



COVID-19 Response Guidelines

Update

April 7, 2020

SAR/MW

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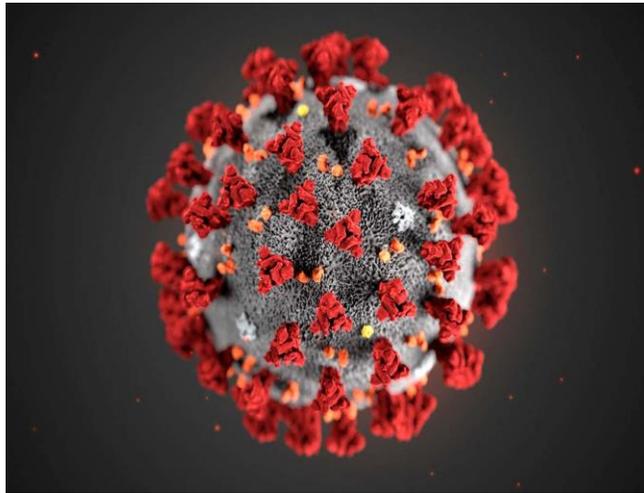
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SECTION 1: GENERAL INFORMATION



These guidelines have been reviewed and approved by, Marvin Wayne, MD, Whatcom County Medical Program Director, and Michael Hilley, Whatcom County EMS Manager. They will be modified and updated as new information is obtained or local conditions change.

1.1 GENERAL INFORMATION

General guidelines for response, PPE, decontamination and other precautions will be guided by the Centers for Disease Control (CDC), Whatcom County Department of Health (WCDH), Whatcom County Emergency Medical Services, and standard operating policy and procedures established by individual agency infection control plans (ICP).

All responders should familiarize themselves with individual agency ICP and review daily updates as provided through the CDC website. The COVID-19 pandemic is a dynamic event, and WCEMS will update information as needed through email or other media with any substantive changes.

Local information about COVID-19, county and city response can be accessed at www.whatcomcovid.com.

This plan has been reviewed by WCEMS Administration and the Medical Program Director for Whatcom County.

1.2 BACKGROUND

CDC is responding to an outbreak of respiratory disease caused by a novel (new) coronavirus that was first detected in China and which has now been detected in more than 100 locations internationally, including in the United States. The virus has been named “SARS-CoV-2” and the disease it causes has been named “coronavirus disease 2019” (abbreviated “COVID-19”).

On January 30, 2020, the International Health Regulations Emergency Committee of the World Health Organization declared the outbreak a “public health emergency of international concern external icon” (PHEIC). On January 31, 2020, Health and Human Services Secretary Alex M. Azar II declared a public health emergency (PHE) for the United States to aid the nation’s healthcare community in responding to COVID-19.

Source and Spread of the Virus

Coronaviruses are a large family of viruses that are common in people and many different species of animals, including camels, cattle, cats, and bats. Rarely, animal coronaviruses can infect people and then spread between people such as with MERS-CoV, SARS-CoV, and now with this new virus (named SARS-CoV-2).

The SARS-CoV-2 virus is a beta-coronavirus, like MERS-CoV and SARS-CoV. All three of these viruses have their origins in bats. The sequences from U.S. patients are similar to the one that China initially posted, suggesting a likely single, recent emergence of this virus from an animal reservoir.

Early on, many of the patients at the epicenter of the outbreak in Wuhan, Hubei Province, China had some link to a large seafood and live animal market, suggesting animal-to-person spread. Later, a growing number of patients reportedly did not have exposure to animal markets, indicating person-to-person spread. Person-to-person spread was subsequently reported outside Hubei and in countries outside China, including in the United States. Some international destinations now have apparent community spread with the virus that causes COVID-19, as do some parts of the United States. Community spread means some people have been infected and it is not known how or where they became exposed. Learn what is known about the spread of this newly emerged coronaviruses.

1.3 ILLNESS SEVERITY

The complete clinical picture of COVID-19 is not fully known. Reported illnesses have ranged from very mild (including some with no reported symptoms) to severe, including illness resulting in death. While information so far suggests that most COVID-19 illness is mild, a report out of China suggests serious illness occurs in 16% of cases. Older people and people of all ages with severe underlying health conditions — like heart disease, lung disease and diabetes, for example — seem to be at higher risk of developing serious COVID-19 illness.

There are ongoing investigations to learn more. This is a rapidly evolving situation and information will be updated as it becomes available.

SECTION 2: HOUSEKEEPING and HYGIENE



2.1 HOUSEKEEPING

All fire and EMS providers are each responsible for ensuring the cleanliness of your facilities, apparatus and equipment. All providers shall follow housekeeping policies and procedures as outlined in agency ECP.

Any surfaces or equipment touched by a patient or suspected of contamination shall be cleaned using agency prescribed disinfectants following each transport, as outlined in individual agency ECP.

2.2 HYGIENE

Hygiene is a key component to preventing the spread of COVID-19 or any other communicable illness. Proper daily hygiene includes:

- 1) Washing hands with soap and water on a regular basis.
 - a. After removal of gloves and other PPE.
 - b. After cleaning and decontaminating equipment.
 - c. After using the restroom.
 - d. Before eating.
- 2) Avoid touching face, eyes, and other mucous membranes with contaminated hands.
- 3) Eating, drinking, applying cosmetics or lip balm, and handling contact lenses is prohibited in work areas (patient care areas) of the ambulance or where there is reasonable likelihood of occupational exposures.
- 4) Under NO circumstances should contaminated work uniforms be laundered at home.
- 5) All employees shall maintain extra, clean uniforms at work.
 - a. Employees should don a new uniform if exposed.
- 6) All linen used for patient transport shall be considered contaminated.
 - a. Handle all contaminated linens as little as possible and with minimal agitation.

Hand sanitizer is an acceptable substitute for soap and water until handwashing can occur.

2.3 SELF MONITORING

During shift work providers will self-monitor their temperature.

Providers shall monitor for a temperature above 100.4°F (38.4°C):

- 1) At the beginning of their shift (08:00 or as close as possible).
- 2) Mid-shift (20:00 or as close as possible).
- 3) Any employee presenting with a temperature or symptoms of respiratory infection during shift shall self-report to their supervisor and will be relieved from duty.

Providers shall also monitor for other symptoms consistent with COVID 19, including:

- 1) Sudden loss of smell or taste (reported in 1/3 of positive cases)
- 2) Respiratory symptoms
- 3) Body aches, headache, or other flu-like symptoms
- 4) Chest pain not cardiac in nature

SECTION 3: PERSONAL PROTETIVE EQUIPMENT (PPE)



3.1 ASSIGNED PPE

Where available all EMS/fire personnel will be assigned:

- 1) A fit tested MSA 200 half-mask respirator
- 2) One set of P100 cartridges
 - a. Changed every 3 months or as directed
- 3) Plastic case to hold personal respirator

Once issued PPE is the individual responders' responsibility to carry, maintain, clean and properly disinfect.

