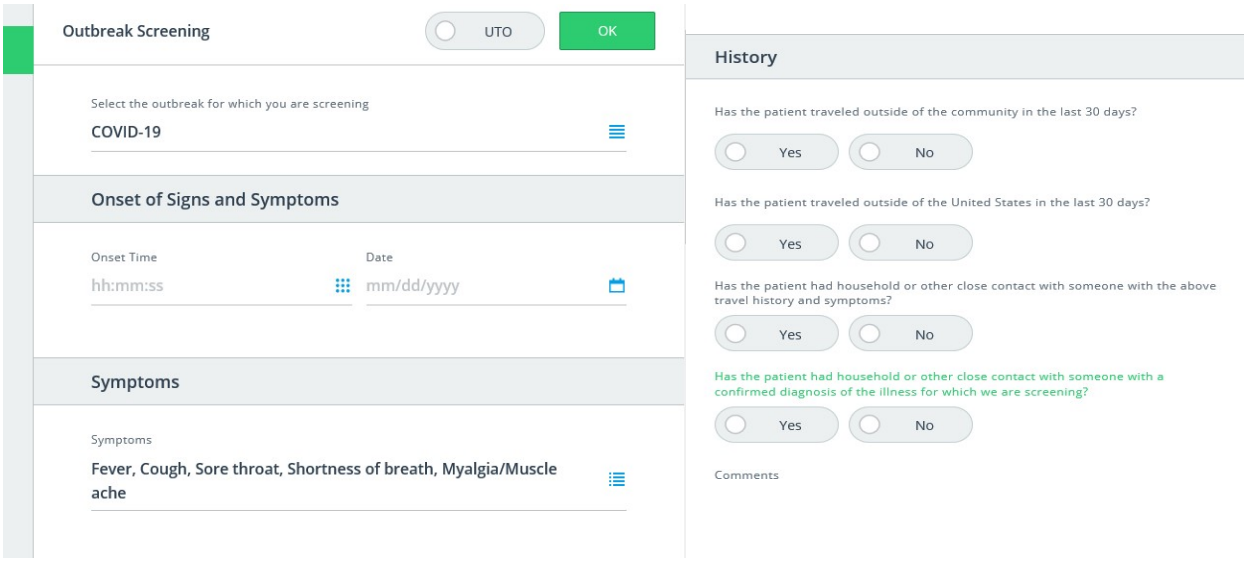
Direction: Required on all EMS incidents throughout the pandemic

Location: Forms tab/Outbreak Screening box

A screenshot showing the Outbox Screening box found under the Forms tab is provided below:



Screenshots of the Outbreak Screening form with all symptoms selected are provided below:



Exposure

Exposure is thought to occur mostly from person-to-person via respiratory droplets among close contacts.

Close contact with a sick person is generally required to become infected. Close contact includes:

- Living in the same household as a sick person with COVID-19 or a person under investigation,
- Caring for a sick person with COVID-19 or a person under investigation,
- Being within 6 feet of a sick person with COVID-19 or person under investigation for about 10 minutes, OR
- Being in direct contact with secretions from a sick person with COVID-19 or person under investigation (e.g., being coughed on, kissing, sharing utensils, etc.).

If close contact occurs in which a member is not wearing appropriate PPE, or PPE is breached, refer to exposure risk categories.[21]

If an on duty exposure occurs, follow your agency's infectious exposure policy and contact your POC for further information.

High-Risk Exposure

1. Prolonged close contact with an individual with known COVID-19 infection or a person under investigation (PUI) with no patient mask and the provider's nose and mouth is exposed.
2. EMS provider in the room with eyes, nose or mouth unprotected for procedures that generate aerosols or during which respiratory secretions are poorly controlled such as:
    1. Cardiopulmonary resuscitation
        - BVM
        - Intubation
        - CPAP
        - Nebulizer therapy
        - Suctioning

[21] https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-risk-assesment-hcp.html

Medium-Risk Exposure

Prolonged close contact with a suspected or known COVID-19 patient, by an EMS provider who is not wearing a facemask, is considered a medium risk exposure. Aerosol generating procedures, without the use of an N95, are also considered medium risk exposures.

Low-Risk Exposure

Low risk exposure generally includes brief interactions with patients with COVID-19 or a person under investigation or prolonged close contact with patients who were wearing a facemask for source control while the EMS provider was wearing a facemask or respirator. Use of eye protection, in addition to a facemask or respirator would further lower the risk of exposure.

