



Corona Virus Disease (COVID-19)

EMS PLAYBOOK

The COVID-19 pandemic is an emerging, rapidly evolving situation. EMS practices update frequently as science provides new insights, strategies, and technology or governmental/educational leaders provide new resources or temporarily modify laws, rules, and guidelines. Because of this, documents can become outdated quickly and newer messaging may be difficult to follow and assimilate into current practice. This playbook synthesizes important EMS-related content, curates it by topic and provides links to credible resources. Check the System website often for updates.



Corona Virus Disease (COVID-19) EMS PLAYBOOK Table of Contents



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History and timeline of the pandemic in Illinois

On December 31, 2019 China first reported a cluster of pneumonia cases in Wuhan Province. By January 7, Chinese health authorities confirmed this was a novel coronavirus. We saw horrific stories on the news but never imagined this would happen here. We were wrong.

The first case in Illinois was diagnosed on January 24, 2020 and admitted to one of our neighboring hospitals. Cases #3 and #4 were diagnosed and admitted to NCH on February 29th and March 2nd. It suddenly became very real for us. An aggressive screening process was implemented and infection prevention protocols were tightened like never seen before.

Schools were closed on March 13th and bars/restaurants were closed two days later. A "Stay at Home Order" was issued on March 20th, for 17 days and then extended until April 30th. On April 9, the governor issued a disaster proclamation. The stay at home order was extended again until May 30th and schools were closed for the remainder of this academic year. Limited opening of select public spaces and business was allowed on May 1st along with a masking and social distancing policy (with exceptions).

Many predictive models were used to plan our response. None were exactly right. The peak in Illinois was predicted to be in mid-April, but aggressive social distancing and use of PPE flattened and elongated the curve. New models anticipate the peak in early to mid-May, but that may change with the relaxing or disregard of stay at home orders, quarantine fatigue, and the draw of public gathering due to warmer weather. There was a predicted shortage of hospital and ICU beds, ventilators, and healthcare personnel. Thankfully, this has not happened here so far based on excellent planning and responses by all.

This crisis has taken a tremendous toll in so many ways: financial, psychological, physical and more. There is no way to measure the full impact, but one thing is clear, **we have all come together to fight this crisis and we will get through this!** Life will eventually return to a NEW normal, but that time has not yet arrived, so please continue to follow all of these guidelines. Our **heartfelt thanks to each of you.** You are making a difference!

Transmission (<https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/how-covid-spreads.html>)

The onset and duration of viral shedding and the period of infectiousness are not fully known. Studies have documented SARS-CoV-2 transmission for **up to 2 days before onset of S&S**. CoV-2 RNA may be detected in body secretions for weeks after illness onset. Detection of viral RNA does not necessarily mean that infectious virus is present.

Person-to-person spread: (Virus spreads easily **and sustainably** between people)

- Between people in close contact with one another (within about 6 ft)
- Through respiratory droplets produced when an infected person coughs, sneezes, or talks
- Droplets can land in the mouth or nose of people who are nearby or possibly be inhaled into the lungs

The high replication rate of the virus, especially in the human oral pharynx and upper airway where the ACE2 receptors are located, likely enhances its ability for efficient person to person transfer.

Not easily spread from touching objects or surfaces with virus present and then touching your mouth, or eyes; or via animal to people or people to animal routes.

Body fluids that can transmit disease

Viable, infectious virus has been isolated from respiratory, blood, urine, and stool specimens (raising the possibility of [transmission through the fecal/oral route](#)). It is not yet known whether non-respiratory body fluids from an infected person (vomit, urine, breast milk, or semen) contain viable, infectious virus.

Incubation period

Symptoms can appear 2 to 14 days, (median 5-7 days) after exposure. Studies report that 97.5% of persons who develop S&S will do so within 11.5 days of infection which supports the current 14-day quarantine recommendations.

Modeling: See [Institute for Health Metrics and Evaluation](#): Shows the projected peak of COVID-19 per state with continued effective social distancing. <https://covid19.healthdata.org/projections>

CDC modeling: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/planning-scenarios.html> (5-20-20)

Monitoring: [COVID-19 Data Visualization from the Center for Systems Science and Engineering \(CSSE\) at Johns Hopkins University](#)



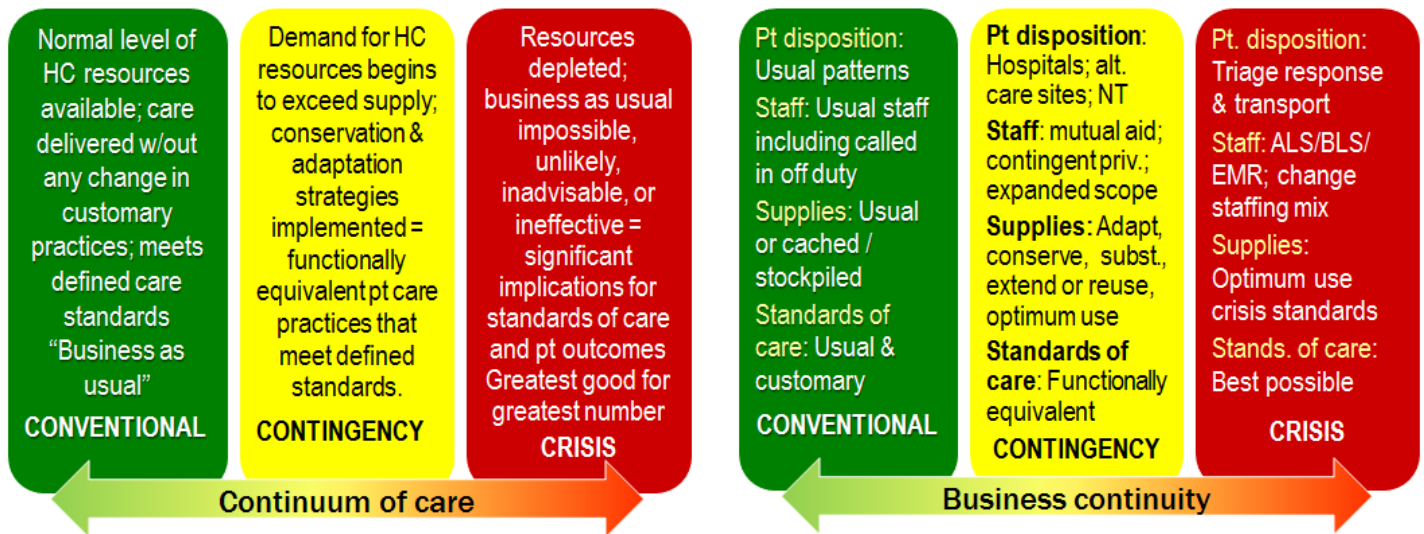
Changes to standards of care should take place along a continuum from conventional to crisis. Advanced planning for alterations in response procedures and in the allocation of resources will be required at the contingency level with the primary goal of avoiding a transition into crisis levels of care.