If respiratory PPE is lost or damaged immediately report the issue to the On-Duty Supervisor for your agency to replace the lost or damaged unit.

3.2 PPE GUIDANCE

All responders shall follow guidelines and recommendations outlined by your own agencies ECP.

Employees shall follow Universal Precautions on all responses.

Any call with signs and symptoms of COVID-19 warrants responders donning full contact-exposure PPE (Mask, Eye Protection, Gown and Gloves).

A high index of suspicion for COVID-19 should be in place when Prospect Dispatch pre-alerts crews through "respiratory precautions" prompts.

Professional judgement should be used in cases where there are not pre-determined COVID-19 or respiratory illness indicators reported through dispatch. We cannot rely on dispatch to catch all possible cases of respiratory illness or possible COVID-19 through call screening.

All long term and short-term health care facilities should be considered "hot spots."

It is recommended that all providers mark their mask with their name or an employee number and write a date on the cartridges.

Service life of cartridges is 3 months from when put into service.

Store assigned masks in provided plastic containers.

3.3 MEDICAL RESPONSE REQUIREMENTS

All providers should exercise caution, and minimize the number of providers, during any procedure that may cause aerosolization of Potentially Infectious Materials (OPIM), including:

- 1) Bag Valve Mask (BVM) Ventilation
- 2) Airway Suctioning (minimize/avoid if possible)
- 3) I-gel use by BLS should only be used/continued if there is a good seal and no aerosolization
- 4) Endotracheal Intubation with Video and RSI as needed may be used to replace igel that is not well sealed
- 5) Nebulizer Treatment MDI only with or without spacer
- 6) Continuous Positive Airway Pressure (CPAP) Therapy, do not routinely use
- 7) CPR stop LUCAS for any airway maneuvers

MINIMUM PPE (LEVEL II) ON ALL CALLS IS MANDATED AS:

- 1) Gloves
- 2) Eye Protection
- 3) Respiratory Protection

CASES INVOLVING KNOWN, CONFIRMED, OR SYMPTOMATIC PATIENTS (LEVEL III):

- 1) Gloves
- 2) Eye Protection
- 3) Respiratory Protection
- 4) Gown

3.4 DONNING AND DOFFING PPE

Providers shall don PPE in sequence:

- 1) Mask
- 2) Eye Protection
- 3) Gown
- 4) Gloves

Providers shall doff PPE in sequence:

- 1) Gloves
- 2) Gown – Sanitize or wash hands if possible
- 3) Eye Protection
- 4) Mask – Sanitize or wash hands if possible

When possible clean and disinfect MSA Masks in the decontamination area at St. Joseph's Hospital. Leave all other PPE doffed in decontamination area before entering emergency department with clean gloves to obtain and replace sheets etc. Do not enter ED for these items wearing gowns, etc., even if clean, as it confuses ED staff as to cleanliness of these items. Used PPE shall never be worn in the cab of the ambulance to avoid cross-contamination.

3.5 COMMUNICATIONS

When communicating with patients or by phone to the hospital the mask can muffle or distort your voice.

Use radio etiquette when communicating:

- a. Speak slowly
- b. Speak clearly
- c. Do not yell through the mask
- d. Be concise with verbal communications

Barriers to communication do not take precedents over respiratory protection. Masks shall not be removed, lifted off the face, or seal broken in order to improve communications.

3.6 DECONTAMINATION

Follow guidance of your agency for strict guidance on decontamination procedures.

3.7 MSA MASK DECONTAMINATION AND CARE

Decontamination should ideally be done at the hospital in the decontamination room or in the back of the ambulance at the hospital.

Avoid taking a dirty mask back to the station for decontamination.

Cavicide spray or wipes are to be used.

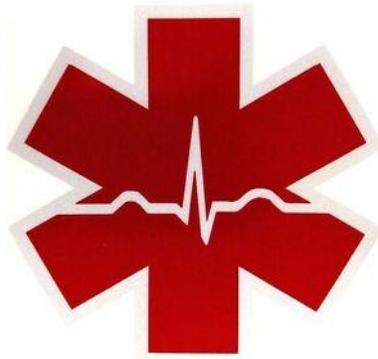
If not using Cavicide refer to individual agency direction.

Use gloves, eye protection and surgical mask during decontamination.

To decontaminate your mask:

- 1) Remove filter cartridges and disconnect head strap assembly from front of mask.
- 2) Spray or wipe all surfaces and allow to air dry.
- 3) **DO NOT SPRAY OR SUBMERGE THE CARTRIDGES. CARTRIDGES ARE TO BE WIPED ON OUTSIDE SURFACES ONLY.**
- 4) Dispose of wipes or towels in medical waste bins.
- 5) If desired, you can warm water rinse and dry with a clean towel after Cavicide (or selected disinfectant) dries to remove any residue or odor.
- 6) Reassemble mask and place in a ventilated case or bag.
 - a. Drill or poke holes in provided plastic case to allow for ventilation in storage container.
 - b. Protect mask integrity and shape to ensure proper fit.

SECTION 4: RESPONSE and TRANSPORT



4.1 GENERAL GUIDELINES

Whenever possible limit the number of responders entering a work area and attempt to maintain a 6 foot “social distancing.”

Send minimal numbers of responders to make initial patient contact as situations allow.

Use clinical judgement and leave at home guidelines to make transport decisions.

Patients presenting with respiratory symptoms such as cough or sore throat shall have a surgical mask (paper mask) placed during treatment and transport.

If patients do not tolerate a mask use a surgical mask with a nasal cannula (NC). Keep flows no greater than 6L/min

While a non-rebreather mask is not recommended, if one must be used, keep flows no greater than 6L/min and cover with a surgical mask.

4.2 OTHER CONSIDERATIONS

Treatment and Transport considerations should include:

- 1) Shelter in place whenever possible and appropriate. Report suspected cases to the Whatcom County Health Department.
 - a. Shelter in place criteria includes:
 - i. Clinically stable patient who is 65 years of age or younger
 - ii. Normal blood pressure for the patient
 - iii. Temperature below 100.4°F (38°C)
 - iv. Heart rate of 110 BPM or less
 - v. SpO₂ of 92% or above
 - b. Leave a copy of shelter-in-place instructions on-scene with the patient, family member or caregiver.
- 2) Consider use of private ambulance when appropriate. This is not an excuse to transport patient in need, and, if not used appropriately, could overwhelm their system.
 - a. Cascade Ambulance - 360-312-0911
 - b. Northwest Ambulance (Cabulance) – (425) 551-8885
- 3) Placement of a mask on all patients presenting with respiratory complaints, or signs and symptoms of respiratory infection.
- 4) Do not transport family or others to the emergency department, (ED).
- 5) Do not transport individuals in the cab of the ambulance.
- 6) PPE should be doffed, and hand sanitizer applied prior to entering the cab of the ambulance.
 - a. No contaminated PPE should be worn in the cab of the ambulance.
- 7) A barrier shall be maintained between the patient treatment area and cab of the ambulance using visqueen and duct tape.
 - a. This provides minimal protection from airflow and droplet contamination between the cab and patient treatment area.
- 8) Run all vents and fans on high settings in patient treatment area and cab of ambulance to create as much air movement as possible.
 - a. Do not run vents on “recirculate” settings.