Establishing a Point of Contact

It can be vital to create a point of contact (POC) for members to have a single source of information for COVID-19 related questions and concerns. The inherent nature of this pandemic can cause anxiety and confusion. Giving members a centralized point to report COVID-19 symptoms or exposures can help foster confidence and minimize confusion. Having the point of contact available 24/7 is key to immediately assisting members who become sick.

Definitions:

POC: Point of contact. This can be a single person or an entire team, depending on the needs of the organization. A single point of contact helps streamline communication between members and the organization.

Hotline: A 24/7 staffed phone number which can assist members who become sick, or answer questions regarding exposures.

> *If there are ANY questions about your crew's safety or ability to respond, first self-isolate affected personnel, then contact supervisor and the Hotline for further information.*

Potential POC responsibilities:

Member health and welfare should be the primary focus of the point of contact. The purpose of the POC is to answer questions to ensure members remain healthy and assisting them if they become sick. Specifically, potential POC responsibilities include:

Intake calls: Answering calls from sick members to assist them with potential isolation procedures, home care needs, paperwork questions, and return to work procedures.

Answering IAP and procedural questions: Answering questions regarding PPE guidelines, COVID-19 response plan (IAP) clarifications, and return to work policies. The POC can function as a general resource for members and their families. Members who are sick at home can use the POC as a centralized contact for potential work related illness paperwork. The POC can also help guide sick members through the COVID-19 testing process, if available.

Tracking of member status: Ensuring members are supported while they are sick is a key function of the point of contact. Tracking each member while they are in quarantine or isolation, and regularly contacting them regarding their status and needs, can help keep both the agency and the member best informed. The POC can aid in tracking member status as well as anticipated return to work timeframes. This tracking function can provide command staff with real-time staffing information, enabling them to make informed strategic decisions.

Return to Work Guidelines

Definitions:

Symptomatic Member: Fever ≥ 100.0° F, subjective symptoms of fever or respiratory symptoms (cough, sore throat, dyspnea).

Asymptomatic Exposure: Members meeting the CDC requirements for low, medium, or high risk exposure to COVID-19, or are otherwise not showing COVID-19 symptoms.

On-duty Exposure: Prolonged close contact with a person under investigation or a suspected or known COVID-19 patient without the use of PPE (mask), medium risk exposure, or high-risk exposure.

Off-duty exposure: Prolonged close contact with a person under investigation (PUI) or a known COVID-19 patient.

Travel Exposure: Members returning from ANY international travel are considered a travel exposure.

Recovery: Three days have passed since resolution of fever without the use of fever-reducing medications and improvement in respiratory symptoms (e.g., cough, shortness of breath) **AND** at least 7 days have passed since symptoms first appeared

> *Members may experience prolonged cough as a result of respiratory viral infection, which may continue after isolation has ended. Members can be advised to wear a facemask until their cough resolves or their health returns to baseline status.*[22]

Discontinuing Isolation: Members may have isolation discontinued and may return to work if they meet the criteria outlined in the **Recovery** definition.

> *If new symptoms arise, follow the response recommendations for a **Symptomatic Member**.*

Positive COVID-19 test or Members Awaiting Test Results: In order for members to return to work following a positive COVID-19 test, at least 3 days (72 hours) must have passed since recovery **AND** at least **10 days** must have passed since symptoms first appeared. The returning member must ensure they practice respiratory hygiene, hand hygiene, and cough etiquette.

> *Isolation increased from 7 days to **10 days** for COVID-19 positive members, or members awaiting test results, per Spokane Regional Health District recommendation.*

[22] https://www.doh.wa.gov/Portals/1/Documents/1600/coronavirus/HealthCareworkerReturn2Work.pdf

Full Staffing Response Plan:

Asymptomatic Exposure Work Restrictions:

- For medium and high level exposures while on duty, off duty, or due to travel. Quarantine for 14 days at home or designated quarantine facility.

Symptomatic Exposure Work Restrictions:

- Complete a COVID-19 test as available. Isolate until 72 hours have passed since recovery **AND** at least **7 days** have passed since symptoms first appeared.
- If not tested, or receive a negative test, isolate until 72 hours have passed since recovery **AND** at least **7 days** have passed since symptoms first appeared.
- Following a positive COVID-19 test, or members awaiting test results, isolate until at least 3 days (72 hours) must have passed since recovery **AND** at least **10 days** must have passed since symptoms first appeared.