The level of care that can be delivered may be dynamic and shift rapidly. Standards should be adjusted up or down to match resource availability vs. demand at a given time, consistent with pre-identified indicators and triggers.

Conventional capacity: The spaces, staff, and supplies used are consistent with usual and customary or augmented practices. Usual staff is used based on System requirements and an organization’s normal or augmented workforce plan for special events. Cached and usual or augmented supplies are used resulting in care practices that meet defined standards.

Contingency capacity: The spaces, staff, and supplies used are not consistent with usual and customary daily practices, but maintain or have minimal impact on usual patient care practices. Spaces or practices may be repurposed, used temporarily during a crisis event or on a more sustained basis when the demands of the incident exceed hospital, agency, and/or community resources. Contingency plans may include, but not be limited to changes in staffing, work redeployment, temporary emergency practice privileges, brief deferrals of non-emergency travel, meetings, classes, or services, change in responsibilities, documentation, etc. based on the nature of the Contingency Capacity declaration. This results in functionally equivalent education and/or patient care practices meeting defined standards.

Crisis capacity: Adaptive spaces, staff and supplies are not consistent with usual and customary standards of education and/or care, but provide the best possible sufficiency of operation in the setting of widespread disease outbreak or disaster situations given the circumstances and resources available. It must be communicated and understood by all impacted stakeholders that the System is operating under crisis capacity standards.



“The best ideas come out of the corner of our eye, the edge of consciousness, in a flash. They are the result of misdirection and random collisions, not a grinding corporate onslaught. And yet we waste billions of dollars of time looking for them where they’re not” (Seth Godin).

Corona Virus Disease (COVID-19) EMS PLAYBOOK Risk Factors /S&S/Clinical Progression



<https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html>

<https://www.cdc.gov/coronavirus/2019-ncov/downloads/2019-ncov-factsheet.pdf>

https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-with-medical-conditions.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fneed-extra-precautions%2Fgroups-at-higher-risk.html#asthma

We are learning more about COVID-19 every day. This list is a living document that may be updated at any time, subject to potentially rapid change as the science evolves.

All persons are at risk of contracting COVID-19 illness.

RISK FACTORS for SEVERE ILLNESS from COVID-19 (CDC, 6-25-20)

- Age alone: risk increases with age, older adults at highest risk
- Any age with these comorbid conditions: Chronic kidney disease; COPD; Obesity (BMI of 30 or higher); serious heart conditions, such as heart failure, coronary artery disease, or cardiomyopathies; Sickle cell disease; Type 2 DM
- **Immunocompromised state:** Primary, secondary, or acquired immune-deficiencies due to a condition or immunosuppressive Rx and/or chronic disease assoc. w/ immune dysfunction organ dysfunction or failure or severe inflammatory disease. Ex: Cancer, solid organ transplantation, rheumatological autoimmune, inflammatory, and metabolic bone disorders
- **Children who are medically complex, have neurologic, genetic, metabolic conditions, or who have congenital heart disease at higher risk than other children.**

Might be at an increased risk for severe illness from COVID-19:

- [Asthma \(moderate-to-severe\); Cerebrovascular disease \(affects blood vessels and brain blood supply\)](#)
- [Cystic fibrosis; Hypertension or high blood pressure](#)
- [Immunocompromised state from blood or bone marrow transplant, immune deficiencies, HIV, use of corticosteroids, or use of other immune weakening medicines](#)
- [Neurologic conditions, such as dementia](#)
- [Liver disease; Pulmonary fibrosis \(having damaged or scarred lung tissues\); Smoking](#)
- [Thalassemia \(a type of blood disorder\); Type 1 and gestational diabetes mellitus](#)

Pregnant Hispanic and non-Hispanic black pregnant women appear to be disproportionately affected by SARS-CoV-2 infection during pregnancy. Among reproductive-age women with SARS-CoV-2 infection, pregnancy was associated with hospitalization and increased risk for ICU admission, and receipt of mechanical ventilation, but not with death (CDC, June 26, 2020 / 69(25): 769–775).

Signs and Symptoms COVID-19 or clotting complications

Fever > 100° F (HCP) (May not be present!)	Abnormal vital signs and/or hypoxia by SpO ₂
Cough (new onset or worsening of chronic cough)	Severe headache or new onset altered mental status
Shortness of breath (dyspnea; ↑ WOB))	Muscle pain/body aches, unusual fatigue
Chest pain (positional or pleuritic)	GI S&S: anorexia, abd. cramping or pain; nausea/vomiting
Abnormal breath sounds/sputum production	Diarrhea (≥3 loose/looser than normal stools/24hr period)
Loss of smell or taste (anosmia and ageusia)	Conjunctivitis and/or eye pain; abnormal eye movements
Congestion in the nasal sinuses or lungs; sore throat	Rashes, skin discoloration; unilateral limb swelling/distal pulse deficits

Clinical progression and Complications (Rev. 5-22-20)

Varies from asymptomatic to severe to fatal illness. Severe disease is characterized by widespread inflammatory processes and unusual vascular disorders that lead to bilateral interstitial pneumonia with hypoxia that may progress to an atypical form of ARDS; respiratory and renal failure, liver enzyme elevation, and other signs referred to as a “cytokine storm”, myocarditis, encephalitis and diffuse vasculitis, hypercoagulable state, septic or cardiogenic shock, multiple organ dysfunction syndrome and death.

Two phenotypes of COVID-19 disease

Type L: low elastane, low ventilation to perfusion ratio, low lung weight on CT, and low lung recruitability. Pt has a high proportion of aerated lung tissue. Over time, this may shift to...

Type H disease: marked by high elastane, high right-to-left shunt, high lung weight, and high recruitability.

Clinical progression and Complications cont.

"2nd week crash": In pts who develop severe disease - medium times to dyspnea after onset of S&S (5-8 days), time to ARDS (8 to 12 days), and time to ICU admit (10 to 12 days).

One physician put it this way, "COVID-19 is a serial killer, no doubt. He has no mercy for anyone. And he has **two bullets**: The first **one is for the lung; the second is on the vascular side.**"

The virus may kill cells that line the alveoli which keep them open and allow for gas exchange. At some point, the body cannot regenerate the cells as fast as they die and a stable situation turns deadly. Direct lung toxicity can cause some of these pts to linger on ventilators for weeks and be difficult to wean.

There is mounting evidence of **thromboembolic complications** (macro and micro). Clotting may be associated with microinfarcts in body tissues that could be a key contributor to the inflammatory processes. The virus appears to attack the lining of blood vessels causing widespread platelet clumping and **clot formation** in capillaries and smaller blood vessels, accompanied by inflammatory processes that suffocate previously healthy tissues.

The circulatory compromise in neuro tissue is thought to cause isolated **altered smell and taste disturbances** to brain tissue infarcts. Clotting in larger vessels may result in **deep-vein thrombosis, pulmonary embolism, stroke, and myocardial injury**. Some present with **skin signs** like rashes, hematomas, petechiae, and purpura (bruise-like findings) & COVID-toes.