4.3 RESPIRATORY PROCEDURES

The following treatments should be prioritized for management of shortness of breath and to limit aerosolized contamination of the workspace. Treatment shall be based on clinical judgement and patient condition.

Breathing Treatments:

- 1) Trial low or high flow O₂, no greater than 6L/min with a mask placed over the patients face or over the top of the Nasal Cannula (NC) or non-rebreather mask (NRB) (do not routinely use NRB).
- 2) High flow O₂ no greater than 6L/min with Albuterol treatments via Metered Dose Inhaler and Spacer unit.

- a. When possible use a patient's prescribed rescue MDI to limit impact on EMS supply stock and bring that MDI to ED with the patient.
- 3) Nebulizer, except MDI as described, treatments shall be avoided to prevent aerosolization of OPIM.

Airway Interventions:

- 1) Endotracheal intubation via video laryngoscopy
- 2) Placement of igel
- 3) Attempt simple ventilation management with BVM and OPA/NPA.

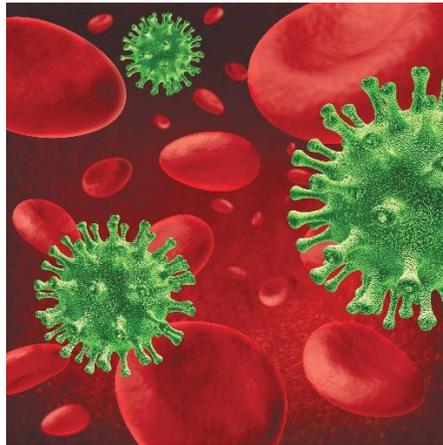
Avoid use of CPAP due to aerosolization concerns.

MEDIC CREWS SHALL NOT PERFORM DIRECT LARYNGOSCOPY, unless no alternatives.

Whatcom County EMS providers are to be using HEPA filters on all airway management procedures potentially producing aerosolizing droplets.

SEE APPENDIX FOR VISUAL GUIDES TO HEPA FILTER SET UP.

EXPOSURES



5.1 EXPOSURES AND REPORTING

Any employee exposure to COVID-19 shall be reported to a direct supervisor as soon as possible following an incident.

EMS-1 or your agency designee shall be consulted on all exposures as the Designated Infection Control Officers (DICO) for the shift.

Follow all exposure reporting procedures as outlined in the BFD-ECP or your mandated agency protocol.

Exposures to patients all fall in the “low” category when responders are properly wearing gloves, eye protection, mask and gown (when appropriate). As all crews strictly follow current minimum PPE requirements for all medical calls (mask, gloves, eye protection) we should not experience any medium or high exposure risks per CDC guidelines.

Report any cases of COVID-19 to the local health department. It is only necessary to report suspected cases if they meet the following criteria:

- 1) Patient has been tested for and is positive for COVID-19.
- 2) Patient has had close contact with a patient that has confirmed COVID-19 (see “Definitions” section of this document for clarification on “close contact”).

For clarification or clinical guidance consult medical control STAR Doc at 360-715-4149.

5.2 CDC EXPOSURE DEFINITIONS

High-risk exposures refer to HCP who have had prolonged close contact with patients with COVID-19 who were not wearing a facemask while HCP nose and mouth were exposed to material potentially infectious with the virus causing COVID-19. Being present in the room for procedures that generate aerosols or during which respiratory secretions are likely to be poorly controlled (e.g., cardiopulmonary resuscitation, intubation, extubation, bronchoscopy, nebulizer therapy, sputum induction) on patients with COVID-19 when the healthcare providers’ eyes, nose, or mouth were not protected, is also considered *high-risk*.

Medium-risk exposures generally include HCP who had prolonged close contact with patients with COVID-19 who were wearing a facemask while HCP nose and mouth were exposed to material potentially infectious with the virus causing COVID-19. Some *low-risk* exposures are considered *medium-risk* depending on the type of care activity performed. 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 exposure. If an aerosol-generating procedure had not been performed, they would have been considered *low-risk*.

Low-risk exposures generally refer to brief interactions with patients with COVID-19 or prolonged close contact with patients who were wearing a facemask for source control while HCP were wearing a facemask or respirator. Use of eye protection, in addition to a facemask or respirator would further lower the risk of exposure.

Proper adherence to currently recommended infection control practices, including all recommended PPE, should protect HCP having prolonged close contact with patients infected with COVID-19. However, to account for any inconsistencies in use or adherence that could result in unrecognized exposures HCP should still perform self-monitoring with delegated supervision.

HCP with no direct patient contact and no entry into active patient management areas who adhere to routine safety precautions do not have a risk of exposure to COVID-19 (i.e., they have *no identifiable risk*.)

Self-monitoring means HCP should monitor themselves for fever by taking their temperature twice a day and remain alert for respiratory symptoms (e.g., cough, shortness of breath, sore throat). Anyone on self-monitoring should be provided a plan for whom to contact if they develop fever or respiratory symptoms during the self-monitoring period to determine whether medical evaluation is needed.

Active monitoring means that the state or local public health authority assumes responsibility for establishing regular communication with potentially exposed people to assess for the presence of fever or respiratory symptoms (e.g., cough, shortness of breath, sore throat)*. For HCP with *high-* or *medium-risk* exposures, CDC recommends this communication occurs at least once each day. The mode of communication can be determined by the state or local public health authority and may include telephone calls or any electronic or internet-based means of communication.

For HCP, active monitoring can be delegated by the health department to the HCP's healthcare facility occupational health or infection control program, if both the health department and the facility are in agreement. Note, inter-jurisdictional coordination will be needed if HCP live in a different local health jurisdiction than where the healthcare facility is located.

Self-Monitoring with delegated supervision in a healthcare setting means HCP perform self-monitoring with oversight by their healthcare facility's occupational health or infection control program in coordination with the health department of jurisdiction, if both the health department and the facility are in agreement. On days HCP are scheduled to work, healthcare facilities could consider measuring temperature and assessing symptoms prior to starting work. Alternatively, a facility may consider having HCP report temperature and absence of symptoms to occupational health prior to starting work. Modes of communication may include telephone calls or any electronic or internet-based means of communication.