  Return to work requires the use of a facemask at all times while at work until all symptoms are completely resolved or until 14 days after illness onset, whichever is longer.[23]

Travel Exposure:

- Quarantine and self-monitor (at home, or designated quarantine facility) 14 days from the time the member left the area**.**[24]

If member develops symptoms of COVID-19 at any time, the member must cease any patient care activities, immediately self-isolate (separate themselves from others), don a facemask (if not already wearing), and notify their supervisor promptly, if on duty.

Alternate Staffing Response Plan:

In the event that the number of asymptomatic quarantined personnel compromise the agency's ability to meet public health needs, as determined by the agency, a modified return-to-work strategy approved by the Washington State Department of Health may be enacted.[25]

All Masks, All the Time:

In order to protect un-exposed members from exposure to potentially infected but asymptomatic co-workers, all members must wear a facemask, all the time while on shift except while eating, drinking, or sleeping. The asymptomatic, exposed member will wear a facemask as source control, and the unexposed members will wear facemasks as a universal precaution.

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[23] https://www.cdc.gov/coronavirus/2019-ncov/healthcare-facilities/hcp-return-work.html
[24] https://wwwnc.cdc.gov/travel/notices/warning/coronavirus-europe
[25] https://www.doh.wa.gov/Portals/1/Documents/1600/coronavirus/HealthCareworkerReturn2Work.pdf

Asymptomatic Exposure:

- Asymptomatic members with medium or high risk exposure may continue to work provided they adhere to cough etiquette, hand hygiene and wear a facemask at all times while on duty. Members should actively monitor for symptoms consistent with a COVID-19 infection.
- If symptoms of COVID-19 develop at any time, the member must cease patient care activities, immediately self-isolate (separate themselves from others), don a facemask (if not already wearing), and notify their supervisor promptly, if on duty.

Symptomatic Exposure:

- Isolate at home, or designated quarantine facility and complete a COVID-19 test as available. If not tested, or receive a negative test, isolate until 72 hours have passed since recovery **AND** at least **7 days** have passed since symptoms first appeared.
- Following a positive COVID-19 test, or members awaiting test results, isolate until at least 3 days (72 hours) must have passed since recovery **AND** at least **10 days** must have passed since symptoms first appeared. [26]
- Returning to work requires the use of a facemask at all times while on shift except while eating, drinking, or sleeping.

Alternate Staffing Response Plan Summary:

If a member is symptomatic: Symptomatic members will go off duty until they are well.

On duty: Immediately self-isolate, don a facemask (if not already wearing), and notify their supervisor.

Off duty: Member should contact their agency.

If a member is asymptomatic:

- Ensure proper personal protective measures are in place including hygiene, social distancing, and facemask use while on duty.
- Frequently perform self-assessments to monitor for symptoms and document per IAP.
- Continue performing shift duties as normal.

Adapted from the Washington State Department of Health Return to Work Guidance for Health Care Workers and First Responders Who Have Confirmed COVID-19 Infection Or are Asymptomatic with High or Medium Risk Exposures to a Known Case of COVID-19

[26] https://www.doh.wa.gov/Portals/1/Documents/1600/coronavirus/HealthCareworkerReturn2Work.pdf

Full Staffing Response to COVID-19 Exposure

Epidemiologic risk factors	Exposure category	Work restrictions for an asymptomatic EMS provider
Prolonged close contact with a suspected COVID-19 patient who was wearing a facemask (e.g., source control)		
No provider PPE	Medium	Exclude from work for 14 days after last exposure
Provider not wearing a facemask or respirator	Medium	Exclude from work for 14 days after last exposure
Provider not wearing eye protection	Low	None
Provider not wearing gown or gloves	Low	None
Wearing all recommended PPE	Low	None
Prolonged close contact with a suspected COVID-19 patient who was not wearing a facemask (e.g., no source control)		
No provider PPE	High	Exclude from work for 14 days after last exposure
Provider not wearing a facemask or respirator	High	Exclude from work for 14 days after last exposure
Provider not wearing eye protection	Medium	Exclude from work for 14 days after last exposure
Provider not wearing gown or gloves	Low	None
Wearing all recommended PPE	Low	None