Thromboelastography (TEG) has proved to be a better test of whole blood clotting than blood markers alone. Treatment for hypercoagulable pts now often includes prophylactic antiplatelet and anticoagulant drugs. (See Appendix D: 10 Golden Considerations for EMS Assessment of COVID-19)

COVID-19 cardiovascular syndrome presents with **cardiomyopathy**, ventricular **arrhythmias** and hemodynamic instability w/o obstructive CAD. Etiology is suspected to be **myocarditis**, microvascular injury, cytokine-mediated injury or stress-mediated cardiomyopathy. Physicians have reported a large increase in **cardiac arrests** from undetermined causes, but the rate of rise appears to be linked to the pandemic. See: <https://www.emsworld.com/article/1224381/spotting-clotting-hypercoagulopathy-covid-19>

Corona Virus Disease (COVID-19) EMS PLAYBOOK Prevention/Employer responsibilities



Infection Control Guidance for Healthcare Professionals about Coronavirus (COVID-19).

<https://www.cdc.gov/coronavirus/2019-nCoV/hcp/infection-control.html>

<https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/firefighter-EMS.html>

PREVENTION CRITICAL

- Careful hand hygiene is essential. Wash your hands frequently for at least 20 seconds with soap and water or use hand sanitizer with at least 60% alcohol if no soap and water is available.
- Adhere to masking and social distancing rules: Limit contact with others to at least 6 ft apart regardless of how you feel.

EMS EMPLOYER RESPONSIBILITIES (CDC)

- Develop and share a COVID-19 health and safety plan to protect firefighter and EMS employees.
- Deliver up-to-date safety messaging on the current status of resources and protocols.
- Use National Incident Management System (NIMS) forms to document protective actions.
- **Guidelines for Fire station transmission reduction:** Reports are showing a considerable number of FFs are testing positive for COVID19 as a result of firefighter to firefighter transmission in the station rather than exposure to pts. Please consider requiring mask use while working in the fire station, consistent cleaning of frequently touched areas, use of single serving food products and eating/exercising in shifts in order to minimize this risk (Matt Perez, IL State Fire Marshal). <https://www.fireapparatusmagazine.com/2020/04/15/guidelines-for-covid-19-fire-station-exposure-reduction>
- **Screen all personnel** at least at the beginning and half way through each shift. **Fever is often NOT present** early in disease **so also check for known S&S of COVID-19 illness.** If S&S present or new occurs, send home with instructions immediately.
See Sample NWC EMSS COVID-19 **Employee Screening tool** Rev. 5-25-20. See Appendix G this document. **No one should be in an employment setting while symptomatic in any way.**
- Employees should not return to work until the [criteria to discontinue home isolation](#) are met per the latest CDC guidelines, in consultation with healthcare providers and local health departments. Sick leave policies should be flexible and non-punitive. See Safety Measures section for guidelines.
- **Fit test personnel for appropriate respirators.** Train EMS personnel on [proper donning, doffing, and maintenance of all PPE including having them demonstrate competency with donning and doffing, with any PPE ensemble that is used to perform job responsibilities.](#) All PPE should be accessible to responders when needed and available.
- Implement a [specific protocol](#) with **dispatch centers** to determine if a caller or patient may have signs or symptoms and risk factors for COVID-19, and [communicate that information to responders.](#)
- Consult with state and local jurisdictions regarding **access to PPE stockpiles** if PPE supplies are limited. Consider establishing strike teams for suspected COVID-19 cases and sending in the fewest number of responders in full PPE as safety allows to assess the situation. Follow [CDC and NIOSH guidance for strategies for optimizing the supply of PPE.](#) See Safety Measures section for guidelines.
- Follow CDC guidance for when firefighters and EMS providers can return to work
 - [following potential exposure to patients with COVID-19](#)
 - [after being diagnosed with confirmed or suspected COVID-19](#) (See Table of Contents for page numbers)
- Designate a person to be responsible for addressing employees COVID-19 concerns (DICO/PEMSC).

Operational steps: EMS Personnel - Minimize Chance for Exposures

Implement protective measure before arrival, throughout duration of possible exposure, and until the ambulance is cleaned and disinfected. Especially protect those at increased risk for adverse outcomes from COVID-19 (elderly, comorbid conditions), including HCP who are in a recognized risk category.

- PPE must be selected appropriately and **donned correctly** before approaching within 6 ft of a pt.
- PPE must remain in place and be worn correctly for the duration of work in potentially contaminated areas. PPE should not be adjusted (retying gown, adjusting respirator/facemask) during patient care.
- PPE must be **removed (doffed) slowly and deliberately** in a sequence that prevents self and environmental contamination. See DONNING and DOFFING Guidelines (See Table of Contents).

FORMS OF PPE (General information)

All EMS personnel must be educated to ensure correct use and prevent misuse or overuse of PPE.

Facemask: Facemasks (surgical or procedure masks) shall be used according to product labeling and local, state, and federal requirements. If worn properly, a facemask helps block respiratory secretions produced by the wearer from contaminating other persons and surfaces (source control). FDA-cleared **surgical masks** are also designed to protect against splashes and sprays and are prioritized for use when such exposures are anticipated. Facemasks not regulated by the FDA, (some procedure masks) are typically used for isolation purposes and may not provide protection against splashes and sprays.

Respirators: A respirator is a device that covers at least the nose and mouth, and is used to reduce the wearer's risk of inhaling hazardous airborne particles (dust particles and infectious agents), gases, or vapors. Respirators are certified by the CDC/NIOSH, including those intended for use in healthcare.

N-95 Filtering Facepiece Respirators (FFR) – See Appendix F for various types

Reserved for situations where respiratory protection is most important, e.g., aerosol generating procedures (**AGPs**) on patients with COVID-19 (suspected or confirmed) or provision of care to pts with other infections for which respiratory protection is strongly indicated (TB, measles, varicella).

- **Must be fit tested** to ensure that it fits snugly against the user's face to ensure that there are no gaps between the skin and respirator seal. **WITHOUT FIT TESTING**, an N-95 mask only **functions like a facemask** as a means of **source control** (protects others from you) and **DOES NOT protect the WEARER from inhaling infectious respiratory aerosols**.
- If you use a facemask respirator, you must be clean-shaven because facial hair can cause respirators to leak around the face seal (IDPH). Carefully form the nose piece, appropriately adjust head straps, and perform a seal check per procedure to ensure proper fit each time an FFR is used.

Reusable respirators that offer an equal or higher level of protection as N95 FFRs: elastomeric respirators, powered air-purifying respirators (PAPRs), or self-contained breathing apparatus [SCBA] face pieces

AEROSOL GENERATING PROCEDURES (AGPs) impacting EMS

Likely to generate higher concentrations of infectious respiratory aerosols and may put HCPs at increased risk for exposure to infection.