Occupational health or infection control personnel should establish points of contact between the organization, the self-monitoring personnel, and the local or state health departments of authority in the location where self-monitoring personnel will be during the self-monitoring period. This communication should result in agreement on a plan for medical evaluation of personnel who develop fever or respiratory symptoms (e.g., cough, shortness of breath, sore throat)* during the self-monitoring period. The plan should include instructions for notifying occupational health and the local public health authority, and transportation arrangements to a designated hospital, if medically necessary, with advance notice if fever or respiratory symptoms occur. The supervising organization should remain in contact with HCP through the self-monitoring period to manage self-monitoring activities and provide timely and appropriate follow-up if symptoms occur in a HCP. Note, inter-jurisdictional coordination will be needed if HCP live in a different local health jurisdiction than where the healthcare facility is located.

Close contact for healthcare exposures is defined as follows: a) being within approximately 6 feet (2 meters), of a person with COVID-19 for a prolonged period of time (such as caring for or visiting the patient; or sitting within 6 feet of the patient in a healthcare waiting area or room); or b) having unprotected direct contact with infectious secretions or excretions of the patient (e.g., being coughed on, touching used tissues with a bare hand).

Data are limited for definitions of close contact. Factors for consideration include the duration of exposure (e.g., longer exposure time likely increases exposure risk), clinical symptoms of the patient (e.g., coughing likely increases exposure risk) and whether the patient was wearing a facemask (which can efficiently block respiratory secretions from contaminating others and the environment), PPE used by personnel, and whether aerosol-generating procedures were performed.

Data are insufficient to precisely define the duration of time that constitutes a prolonged exposure. However, until more is known about transmission risks, it is reasonable to consider an exposure greater than a few minutes as a prolonged exposure. Brief interactions are less likely to result in transmission; however, clinical symptoms of the patient and type of interaction (e.g., did the patient cough directly into the face of the HCP) remain important. Recommendations will be updated as more information becomes available.

Risk stratification can be made in consultation with public health authorities. Examples of brief interactions include: briefly entering the patient room without having direct contact with the patient or their secretions/excretions, brief conversation at a triage desk with a patient who was not wearing a facemask.

Healthcare Personnel: For the purposes of this document HCP refers to all paid and unpaid persons serving in healthcare settings who have the potential for direct or indirect exposure to patients or infectious materials, including body substances; contaminated medical supplies, devices, and equipment; contaminated environmental surfaces; or contaminated air. For this document, HCP does not include clinical laboratory personnel.

5.3 WORK RESTRICTIONS

If you are sick do not come to work.

If you have and exposure or have been in contact with a suspected COVID-19 patient alert your supervisor and contact the on-duty EMS Captain.

The table in the appendix will guide decision making based on type of exposure and level of risk.

5.4 EMPLOYEE TESTING

If Fire or EMS Personnel or family members exhibit any of the following, they may qualify for testing for COVID-19:

- 1) Temperature of 100.4°F(38°C) or higher.
- 2) Cough
- 3) Shortness of Breath
- 4) Other flu-like or respiratory symptoms concurrent with COVID-19

If any of the above symptoms are present:

- 1) Contact Care Medical Group during the hours of 08:00-17:00, seven days a week
 - a. 360-734-4300
- 2) If you are not a member of BFD contact the service that your agency has designated, or Whatcom County Health Department
- 3) Identify yourself as a member of Whatcom County Fire and EMS or as a family member or partner of EMS provider.
- 4) Identify symptoms.
- 5) Care Medical will then triage the need for testing.
- 6) If testing is warranted Care Medical or your agencies designee, will perform testing and process results through Northwest Laboratories or appropriate service.
- 7) Individual being tested will be contacted by testing ordering agency, with result of test.
- 8) Result of test will guide work restrictions and further actions as dictated by your agencies ECP or BFD ECP, , or Whatcom County Health Department.

APPENDIX

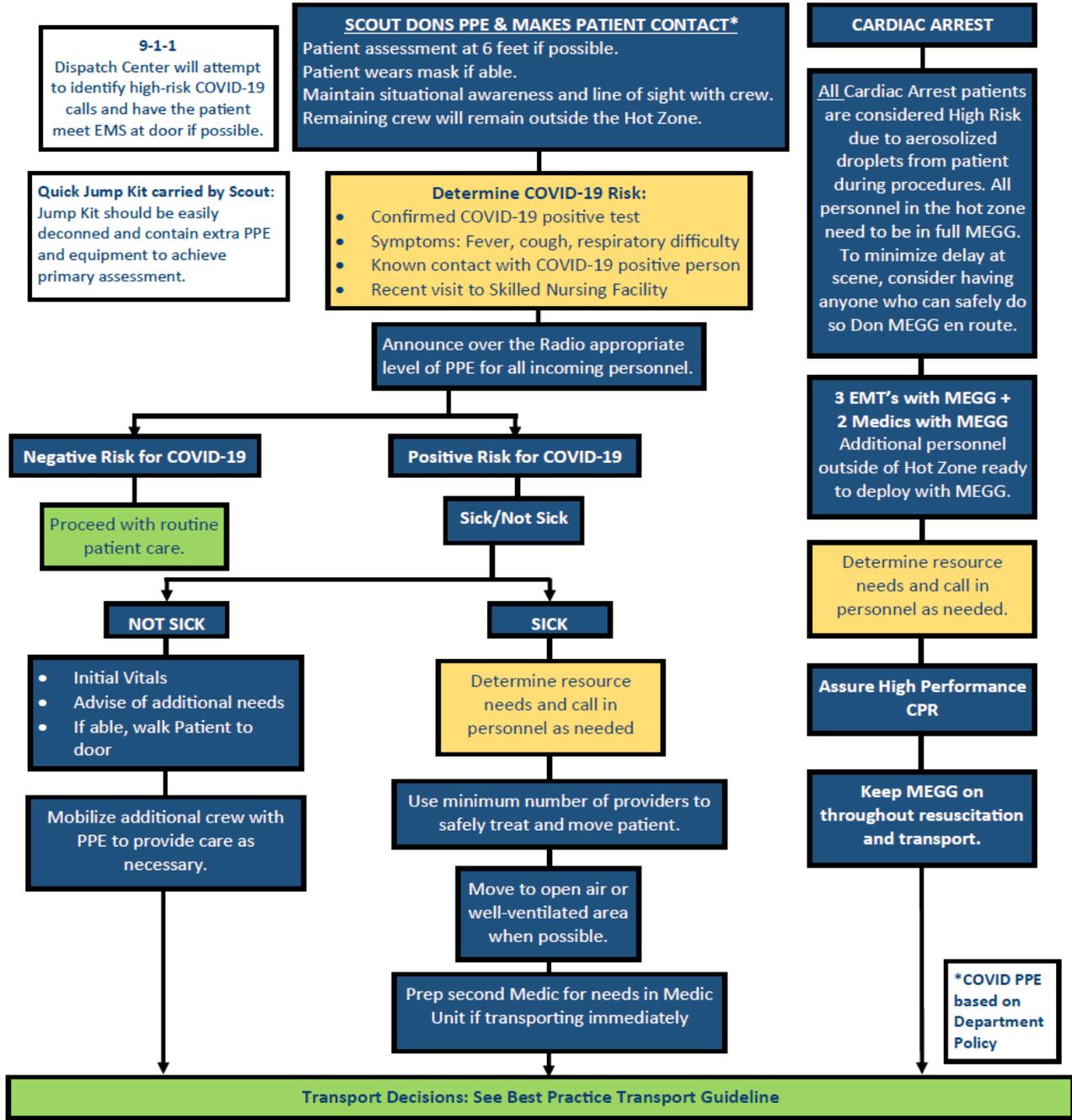


COVID-19 Best Practice Scout Model Guideline

Adopted - 3/25/2020
Revised - 3/26/2020

The scout strategy is designed to reduce the risk of COVID - 19 exposure, preserve PPE, and continue to deliver the highest –standard of patient care.