Alternate Staffing Response to COVID-19 Exposure

Epidemiologic risk factors	Exposure category	Work restrictions for an asymptomatic EMS provider
Prolonged close contact with a suspected COVID-19 patient who was wearing a facemask (e.g., source control)		
No provider PPE	Medium	Continue to work while wearing facemask and practicing proper hygiene and social distancing
Provider not wearing a facemask or respirator	Medium	Continue to work while wearing facemask and practicing proper hygiene and social distancing
Provider not wearing eye protection	Low	None
Provider not wearing gown or gloves	Low	None
Wearing all recommended PPE	Low	None
Prolonged close contact with a suspected COVID-19 patient who was not wearing a facemask (e.g., no source control)		
No provider PPE	High	Continue to work while wearing facemask and practicing proper hygiene and social distancing
Provider not wearing a facemask or respirator	High	Continue to work while wearing facemask and practicing proper hygiene and social distancing
Provider not wearing eye protection	Medium	Continue to work while wearing facemask and practicing proper hygiene and social distancing
Provider not wearing gown or gloves	Low	None
Wearing all recommended PPE	Low	None

Quarantine and Isolation Recommendations

Quarantine is a separation of an *asymptomatic* member who has had prolonged close contact with a person under investigation (PUI) or a suspected or known COVID-19 patient without the use of PPE (mask), or a medium or high-risk exposure. This separation from others who have not been exposed is to prevent possible spread of COVID-19.[27]

Recommended Procedure:
Members are advised to separate from others, who have not been exposed, through social distancing, and by use of a facemask while working in proximity to other members.

Additional actions include:
- Monitor themselves for signs and symptoms consistent with COVID-19.
- Maintain contact with their agency

Isolation is a separation of a *symptomatic* member with a known or suspected COVID-19 infection, from those who have not been infected.

Recommended Procedure
Members in isolation are to separate themselves from others through social distancing.

Additional precautions include:
- The isolated member should wear a facemask when around other people.
- Full recommended PPE for others coming in contact with the isolated member.
- Prohibit visitors who do not have an essential need to be in the isolation location.
- To the extent possible, members with known or suspected COVID-19 should be housed in an isolated room or area for the duration of their isolation to minimize pathogen spread.
- Other members should stay in another room or be separated from the isolated member as much as possible. Household members should use a separate bedroom and bathroom, if possible.
- Perform hand hygiene frequently.
- Clean all “high-touch” surfaces, such as counters, tabletops, doorknobs, bathroom fixtures, toilets, phones, keyboards, tablets, and bedside tables, every day. Also, clean any surfaces that may have blood, stool, or body fluids on them.
- Avoid sharing household items with the patient. Isolated members should not share dishes, drinking glasses, cups, eating utensils, towels, bedding, or other items. After a member uses these items, they should wash them thoroughly.

[27] https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-prevent-spread.html

Quick Reference Guides

COVID-19 Screening questions for EMS Providers

COVID-19 SCREENING QUESTIONS

1. Do you have a fever?
2. Do you have any symptoms of a fever such as body aches or chills?
3. Do you have a sore throat, cough and/or difficulty breathing?
4. Does anyone here have any of the symptoms I have just asked?
5. Is anyone here under quarantine for any reason?

If **YES**, or **LANGUAGE BARRIER**, or **UNCONSCIOUS =** **LEVEL YELLOW**

If in doubt, err on the side of caution and use an N95.

BVM, CPAP, SVN, Intubation, Suction = **LEVEL RED (N95)** for **ALL PERSONNEL**

COVID-19 Response PPE Guide:

Follow Your Agency Guidelines Regarding Specific PPE Use

Level Green

Minimum PPE

<u>All Calls</u>

Don prior to performing a door triage

- Gloves
- Standard Eye Protection
- Facemask

Level Yellow

COVID Response

<u>Standard Encounter</u>

Positive Screening from dispatch or door triage

- Gloves
- Standard Eye Protection and Faceshield
- Facemask or N95(+) Respirator
- Gown or Level B