- Open suctioning of airway secretions
- Cardiopulmonary resuscitation (CPR)
- Endotracheal intubation (advanced airway placement) and extubation
- Noninvasive positive pressure ventilation (NIPPV) (BiPAP, CPAP)
- Manual ventilation with a BVM

Limited data on whether these may generate an increased exposure risk:

- Nebulizer administration
- High-flow oxygen delivery
- Tracheostomy suctioning

CDC strategies to optimize the supply of face masks

<https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/face-masks.html>

IDPH recommendations: crisis/alternative strategies that may need to be activated when N95 masks or supplies are running low:

- Prioritize use of masks by activity type
- Use N95 masks that are adequate for use after manufacturer designated shelf life
- Use alternative respirators approved by NIOSH
- Exclude healthcare workers at high risk for severe illness
- Designate specific healthcare workers for care of patients with COVID-19
- Use masks not evaluated or approved by NIOSH as a last resort

Corona Virus Disease (COVID-19) EMS PLAYBOOK Forms of PPE cont./Hand hygiene



FDA face mask and respirator enforcement policy during COVID-19 outbreak under **CRISIS** operations:

The FDA revised its [face mask and respirator guidance](#) to provide significant, additional enforcement discretion for PPE that is not subject to COVID-19 emergency use authorization.

The FDA "recognizes that, when alternatives, such as FDA-cleared masks or respirators, are unavailable, individuals, including healthcare professionals, might improvise PPE. It does not intend to object to individuals' distribution and use of improvised PPE when no alternatives, such as FDA-cleared masks or respirators, are available."

FDA's policy provides enforcement relief from compliance under the revised guidance for the use of face masks, with or without a face shield (not including respirators); face shields that are intended for a medical purpose; and surgical masks.

Further, for the duration of the public health emergency, when FDA-cleared or National Institute for Occupational Safety and Health-approved (NIOSH) N95 respirators are not available, FDA does not intend to object to the distribution and use of respirators identified in CDC recommendations. This would include respirators included in CDC crisis management recommendations, such as those approved under standards used in other countries.

GLOVES

Wear a single pair of disposable pt examination gloves; change if they become torn or heavily contaminated

EYE PROTECTION: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/eye-protection.html>

Eye protection includes goggles or a disposable face shield that covers the front and sides of the face. Personal eyeglasses and contact lenses are NOT considered adequate eye protection.

FACE SHIELDS

Locally made **face shields:** Link to the Google form to request the face shields.

<https://docs.google.com/forms/d/e/1FAIpQLSdlrZouOwsZuHyL0ErOddYrxJXxJeQ5sLe6eKFLG0BwvHINQQ/viewform?vc=0&c=0&w=1>

GOWNS

See the following link: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/isolation-gowns.html>

If there are shortages of gowns, they should be prioritized for:

- aerosol generating procedures
- care activities where splashes and sprays are anticipated
- high-contact patient care activities that provide opportunities for transfer of pathogens to the hands and clothing of HCP. Examples include:
 - transferring, changing linens, changing briefs or assisting with toileting
 - device care or use, wound care

If NO isolation gowns are available; EMS may use the fluid-repellant Tyvek gowns already required on ambulances or another improvised water and splash resistant covering during ETI and BVM ventilation.

HAND HYGIENE: Perform hand hygiene before and after all patient contact, contact with potentially infectious material, and before putting on and after removing PPE, including gloves. Hand hygiene after removing PPE is particularly important to remove any pathogens that might have been transferred to bare hands during the removal process.

- Perform hand hygiene by washing hands with soap and water for at least 20 seconds paying close attention to your nails and under your nails.
- If hands are visibly soiled, use soap and water before returning to ABHR.
- Use an alcohol-based hand sanitizer (ABHR) that contains at least 60% alcohol if water is unavailable



Corona Virus Disease (COVID-19) EMS PLAYBOOK PPE Donning & Doffing



Using PPE: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/using-ppe.html>

Before caring for patients with COVID-19, healthcare personnel (HCP) must:

- **Receive comprehensive training** on when and what PPE is necessary, how to don (put on) and doff (take off) PPE, limitations of PPE, and proper care, maintenance, and disposal of PPE.
- **Demonstrate competency** in performing appropriate infection control practices and procedures.

See EMS Self-learning module issued April 2, 2020 posted to System website.

This video takes 18 minutes to watch but is the very best full explanation we've found.

Also attached to the System email are several guidance documents from the CDC as a quick reference.

Update to the video: under contingency conditions, N95 masks are only used for AGPs

<https://www.csems.org/cdc-guidance-video-donning-and-doffing-ppe-for-covid-19/>

Donning (putting on the gear):

More than one donning method may be acceptable. Training and practice using your agency's procedure is critical. Below is one example of donning.

1. **Identify and gather the proper PPE to don.** Ensure correct sizing (based on training).
2. **Perform hand hygiene using hand sanitizer.**
3. **Put on isolation gown.** Tie all of the ties on the gown. Assistance may be needed by another HCP.
4. **Put on NIOSH-approved N95 respirator or higher (use a facemask if a respirator is not available).** If the respirator has a nosepiece, it should be fitted to the nose with both hands, not bent or tented. Do not pinch the nosepiece with one hand. Respirator/facemask should be extended under chin. Both your mouth and nose should be protected. Do not wear respirator/facemask under your chin or store in scrubs pocket between patients.*
 - **Respirator:** Respirator straps should be placed on crown of head (top strap) and base of neck (bottom strap). Perform a user seal check each time you put on the respirator.
 - **Facemask:** Mask ties should be secured on crown of head (top tie) and base of neck (bottom tie). If mask has loops, hook them appropriately around your ears.
5. **Put on face shield or goggles.** Face shields provide full face coverage. Goggles also provide excellent protection for eyes, but fogging is common.
6. **Perform hand hygiene before putting on gloves.** Gloves should cover the cuff (wrist) of gown.

Doffing (taking off the gear):

More than one doffing method may be acceptable. Training and practice using your agency's procedure is critical. Below is one example of doffing.

1. **Remove gloves.** Ensure glove removal does not cause additional contamination of hands. Gloves can be removed using more than one technique (e.g., glove-in-glove or bird beak).
2. **Remove gown.** Untie all ties (or unsnap all buttons). Some gown ties can be broken rather than untied. Do so in gentle manner, avoiding a forceful movement. Reach up to the shoulders and carefully pull gown down and away from the body. Rolling the gown down is an acceptable approach. Dispose in trash receptacle.*
3. **Perform hand hygiene.**
4. **Remove face shield or goggles.** Carefully remove face shield or goggles by grabbing the strap and pulling upwards and away from head. Do not touch the front of face shield or goggles.
5. **Remove and discard respirator (or facemask if used instead of respirator).*** Do not touch the front of the respirator or facemask.
 - **Respirator:** Remove the bottom strap by touching only the strap and bring it carefully over the head. Grasp the top strap and bring it carefully over the head, and then pull the respirator away from the face without touching the front of the respirator.
 - **Facemask:** Carefully untie (or unhook from the ears) and pull away from face without touching the front.
6. **Perform hand hygiene after removing the respirator/facemask.**

Corona Virus Disease (COVID-19) EMS PLAYBOOK Source Control / Required EMS PPE



Interim Guidance for Emergency Medical Services (EMS) Systems and 911 Public Answering Points (PSAPs) for COVID-19 in the United States – March 10, 2020

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

UNIVERSAL SOURCE CONTROL MEASURES

Public: The CDC recommends that a minimum of **cloth face coverings** be worn in public spaces, particularly in areas of widespread COVID-19 illness. This recommendation applies to adults and children aged ≥ 2 years and is done in addition to social distancing. Textile (cloth) covers are intended to keep the person wearing one from spreading respiratory secretions to others. They **are not considered PPE by the CDC** and it is uncertain whether they protect the wearer. Masks made from cotton with higher thread counts, natural silk, and chiffon perform well. Guidance on design, use, and maintenance of cloth face coverings is available from the following.