NO NON-ESSENTIAL PERSONNEL IN THE HOT ZONE.
Consider: BC's, MSO, Chaplain, PD. Exit civilians and public outside of hot zone with a mask for interview.





Whatcom EMS COVID-19 Response Checklist

All EMS Responses - Medium Precautions - Level II

1. PPE – minimum for all providers:

- Gloves, Eye Protection, and Approved Mask on all EMS calls, including MVCs.
- Post response, if patient determined to be effectively no risk for COVID-19
- Mask may be stored in open bag for later use

2. Door Triage/room scan/6 ft of separation:

- Does anyone have fever, cough, respiratory distress? YES- **Level III PPE**
- Dispatch positive screen for PPE? YES-follow instructions 3 and 4 below:

3. Treatment Precautions:

- If safe/feasible, consider having the patient brought to the entry point of the building.
- Minimize providers in the building required for patient care.
- Surgical mask for the patient, nasal cannula can be used under a surgical mask.
- A surgical mask can be placed over a non-rebreather mask.

4. Transport Precautions:

- Driver will remove eye protection/gloves. Minimize providers in the back of unit.
- CDC guidance for ventilation during transport, see "Transporting Instructions."

Assisted care, adult family home, nursing home, clinic, jail, other high-risk facility = **Level III PPE**

High Precautions - Level III

- Does anyone have a fever, or cough, or respiratory distress?
- Is the Patient or Facility suspected to have COVID-19?
- Had previous contact with a COVID-19 patient? ↓
- Is patient from a high-risk facility (Assisted Care, AFH, Nursing home, clinic, jail)?
- May require aerosol-generating procedures?

If Yes to any question = High Precaution **Level III PPE** If No to all questions = Level II PPE

- PPE- gloves, approved mask, eye protection, and gown. Surgical mask on patient.
- Follow all Instructions in Level II
- Contact your department's MSO/Designee for support as needed.
- Contact destination hospital and advise you have an isolation patient.

Precautions for Aerosol Generating Procedures

If patient condition REQUIRES use of invasive airway interventions:

- Level III PPE required during all aerosol generating procedures:
 - BVM, Suctioning, CPAP, iGel, Intubation, Nebulized meds, NRB (if no surgical mask).
 - Nebulized meds used as a last resort-consider other appropriate treatments first.
- BVMs should be equipped with HEPA filters.
- Use Supraglottic airway (SGA) instead of intubation for suspected/known COVID-19 patients.
 - Intubation allowed if SGA will not oxygenate and ventilate.
- DO NOT USE VENTILATORS
- Maximize area ventilation during these procedures-open doors, use exhaust fans.
- Contact Medical Control as needed for guidance.

Transporting Instructions

NOTE: Per CDC, Hospitals not accepting any visitors. Only parents/guardians, POA, special needs patients. There may be exceptions for end of life situations.

- Isolate the ambulance driver from the patient compartment.
- During transport, vehicle ventilation in both compartments should be on non-recirculated mode to maximize air changes that reduce potentially infectious particles in the vehicle. If the vehicle has a rear exhaust fan, use it to draw air away from the cab, toward the patient-care area, and out the back end of the vehicle.
- Open the outside air vents in the driver area and turn on the ventilation fans to the highest setting.

Decontamination Checklist

Daily - Deep cleaning of stations and apparatus will be conducted at the start of every shift.

ALL PRIMARY DECON TO BE DONE BEFORE ENTERING STATION. DO NOT CONTAMINATE STATION.

PPE **Gowns = single use** **Approved Mask = follow department guidance**

Eye Protection = decontaminate and reuse.

Level II – Properly dispose of PPE. Wash hands. Deep clean apparatus.

Level III - Transport units will perform decon at hospital:

Properly dispose of PPE. Wash hands. Deep clean apparatus. Disinfect eye protection then wash with soap/water. Launder uniforms as appropriate per agency infection control guidelines

If any aerosol generating procedures were performed on a COVID-19 SUSPICIOUS PATIENT (symptoms or possible contact with COVID pt) or any time providers feel that higher level decon is warranted:

1. After patient transfer, properly dispose of PPE and wash hands.
2. Deep clean apparatus wearing PPE (see guidelines below). Decon boots with approved decon spray
5. Return to station. Launder uniforms wearing PPE.
6. Shower and don fresh uniforms.

Note: Crew members involved in aerosol generating procedures who do not transport: See decon guidance on page 3

Cleaning EMS Transport Unit after Transporting a Patient with Suspected/Confirmed COVID-19

1. Allow for maximum ventilation in patient compartment by keeping all doors open while delivering patient.
2. PPE for apparatus decon: Eye protection, surgical mask and gloves at a minimum. Routine cleaning and disinfection procedures (e.g. using cleaners and water to pre-clean surfaces prior to applying disinfectant) are appropriate for SARS-CoV-2 (COVID-19). Pre-cleaning removes gross contaminants prior to disinfection.
3. Follow directions manufacturer of disinfectant for thorough disinfection.
4. Clean and disinfect all surfaces that patient may have contacted and all surfaces that may have been contaminated by aerosol generation.
5. Clean and disinfect all reusable patient-care equipment before use on another patient.

PPE Precautions – Levels I, II, III



Level I / Standard



GOGGLES

Level II / Medium

- Gloves
- Approved Mask
- Eye Protection



Level III / High

- Gloves
- Approved Mask
- Eye Protection
- Gown

Donning PPE Sequence: **MEGG**

1. **M**ask
2. **E**yes
3. **G**own
4. **G**loves

To Doff PPE, just reverse the donning sequence: **GGEM**

1. **G**loves
2. **G**own- Wash Hands
3. **E**yes
4. **M**ask- Wash Hands

Decon guidance for non-transport crews when aerosol generating procedures were performed on COVID-19 SUSPICIOUS PATIENT

AT SCENE:

- 1) Doff and bag all PPE.
- 2) Decon boots.
- 3) Return to station.
- 4) Launder contaminated uniforms (per department policy)
- 5) Shower and don fresh uniform.