Level Red

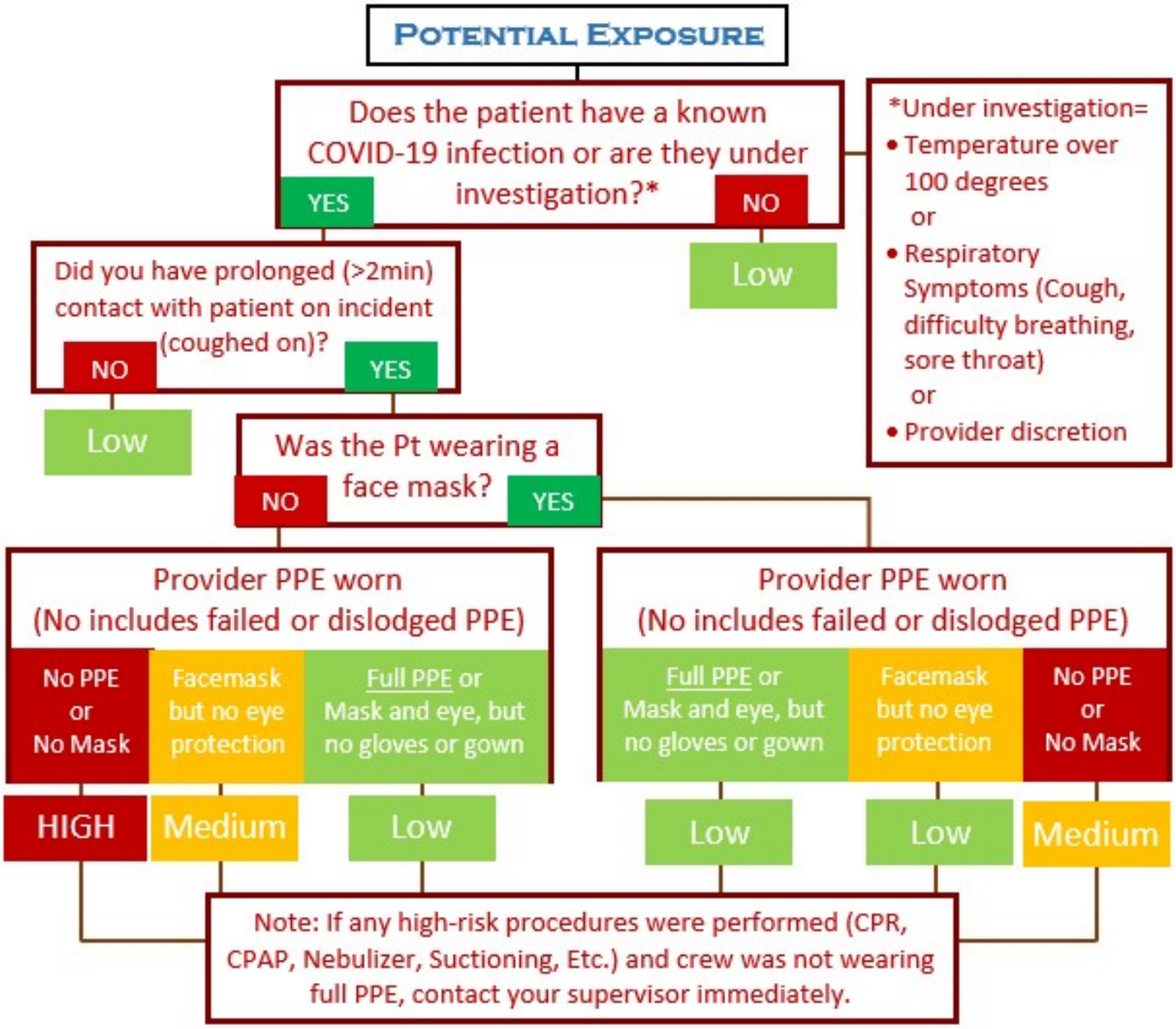
COVID Response

<u>High Risk Encounter</u>

CPR, BVM, Intubation, CPAP, Nebulizer, Suctioning, ETC.