- National Academies Press. (2020). Rapid Expert Consultation on the Effectiveness of Fabric Masks for the COVID-19 Pandemic (April 8, 2020)
- IDPH Guidance on the Use of Masks by the General Public
- <https://www.pulmonologyadvisor.com/home/topics/lung-infection/best-materials-to-use-for-homemade-cloth-masks-during-the-covid-19-pandemic/>

Healthcare facilities: Have implemented **universal masking policies** during the pandemic

Visitors: Must wear a **cloth face covering** (unless exception applies) while in the building

Patients: **Surgical mask** on all patients (unless exception applies in conjunction with O₂ as adapted)

EMS: Wear at least a **surgical mask** when entering a hospital with **any patient** unless AGPs (see p. 7) in place, then wear an N95 mask.

EMS Standard, Contact, Droplet, & Airborne Transmission-Based Precautions

- **Limit EMS responders who initially don PPE and approach within the close proximity contact area (6 ft) to one or two persons** (even in cardiac arrests). Begin all assessments from a distance of 6 feet from the patient if possible until source control is initiated for pts (surgical or procedure mask) and bystanders (cloth mask) and appropriate PPE is in place for EMS responders.
- Use appropriate PPE to protect **hands, mouth, nose, eyes and clothing on all patients** (see below). Avoid touching face (mask exterior). Perform hand hygiene in compliance with CDC guidelines.
- **Conserve PPE using CDC Strategies to Optimize the Supply of PPE and Equipment**
See: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/index.html>
When supplies are stressed, low, or absent implement strategies to substitute, adapt, conserve, re-use, repurpose, and/or re-allocate based on operational needs:
Contingency: Used to help stretch PPE when shortages are anticipated or present.
Crisis: Used in severe shortages to stretch available supplies for the most critical needs.
The System activated optimization **strategies for N-95 masks** on April 2, 2020.
See Update 6-28-20: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/face-masks.html>
 - NO EMS extended or reuse of facemasks, respirators, or gowns at present
 - We will implement those guidelines if local resources become depleted.

Minimum PPE REQUIRED for EMS during Contingency Operations

- **NO aerosol generating procedures (AGPs):** PPE on 2 EMS responders
Nonsterile gloves; procedure (surgical) mask (*N-95 OK if available and restocked by agency*); isolation gown or coveralls (if available); eye protection (goggles or face shield). Expected # per front line ambulance (non-cardiac arrest): 3 surgical masks (2 EMS personnel; 1 pt), 3 gowns, 2 eye protection/face shields; 3 sets of gloves.
- **+ Aerosol generating procedures (AGPs) (add Airborne precautions):**
Nonsterile gloves; **N-95 mask** (unless wearing an alternate respirator); gown or coveralls; eye protection (face shield preferred if N95 is not fluid resistant or place surgical mask over N95). Expected # N95 masks/vehicle: 2)



PSAPS/EMDs and pre-arrival notifications: When COVID-19 is suspected, EMS providers should be notified in advance of a CONTACT ALERT to provide notice that PPE may be needed.

Emergency Medical Dispatch (EMD) centers should question callers and determine the possibility that a call concerns a person who may have S&S and/or risk factors for COVID-19. The query process should never supersede the provision of pre-arrival instructions to the caller when immediate lifesaving interventions (e.g., CPR or the Heimlich maneuver) are indicated. Patients in the US who meet the criteria should be evaluated and transported as a PUI (see above for definition).

Information on a possible PUI should be communicated to EMS clinicians before arrival in order to allow use of appropriate PPE. EMDs should use medical dispatch procedures that are coordinated and approved by the EMS MD and with the local or state public health department.


TRANSPORT CONSIDERATIONS

- EMS should **notify the receiving healthcare facility** that the pt has an exposure history and S&S suggestive of COVID-19 so appropriate infection control precautions may be taken prior to pt arrival.
- **Limit # of HCP in the pt compartment** during transport to essential personnel to minimize exposure.
- When possible, use vehicles that have **isolated driver** and patient compartments that can provide separate ventilation to each area. Close the door/window between these compartments before bringing the patient on board.
- 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.
- Some vehicles are equipped with a supplemental recirculating ventilation unit that passes air through HEPA filters before returning it to the vehicle. Such a unit can be used to increase the number of air changes per hour (ACH) (<https://www.cdc.gov/niosh/hhe/reports/pdfs/1995-0031-2601.pdf>).
- If a vehicle without an isolated driver compartment and ventilation must be used, open the outside air vents in the driver area and turn on the rear exhaust fans to the highest setting. This will create a negative pressure gradient in the patient area.

Ambulance Drivers: Wear appropriate PPE for providing direct patient care. After completing patient care and BEFORE entering an **isolated driver's compartment**, driver should remove and appropriately dispose of contaminated PPE (except respirator or facemask) and perform hand hygiene to avoid soiling the compartment.

Patients/family members: Keep patient separated from others as much as possible. No family member may accompany patient in the ambulance unless they are the parent/guardian of a minor.

UPON ARRIVAL at a HEALTHCARE FACILITY

- Follow pandemic procedures for a transfer of a patient into the receiving healthcare facility (e.g., wheel the patient directly into an examination room). Just as in Ebola policies, **hospitals may ask EMS to hold the patient in the ambulance for a few minutes while they are opening an exam room** for a patient with suspected COVID-19. Under present contingency operations, none of these patients should be "admitted to the wall".
- **Remove gloves and gowns before leaving the hospital receiving space** per doffing guidelines and perform hand hygiene. **Do not cross contaminate the ED** by walking around in a contaminated gown or gloves. **DO NOT immediately remove or discard face masks/eye protection if you are cleaning and disinfecting the ambulance.** Remove after cleaning is done.
- Follow standard policy for the containment and disposal of used PPE and regulated medical waste. **This is NOT acceptable PPE disposal practice!** 
- Follow CDC guidance if you are reusing, reprocessing, and storing any PPE.