If unable to decon at scene:

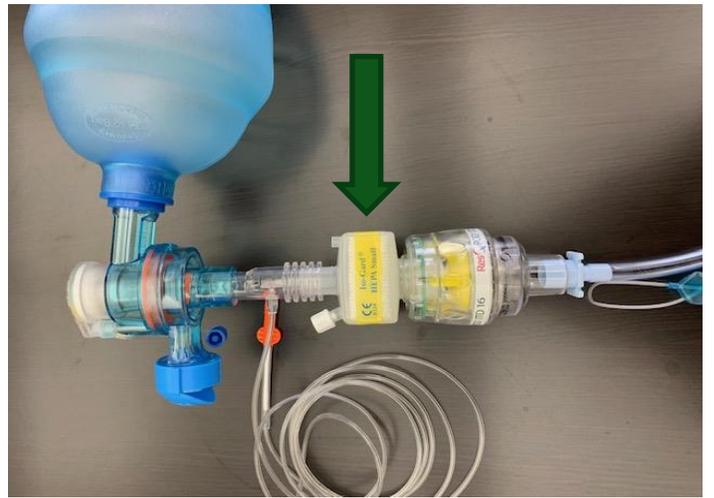
Do steps 1-4 on ramp-NOT INSIDE THE BAY

Decon inside of rig wearing PPE per instructions on page 2.

ET INTUBATION PLACEMENT



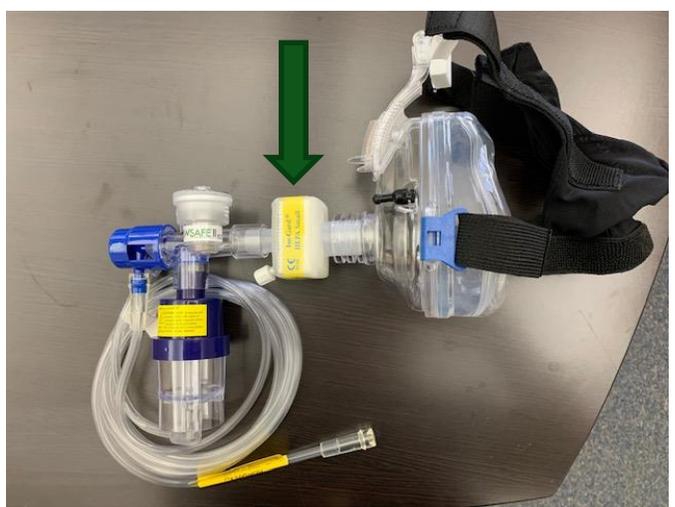
POD and ETCO2 PLACEMENT



BVM VENTILATION PLACEMENT



CPAP PLACEMENT



Epidemiologic risk factors	Exposure category	Recommended Monitoring for COVID-19 (until 14 days after last potential exposure)	Work Restrictions for Asymptomatic HCP
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Prolonged close contact with a COVID-19 patient who was wearing a facemask (i.e., source control)

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	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

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



LEAVE AT HOME INSTRUCTIONS

Respiratory Infection/Suspected or Confirmed COVID-19

These instructions are for individuals with an acute respiratory infection that are confirmed or suspected to be COVID-19, and do not require hospitalization or emergent care.

- 1) Separate yourself from other people and animals in your home and maintain a 6 foot “social” isolation zone.
- 2) Wear a facemask when you are around other people or at a health care providers office.
- 3) Prohibit visitors who do not need to be in your home.
- 4) Do not share personal household items (i.e., toothbrush, drinking cups, towels, bedding, etc.).
- 5) Cover your coughs and sneezes with tissue, throw away soiled tissues in a lined trash can.
- 6) Clean your hands often by washing for 20 seconds with soap and water or use a hand sanitizer that is at least 60% alcohol concentration.
- 7) Monitor your symptoms, take your temperature at least twice a day, and seek prompt medical attention if your symptoms worsen, these include:
 - a. Worsening cough or shortness of breath
 - b. Persistent fever over 100.4°F (38°C)
- 8) If symptoms worsen and you need re-evaluation by a medical professional call your personal physician or clinic, prior to going into the healthcare facility. Also contact them for advice on testing for possible COVID-19 or other guidance.
- 9) If symptoms worsen to the point of needing emergency care call 911.
- 10) In any case remain in self-quarantine for 14 days from the point of known or suspected exposure, or until you do not have a fever for 72 hours or more.

Return to Work Guidance for Healthcare Workers (HCWs) and First Responders (FRs) Who Have Confirmed COVID-19 Infection or Are Asymptomatic with High or Medium Risk Exposures* to a Known Case of COVID-19

RECOMMENDATIONS

Healthcare Workers and First Responders with Confirmed COVID-19

- HCWs and FRs should not return to work until:
 - At least 3 days (72 hours) have passed since recovery defined as 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
- Healthcare workers and first responders can return to work provided they:
 - Adhere to respiratory hygiene, hand hygiene, and cough etiquette
 - Wear a facemask at all times while in the healthcare facility, if there is a sufficient supply of facemasks, until all symptoms are completely resolved or until 14 days after illness onset, whichever is longer.
- Employers should consider reassigning HCWs who work with severely immunocompromised patients, such as bone marrow transplant patients, to work in other areas.
- Some HCWs and FRs may experience prolonged cough as a result of respiratory viral infection, which may continue after isolation has ended. Such persons can be advised to wear a surgical mask or equivalent until their cough resolves or their health returns to baseline status.

Alternatively, **HCWs with confirmed COVID-19 infection can have isolation discontinued and return to work based on the following:**

- Resolution of fever, without use of antipyretic medication
- Improvement in illness signs and symptoms
- Negative results of a molecular assay for COVID-19 from at least two consecutive NP swab specimens collected ≥ 24 hours apart.

Asymptomatic HCWs and FRs with High or Medium Risk Exposures* to a known case of COVID-19

- HCWs and FRs should actively monitor for symptoms consistent with COVID-19 infection but can return to work provided they:
 - Adhere to cough etiquette and hand hygiene
 - Wear a facemask at all times while in the healthcare facility, if there is a sufficient supply of facemasks, until 14-days after the date of exposure.
- If symptoms develop during the monitoring period:
 - If HCWs and FRs develop fever (measured temperature > 100.4° or subjective fever) or respiratory symptoms consistent with COVID-19, they must cease patient care activities, immediately self-isolate (separate themselves from others), don a facemask (if not already wearing), and notify their supervisor or occupational health services promptly so they can coordinate consultation and referral to a healthcare provider for further evaluation.
 - Testing for COVID-19 should be performed, if available. (If testing not available, follow guidance above for infected HCWs.)
 - If positive, refer to guidance above for infected HCWs.
 - If negative, they can return to work under the following conditions:
 - Symptoms have resolved.
 - It has been at least 24 hours since the fever has gone without use of fever-reducing medications (for persons who develop fever).
 - They should wear a facemask at all times while in the healthcare facility, if there is a sufficient supply of facemasks, until 14-days after the date of exposure. (If new symptoms arise during the 14-day monitoring period retesting is indicated as above.)