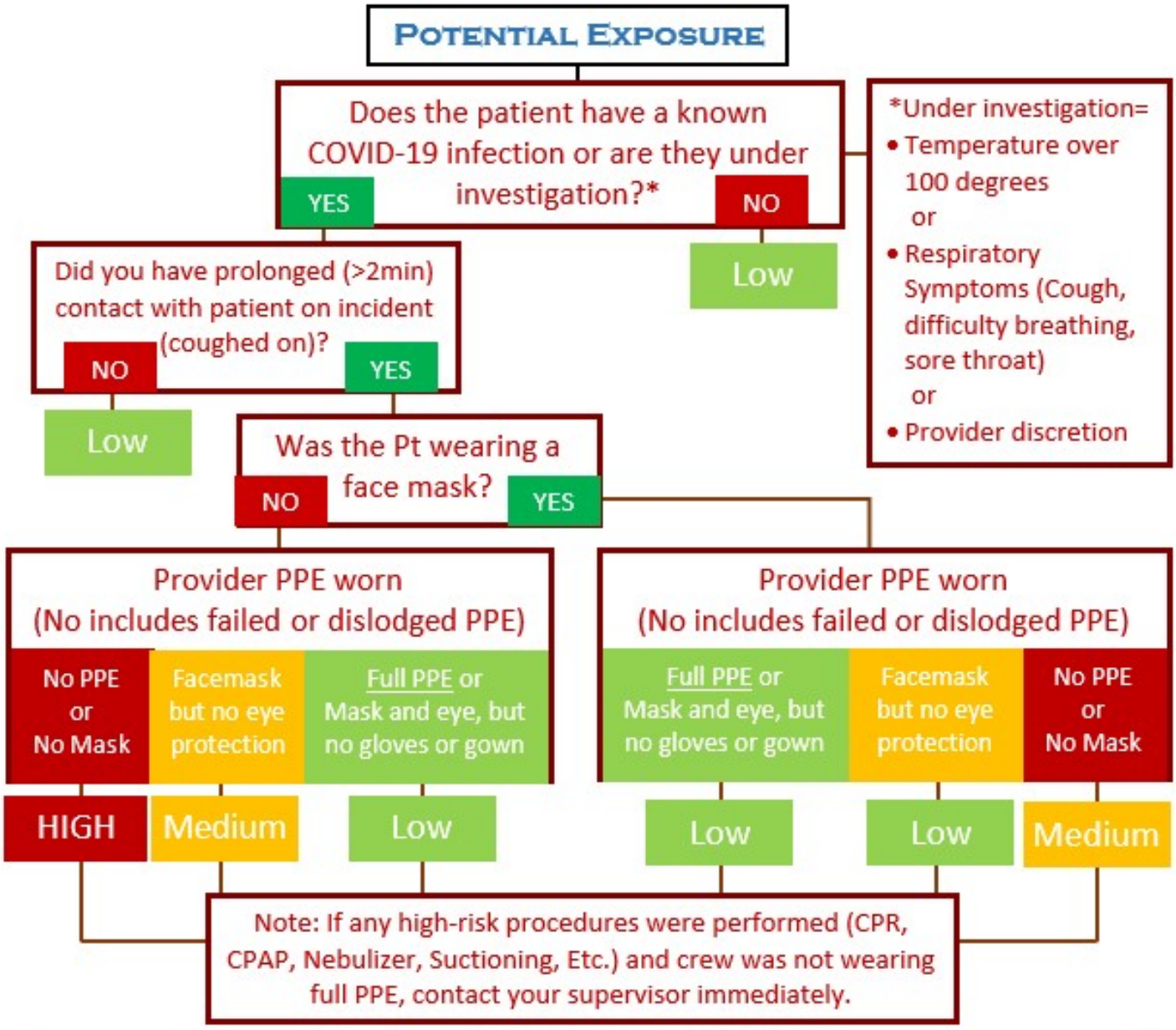
- Gloves
- Standard Eye Protection and Faceshield
- N95(+) Respirator
- Gown or Level B

Exposure flow chart: Full Staffing Plan



Low	Decontaminate equipment, wash hands, & continue working. Complete applicable department documentation.
Medium	14 days quarantine at home or designated location. Complete applicable department documentation, crew OOS, Isolate, contact supervisor.
HIGH	14 days quarantine at home or designated location. Complete applicable department documentation, crew OOS, Isolate, contact supervisor.

Exposure flow chart: Alternate Staffing Plan



Low	Decontaminate equipment, wash hands, & continue working. Complete applicable department documentation.
Medium	Contact supervisor, crew to go OOS for decontamination. Decontaminate crewmembers and all equipment. Complete applicable department documentation, complete county Potential Infectious Disease Exposure form.
HIGH	Contact supervisor, crew to go OOS for decontamination. Decontaminate crewmembers and all equipment. Complete applicable department documentation, complete county Potential Infectious Disease Exposure form.