RESTOCKING PPE

- Hospitals will restock EMS from their stores (if available) for appropriate use.
- Restock from internal inventories if EMS use exceeds guidelines and/or you have surplus stock
- Inform EMS Administrative Director [Connie Mattera (cmattera@nch.org)] if you need central restocking from the Resource Hospital due to lack of PPE supplies available at a receiving hospital.

Corona Virus Disease (COVID-19) EMS PLAYBOOK Cleaning & Disinfection



See System Policy I-2: Infection Control Measures/Communicable Disease Follow-up (1/1/16)

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

https://www.acep.org/globalassets/images/covid-19_k-west-1.pdf

https://www.ems.gov/pdf/Federal_Guidance_and_Resources/PPE_and_Infection_Control/COVID-19_Disinfection_Structural_Firefighting_Personal_Protective_Equipment.pdf

EMS VEHICLES after transporting a PUI or pt with confirmed COVID-19

- After transporting, leave vehicle rear doors open to allow for sufficient air exchanges to remove potentially infectious particles. The time to transfer pt. to the receiving facility and complete all documentation should provide sufficient air changes. EMS HCP must visually observe the vehicle at all times while parked with doors open to ensure security of EMS equipment and drugs.
- When cleaning the vehicle, wear a disposable gown and gloves. A face shield or facemask and goggles should also be worn if splashes or sprays during cleaning are anticipated.
- Ensure that environmental cleaning and disinfection procedures are followed and adequate ventilation is provided when chemicals are in use. Doors should remain open when cleaning the vehicle.
- **Clean and disinfect all non-porous surfaces** that may have come in contact with the pt or been contaminated during patient care (e.g., stretcher, rails, control panels, floors, walls, work surfaces, clipboards, radios and other frequently touched surfaces or equipment) using cleaners and water to pre-clean surfaces prior to applying an EPA-registered hospital-grade disinfectant according to the manufacturer's recommendations and **for appropriate contact times** as indicated on the product's label. Non-porous surfaces of PPE such as powered air-purifying respirators (PAPRs) should be cleaned and disinfected in accordance with the manufacturer's recommendation.

Refer to List N on the EPA website for qualified EPA-registered disinfectants approved for emerging viral pathogens such as SARS-CoV-2. <https://www.epa.gov/newsreleases/epa-continues-add-new-surface-disinfectant-products-list-n-effort-combat-covid-19>

- **Sprayers, foggers, and UV lights do NOT eliminate the need to clean first.** "Organic material can interfere with disinfection technologies. Thus, surfaces must be cleaned/disinfected prior to use of automated disinfection technology" (Dr. William Rutala).

UNIFORMS: Clean/disinfect contaminated EMS clothing per agency/manufacturer guidelines.

- **Change contaminated clothing**, including turnouts, as soon as possible and wash in detergent and hot water as recommended by the manufacturer. (No bleach for turnouts)
- **Wash contaminated uniforms at the EMS quarters** if possible. Place contaminated uniforms into a plastic bag to prevent cross contamination of other uniforms, wash separately, and rinse the washing machine with a cup of bleach after clothing is removed. Do not launder contaminated clothing at home if facilities are available at the EMS quarters.
- **Boots** should be scrubbed with soap and hot water to remove contaminants. Wash footwear soles at the scene or ASAP. Studies have shown high contamination of shoe soles but shoe coverings are not recommended as they produce a high risk of provider exposure during doffing.

ELECTRONIC DEVICES – Cleaning and disinfecting

Document: Devices used and procedures used to clean them:

- Keyboards; touch screens; stylus/pen; external mouse or other peripherals
- Microphone & camera areas (voice-to-text enabled applications); cases, mounts, storage locations

FACE SHIELDS: Cleaning, disinfecting, and reuse guidelines

- Clean: Wearing clean gloves, carefully wipe the inside and then the outside of the face shield or goggles using a clean cloth saturated with neutral detergent solution or a cleaner wipe.
- Disinfect: Carefully wipe the outside of the face shield or goggles using a wipe or clean cloth saturated with EPA-registered disinfectant solution
- With a new wipe, clean the headband moving from inside to outside.
- Disinfect outside, allowing wet dwell time recommended by disinfectant product
- Remove film left on surfaces by rinsing with a wet paper towel or alcohol; fully dry
- Remove gloves and perform hand hygiene
- Place face shield in a bag labeled with member's name, date and time. Inspect prior to next use, for defects or damage (cracks, tears, or stretched out headband). If present, do not reuse.

General Considerations for all HCP safety (IDPH Siren Alert 4-26-20)

Monitor your health: Check your temperature twice a day and remain alert for respiratory symptoms. Be sure to contact your primary care physician and employer immediately if symptoms develop.

Prepare for work

- Always have a clean uniform ready.
- If you typically wear jewelry, a tie, a watch, or other nonessential accessories, leave them at home
- If you have medium or long hair, wear it pulled back
- If you wear contacts, consider wearing glasses to decrease need to touch your face and offer a barrier
- Prepare clean clothes/shoes to change into after work. Take them with you if you can change at work.
- Remove nonessential items in your car, and stock car with disinfecting wipes to wipe down key surfaces

Before leaving work

- If possible, shower and change into clean clothes and shoes before heading home.
- Put dirty clothes and shoes into a bag for soiled clothing. Consider using a cloth bag you can wash along with your dirty clothes each day.
- Wash your hands or use hand sanitizer after removing work clothes and before touching clean clothes.

When you arrive home

- If unable to change clothes before leaving work, change in an isolated location (garage, laundry room)
- Do not wear shoes from work into your home. Clean them, top and bottom, with disinfecting wipes.
- Wash clothes worn at work using your usual laundry detergent
- If possible, use the warmest water setting appropriate for the items and dry completely
- Wash or safely discard dirty clothes bag; wash hands after handling dirty clothes and shoes
- Shower before interacting with your family.
- Isolate, if possible, from your family to limit their potential for exposure: Consider identifying a room and bathroom used exclusively by you. Have a family member leave food and items outside your isolation area to avoid moving throughout your home. Consider using disposable plates, cups, and utensils.
- If unable to use separate spaces from family, attempt to maintain 6 feet from others and sleep alone

Disinfect your home regularly

- Clean and disinfect frequently touched surfaces in your home daily. This includes tables, doorknobs, light switches, countertops, handles, desks, toilets, faucets, sinks, and electronics.
- Use cleaning/disinfecting methods recommended by the CDC: <https://www.cdc.gov/coronavirus/2019-ncov/prepare/cleaning-disinfection.html>

Staff well-being

All of us are pretty tired of the disruptions and “quarantine fatigue” caused by this pandemic and dream of life returning to a new normal - but that is unlikely in the short-term. Stress during an infectious disease outbreak can include

- Fear and worry about your own health and the health of your loved ones
- Changes in sleep or eating patterns
- Difficulty sleeping or concentrating
- Worsening of chronic health problems and/or worsening of mental health conditions
- Increased use of [alcohol](#), [tobacco](#), or [other drugs](#) (CDC)

We must effectively address needs of the **body, mind and spirit** to thrive through this crisis. Please let us know if there is anything the System can do more, make available to you, or should be doing that we are not, to best support you. **Our most valuable resources are our people** and your health and well-being are our top priority! The CDC has some great tips and resources for coping with stress during this pandemic. See: <https://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/managing-stress-anxiety.html> Also see The National Academy of Medicine Resource to support the health and well-being of clinicians during the Covi-19 outbreak. <https://nam.edu/initiatives/clinician-resilience-and-well-being/clinician-well-being-resources-during-covid-19/> and https://www.ems.gov/pdf/Federal_Guidance_and_Resources/Personnel_Health_and_Safety/Burnout_Self-Care_COVID-19_Exposure_for_First_Responders.pdf

Corona Virus Disease (COVID-19) EMS PLAYBOOK PPE Burn Rate Calculator



Sources: IDPH Siren Alert 4-24-20

<https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/burn-calculator.html>

The Personal Protective Equipment (PPE) Burn Rate Calculator is a spreadsheet-based model that will help organizations plan and optimize the use of PPE for their response to COVID-19.