***For more information** on evaluation of HCWs diagnosed with or exposed to COVID-19 please see the following guidance from 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 \(COVID-19\)](#)

To request this document in another format, call 1-800-525-0127. Deaf or hard of hearing customers, please call 711 ([Washington Relay](#)) or email civil.rights@doh.wa.gov.

Skilled Nursing Facility and Adult Family Care Home Guidance When Requesting Emergency Medical Services Response



Marvin Wayne, MD, WCEMS MPD

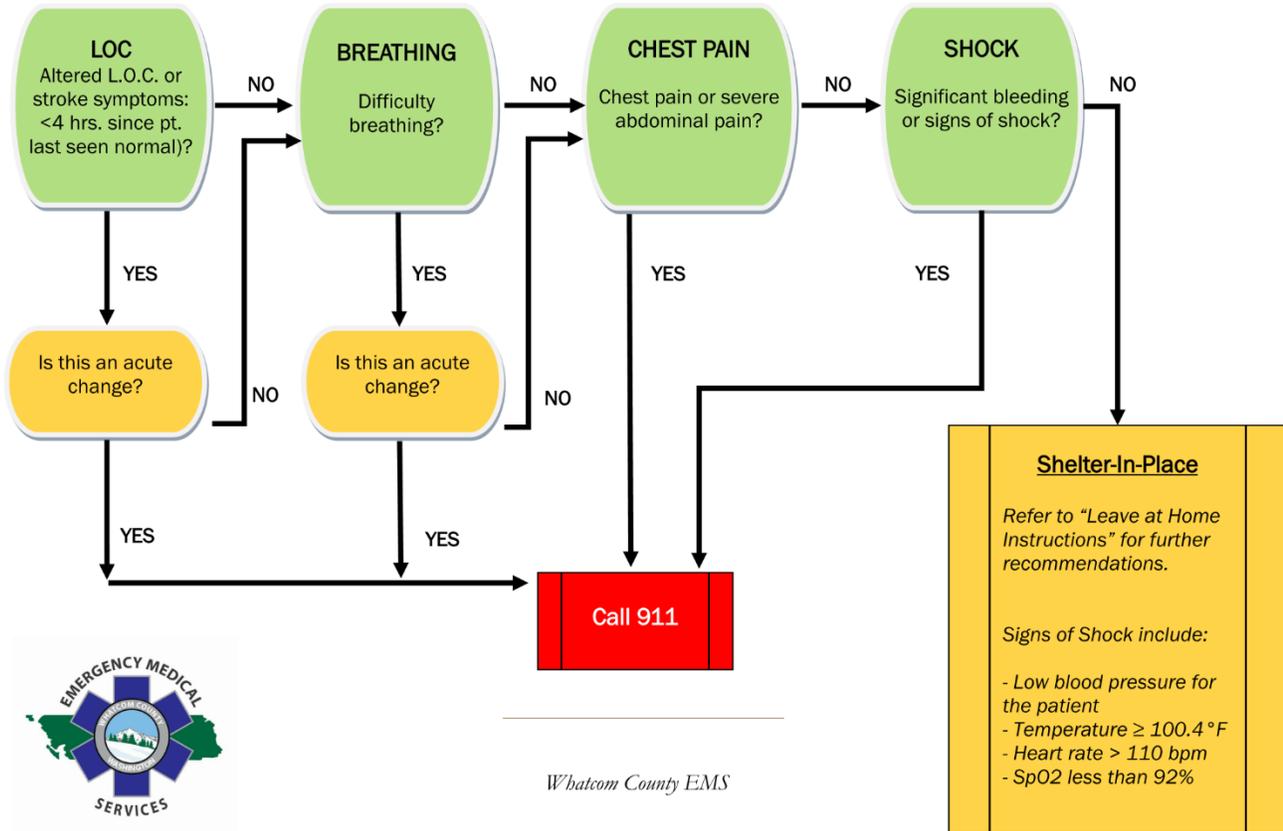
As the COVID19 continues to stress hospital and Emergency Medical Systems, Whatcom County Emergency Medical Services (WCEMS) is issuing guidance to short- and long-term care facilities about the EMS response to your facility.

1. Emergency Medical Services (911) will always respond to your facility if there is an emergency. When a provider calls 911, they will be asked a series of questions to determine if this is a potential flu/fever call.
2. When Paramedics and Emergency Medical Technician arrive at the patient bedside, they will provide an assessment to determine if there is an emergent need for the patient to be transported to the Emergency Department. This determination will be made by a discussion between the hospital Medical Control Physician and the Paramedic/Emergency Medical Technician.
3. Generally, our assessment protocol includes parameters for EMS to determine that the patient may have a flu-like illness, without an immediate life-threatening condition. In these circumstances off-site physician orders and in-house nursing protocols may be overridden by the Emergency Department Medical Control Physician or the Whatcom County Medical Program Director to determine that transport is not indicated.

WCEMS and the Emergency Department are working hard to limit COVID19 exposures for everyone. Skilled Nursing Facilities and other healthcare short/team facilities will need to consider how to take care of respiratory (flu-like) patients in those facilities. WCEMS has provided an algorithm that guides Skilled Nursing Facilities and other short-long term Care Facilities to “Make the Right Call” when considered the need for 911/EMS interventions.

Make the Right Call

911 Activation Guidelines (COVID-19 Specific)



Whatcom County EMS

Whatcom Food Bank Resources - 3/21 to 3/29

Curb-side services available During COVID-19 Emergency Response Period



MONDAYS:

Blaine Food Bank

500 'C' St.
9:00 AM-12:00 PM
360-332-6350

Ferndale Food Bank

1671 Main St.
9:00-11:00 AM
360-384-1506

Lynden Project Hope Food Bank

205 S BC Ave. #105, Lynden
9:30 AM-12:00 PM,
360-354-4673

TUESDAYS:

Bellingham Food Bank

Tues 3/24, 1:00-4:00pm
Shuksan Middle: 2717
Alderwood

Foothills Food Bank

EWRRC: 8251 Kendall Rd, Maple
Falls
9:00-11:30 AM

Lynden Project Hope Food Bank

205 S BC Ave. #105, Lynden
3:00-6:00 PM
360-354-4673

Salvation Army

2912 Northwest Ave
10:00 AM-1:00 PM
360-733-1410

WEDNESDAYS

Bellingham Food Bank

Wed 3/25, 3:00-6:00 PM
Christ The King Church
4173 Meridian

Ferndale Food Bank

1671 Main St.
9:00-11:00 AM
360-384-1506

Blaine Food Bank

500 'C' St.
5:00-7:00 PM
360-332-6350

Salvation Army

2912 Northwest Ave
10:00 AM-1:00 PM
360-733-1410

THURSDAYS:

Bellingham Food Bank

Thurs 3/24, 1:00-4:00 PM
Waypoint Park: 1100
Granary Ave.