Any organization that uses PPE can access the spreadsheet via the CDC website listed above.

Once the calculator is downloaded, there will be 3 tabs: calculator, graph, and instructions. The instructions include how to enter the information. This information is also on the spreadsheet where the data is entered.

To use the calculator, enter the number of full boxes of each type of PPE in stock (gowns, gloves, surgical masks, respirators, and face shields) and the total number of patients at your facility. The tool will calculate the average consumption rate, also referred to as a “burn rate,” for each type of PPE entered in the spreadsheet. This information can then be used to estimate how long the remaining supply of PPE will last, based on the average consumption rate. Using the calculator can help facilities make order projections for future needs.

System Requirements

- Windows* operating system (MS Windows 2000 or newer)
- Microsoft Excel (MS Office 2000 or newer)
- 486 Pentium processor and at least 128MB RAM
- 2 MB of hard drive storage space

* MS Windows and Office is a copyrighted product produced by Microsoft Corporation, based in Redmond, WA. Use of trade names and commercial sources is for identification only and does not imply endorsement by the U.S. Department of Health and Human Services.

Instructions for Downloading

Before loading and starting the PPE Burn Rate Calculator, you may need to change Excel's security level. To do so:

1. Open a blank Excel spreadsheet
2. Click Tools and then click Macro, choose Security
3. Set Security Level to Medium
4. Click OK
5. Double-click and open PPE Burn Rate Calculator file
6. When asked to Disable Macros or Enable Macros, click Enable Macros

Downloading the Files

We recommend downloading and saving the PPE Burn Rate Calculator spreadsheet to your computer before opening the spreadsheet. Taking this step will open the spreadsheet in Excel rather than your web browser.



COVID-19 NOTIFICATIONS - DICO Responsibilities

- EMS personnel should notify the ED prior to arrival if a patient is known to have tested positive or meets the criteria for being classified as a PUI for COVID-19 per CDC guidelines.
- It is assumed that EMS HCP were wearing appropriate PPE prior to and during pt contact.
- If it is determined that EMS had unprotected or insufficiently protected contact prior to discovering a patient's possibly infectious status, or their PPE was compromised in some way, tell the receiving ED physician ASAP.
- A Designated Infection Control Officer (**DICO**) cannot require that a pt be tested solely because of EMS concerns for possible illness. Hospitals will follow CDC, IDPH, and internal guidelines for testing.
- If an agency determines that EMS or law enforcement officers had unprotected or insufficiently protected contact with a PUI, the CDC and IDPH provide guidelines for risk stratification, PCR testing, possible work restrictions/home monitoring and return to work criteria.

POSITIVE PATIENT COVID-19TEST RESULT NOTIFICATIONS

- COVID-19 falls under the Ryan White Act notification provisions.
- Per IDPH directive, **hospitals must inform EMS personnel if a patient they transported tested positive** for COVID-19. Test results may take a week or longer to be received in some cases. Each hospital shall use internal procedures for doing patient testing and providing feedback to EMS in compliance with national/ state/System directives.
- **Process:** Notice shall be provided to the agency DICO (See System Website: www.nwcemss.org for current listing) and/or Provider EMSC via e-mail ASAP after results are received. The DICO/PEMSC shall respond to the hospital EMSC that the message has been received. **Sample language:**

(EMS Agency) incident/run number # _____; patient (initials/gender/age) was transported to (hospital name) on (date) and tested positive for COVID-19. From the report it appears that the crew wore full PPE; or from the report it is unclear if the crew wore appropriate PPE.

Please complete an internal review of this call and follow CDC and System recommendations for risk assessment and follow-up. Please respond back to me that you have received this e-mail. Let me know if you have any questions or concerns.

(HEMSC name and contact information)
- Hospitals have no further duties relative to EMS testing or follow up after notification of a positive test result is given to the DICO/PEMSC and confirmation of receipt is received from the agency unless the agency reaches out to the hospital for clarification or direction.
- **When notice is received, providers are required** to review the PCR to determine the types of PPE worn by EMS and make a risk determination. If unclear from the PCR, please follow up with the individuals on the call. If PPE worn is missing or incorrectly noted, crews must complete an addendum.
- **If EMS personnel were wearing prescribed PPE** (Gloves, mask/respirator, gown, eye protection/face shield) when within 6 feet of a PUI – they are at low risk and may be allowed to continue working as long as they remain asymptomatic.
- **If PPE worn is found to be insufficient or breached based on national/state standards** – a risk determination will be made on a case by case basis and actions that should be taken in compliance with guidelines set forth by the CDC and IDPH.

See CDC Guidance for Risk Assessment and Public Health Management of Healthcare Personnel with Potential Exposure in a Healthcare Setting to Patients with Coronavirus Disease 2019 (COVID-19) **(See next page).**

Corona Virus Disease (COVID-19) EMS PLAYBOOK Work Exposure Definitions



EMS agencies should develop policies for assessing exposure risk and managing EMS personnel potentially exposed to SARS-CoV-2 in coordination with local public health authorities; their Occupational Health Provider and/or Infection Control subject matter experts.

Decisions for monitoring, excluding from work, or other actions for HCP with potential exposure to COVID-19 should be made in consultation with the above. Refer to the [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 2019 \(COVID-19\) \(June 18, 2020\)](#) for information.

5-29-20 Updates include:

- Any duration of exposure should be considered prolonged if the exposure occurred during performance an aerosol-generating procedure.
- The time period that should be used for contact tracing after exposure to asymptomatic individuals who test positive for SARS-CoV-2 was shortened. The time period was changed from 10 days before obtaining the specimen that tested positive for COVID-19 to 2 days to accommodate pragmatic and operational considerations for the implementation of case investigation and contact tracing programs.
- Recent data suggest that asymptomatic persons may have a lower viral burden at diagnosis than symptomatic persons. Thus, the longer contact elicitation window (10 days) may have limited impact in identifying new COVID-19 cases.
- The recommendation for the **shorter contact elicitation window (2 days)** will help focus case investigation and contact tracing resources toward activities most likely to interrupt ongoing transmission.
- This time period is also now in alignment with recommendations from the World Health Organization, European CDC, and Public Health Canada.