Salvation Army

2912 Northwest Ave
10:00 AM-1:00 PM
360-733-1410

Southside Food Bank

(Hillcrest Chapel)
1400 Larrabee Ave.
1st and 3rd Thurs of the
month
10:00-11:30 AM
360-733-8400

FRIDAYS:

Blaine Food Bank

500 'C' St.
9:00 AM-12:00 PM
360-332-6350

Lummi Food Bank

For low-income reservation
residents and tribal members
2830 Kwina Rd.
12:30-3:30 PM.
Not open first Friday of the month
360-380-6962

Lynden Project Hope Food Bank

205 S BC Ave. #105, Lynden
9:30 AM-12:00 PM,
360-354-4673

Nooksack Tribal Food Bank

2515 Sulwhanon Dr. Everson
1st Fri of the month 12:00-3:00 PM
If 1st Fri is the 1st of the month,
open 2nd Fri
360-592-0135

SATURDAYS:

Ferndale Food Bank

1671 Main St.
9:00-11:00 AM
360-384-1506

Please help us keep this resource up-to-date, e-mail any changes to:

communityresources@oppco.org

Personal MSA Advantage 200 Morning Check

- Hold mask to face with both cartridges sealed with palm of your hand.
- Breathe in to make sure air does not enter the mask. →
- It is not necessary to put headband on but entire mask should be visually inspected for any cracks and headbands adjusted for easy donning



Possible causes for mask leaks

- Cartridge not aligned properly →
 - Small tab must be aligned with small slot on cartridge when installing.
 - One or more tabs not pushed into cartridge before turning to lock. →
- Exhalation valve missing or obstructed.
- Cracks in plastic.



More detailed instructions can be viewed in the MSA Advantage Manual here:

<http://s7d9.scene7.com/is/content/minesafetyappliances/Advantage%20200%20LS%20Instruction%20Manual%20-%20USEN>

OR by searching “msa advantage 200 manual” on Google.com and following links on manufacturer website.

CITATIONS and REFERENCES

- 1) CDC Interim Guidance for EMS Systems for COVID:

<https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-for-ems.html>

- 2) Department of Health (Whatcom County):

<http://www.co.whatcom.wa.us/360/Health-Department>

- 3) County Update on COVID-19:

<http://www.co.whatcom.wa.us/CivicAlerts.aspx?AID=1617>

- 4) MSA Advantage 200LS Half Mask Respirator:

<https://www.bing.com/videos/search?q=msa+advantage+200+ls+training&&view=detail&mid=1A0B0E8D2EE90A6DD31C1A0B0E8D2EE90A6DD31C&&FORM=VRDGAR&ru=%2Fvideos%2Fsearch%3Fq%3Dmsa%2Badvantage%2B200%2Bls%2Btraining%26FORM%3DHDRSC3>

NOTE: The above training video includes multiple versions of the MSA filter. The filters we will be using are the P100 cartridge style, no adaptor is needed.

- 5) CDC HCP Guidance:

<https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-risk-assesment-hcp.html>

- 6) Bellingham Fire Department Exposure Control Plan (copy at each station)

- 7) <https://coronavirus.wa.gov/>

- 8) www.whatcomcovid.com

- 9) https://www.nejm.org/doi/full/10.1056/NEJMp2005689?query=featured_home

- 10) COVID-19 Request for Leave Form, COB

<https://staff.cob.org/groups/disaster/Shared%20Documents1/COVID19-Leave-Self-Attestation-Form.pdf>

(NOTE: TO ACCESS HYPERLINKS PRESS Ctrl + Left Click Mouse)

HEPA Cleaning and Care

COVID-19 aerosols are generated as part of a sneeze or cough with a bimodal size distribution of 72.0 μm and 386 μm .¹ As the droplet travels in air, its size is reduced and it becomes more difficult for the particle to carry the virus, possibly due to shielding by organic materials.² Zhu, N. et al. recently reported in the New England Journal of Medicine that the COVID-19 particles ranged in size from 60 to 140 nm.³ This is in the range of past studies which demonstrated Corona Viruses ranging in size from 80-90 nm.⁴ Does this mean that the COVID-19 particles will penetrate a NIOSH-approved N95? NIOSH requires that N95 respirators be capable of removing at least 95 percent of 0.3-micron particles. Rengasamy et al evaluated eight models of respirators meeting NIOSH N95 approval (CE-marked P2) and NIOSH P100 (CE-marked P3) approval for their capability against nanoparticles produced from both a polydisperse NaCl challenge (238 nm) and a monodisperse silver particle challenge (4-30 nm).⁵ The N95 and P2 products allowed less than 1 percent of particles through while the P100 and P3 products allowed less than 0.03 percent through.⁵

Therefore, the N95 and P100 respirators approved by NIOSH and CE-marked P2 and P3 filtering face piece respirators are suitable protection devices for the COVID-19 response.

¹Zhuyang, H., Wenguo, W., and Huang, Q.Y. Particle Size Distribution of Droplets Exhaled by Sneeze. (2013) JOURNAL OF ROYAL SOCIETY INTERFACE, 10(88): 2013-0560.

²Zuo, Z. et al. Association of Airborne Virus Infectivity and Survivability with its Carrier Particle Size. (2013) AEROSOL SCIENCE AND TECHNOLOGY, 47: 373-382.

³Zhu, N. A Novel Corona Virus from Patients with Pneumonia in China. (2019) NEW ENGLAND J OF MED, 382 (8): 727-733.

⁴Gui, M. et al. Electron microscopy studies of the coronavirus ribonucleoprotein complex. (2017) PROTEIN CELL, 8(3): 219-224.

⁵Rengasamy, S., Elmer, B.C., and Shaffer, R.E. Comparison of Nanoparticle Filtration Performance of NIOSH-approved and CE-Marked Particulate Filtering Facepiece Respirators. THE ANNALS OF OCCUPATIONAL HYGIENE, Volume 53, Issue 2, March 2009, Pages 117–128.

1) Texas Center for Infectious Diseases (TCID) published a research article about re-using P100 filters for half-mask air purifying respirators (APRs). Personnel change their P100 filters annually when completing annual refresher training and fit test. TCID use of elastomeric APRs is highlighted in the Joint Commission's "Implementing Hospital Respiratory Protection Programs: Strategies from the Field," Page 50-52. (see attached PDF and JPG below)

(2) Kate Durand confirmed the CDC-NIOSH recommendation: "Service Time Recommendations for P-Series Particulate Respirators" (Issue Date: May 2, 1997) "Use and reuse of the P-series filters would be subject only to considerations of hygiene, damage, and increased breathing resistance." Page last reviewed: June 4, 2004 (archived document) This NIOSH Guide to the Selection and Use of Particulate Respirators Certified under 42 CFR part 84 (NIOSH No. 96-101) published in January 1996: "P-series filters should be used and reused subject only to considerations of hygiene, damage, and increased breathing resistance if oil aerosols are not present. "