Recommendations regarding which HCP are restricted from work may not anticipate every scenario and will change if indicated by new information. Call the Emergency Operations Center at 770-488-7100.

DEFINITIONS

Self-monitoring means HCP should monitor themselves for fever by taking their temperature twice a day and remain alert for symptoms of COVID-19. Those on self-monitoring should be provided a plan for whom to contact if they develop S&S to determine whether medical evaluation is needed.

Active monitoring: Local public health authority assumes responsibility for establishing regular communication with potentially exposed persons to assess for the presence of S&S of COVID-19. 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 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 employer's occupational health or infection control program, if both the health department and the agency are in agreement. Note, inter-jurisdictional coordination will be needed if HCP lives in a different local health department jurisdiction than where the agency is located.

Self-Monitoring with delegated supervision means HCP performs self-monitoring with oversight by their agency's occupational health provider or DICO in coordination with the local health department, if the health department and the agency are in agreement. On days HCP are scheduled to work, agencies must screen for illness per procedure. 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. 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 symptoms of COVID-19 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.

Corona Virus Disease (COVID-19) EMS PLAYBOOK Risk assessment/Work Restrictions/LHDs



Close contact. Proximity: Being within 6 feet of a person with COVID-19. However, also consider duration of exposure, pt's clinical symptoms, and whether pt or contacts were wearing a mask, PPE used by HCP, and whether AGPs were performed. The protective effects of masks depend on many factors, such as the type of mask, whether it was worn properly, if it has been overused (or unwashed if a cloth mask). One cannot completely rule out an exposure simply because individuals were wearing masks.

Prolonged exposure: Extended to 15 or more minutes, which aligns with the time period used in the guidance for [community exposures](#) and [contact tracing](#). Brief interactions are less likely to result in transmission; however, pt's clinical symptoms and type of interaction (did pt cough directly into person's face) are important. However, any duration should be considered prolonged if the exposure occurs during performance of an [aerosol-generating procedure](#)

RISK STRATIFICATION See Table in updated CDC guidelines for more detailed information.

Guidance for HCP exposed to individuals with confirmed COVID-19 - See

<https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-risk-assesment-hcp.html> (June 18, 2020)

What should EMS personnel do if they think they've been exposed to COVID-19 or have developed S&S?

- Notify chain of command and DICO to ensure appropriate risk stratification, evaluation, and follow up.
- Complete any paperwork required by the EMS Agency.

WORK RESTRICTION RECOMMENDATIONS: See Updated Guidelines – [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 2019 \(COVID-19\)](#) (June 18, 2020)

REGIONAL HEALTH DEPARTMENTS		
IDPH Chicago Regional Office	4212 W. St. Charles Road Bellwood, Illinois 60104	Office: 708-544-5300 Fax: 708-544-5343
Chicago Department of Public Health	DePaul Center 333 S. State Street, 2nd Floor Chicago, Illinois 60604	Office: 312-747-9872 Fax: 312-747-9739
Cook County DPH ccdph.covid19@cookcountyhhs.org	Oak Forest Health Center Campus 15900 S. Cicero Avenue Oak Forest, IL 60452	Office: 708-633-3319 Fax: 708-633-2030 Media: 708-359-1005
DuPage County Health Department	111 N. County Farm Road Wheaton, Illinois 60187	Office: 630-682-7400 Fax: 630-462-9261
Kane County Health Department	1240 N. Highland Avenue, Aurora, IL 60506 1750 Grandstand Place Elgin, IL 60123	Main Phone: 630-208-3801 http://www.kanehealth.com/contact_us.htm
Lake County Health Department	3010 Grand Avenue Waukegan, Illinois 60085	Office: 847-377-8000 Fax: 847-360-3656
McHenry County Health Department	2200 North Seminary Avenue Woodstock, Illinois 60098	Office: 815-334-4510 Fax: 815-338-7661

Corona Virus Disease (COVID-19) EMS PLAYBOOK COVID-19 TESTING



<http://dph.illinois.gov/covid19/testing-guidance> (5-14-20) <https://coronavirus.illinois.gov/s/testing-sites>
COVID-19 hotline at 1-800-889-3931

ELIGIBILITY FOR PCR (disease) TESTING at Community Based Testing Sites:

Persons who have COVID-19 symptoms (Fever, cough, shortness of breath, difficulty breathing, chills, repeated shaking with chills, muscle pain, headache, sore throat, new loss of taste or smell)

Testing is also available for those with or without symptoms who:

- Healthcare workers; first responders
- Employees of correctional facilities
- Individuals exposed to confirmed COVID-19 patients
- Employees that support Critical Infrastructure (grocery stores, pharmacies, restaurants, gas stations, public utilities, factories, childcare and sanitation)
- All local and state government employees
- Individuals with compromised immune systems, chronic medical conditions

The IDPH Community-Based Testing Sites are the only ones that give first responders priority, test asymptomatic HCPs AND are free of charge. All other sites are “allowed” to give first responders priority, test asymptomatic HCPs and test for free but can set their own testing requirements and associated fees. When dealing with non-IDPH sites, have EMS personnel contact their health insurance to see if they will cover the tests and then call the testing site and ask the following to determine best option for testing:

- Do they use IDPH labs to test samples? (IDPH testing of samples is free)
- Do they give first responders priority?
- Are they testing first responders who are asymptomatic? (this testing is allowed but not required)
- Are they charging additional fees for testing supplies and if so would they wave those fees for first responders?
- Do they accept the HCP's health insurance? (IL State Fire Marshall)

State –operated Community Based Testing Sites

Chicago – Harwood Heights - EPA Emissions Testing Facility 6959 W. Forest Preserve Drive
Hours: 0730 – 1500 (max 750 specimens)

Chicago Southside – Chatham movie theater 210 W 87th Street | 0800–1600 (max 750 specimens)

Aurora: Chicago Premium Outlets 1650 Premium Outlet Blvd off of Interstate 88. Vehicles enter from Farnsworth Avenue and leave using the exit at Bilter Road | Hours: 0800-1600 (max 750 specimens)

Champaign - Market Place Shopping Ctr 2000 N. Neil St | 0800–1600 (mas 750 specimens)

East St. Louis Jackie Joyner Kersee Ctr. Argonne Drive | Hours: 0800–1600 (max 500 specimens)

Markham Emissions Testing Station 3824 W. 159th Place | Hours: 0800-1600 (max 800 specimens)

Peoria - Fulton St Parking 601-699 Franklin St. | Hours: 0800–1600 (max 350 specimens)

Rolling Meadows - Rolling Meadows HS 2901 Central Rd. | 0730-1530 (max 750 specimens)

Rockford: U of I College of Medicine – 1601 Parkview Ave | Hours: 0800-1600 (max 500 specimens)

South Suburban College – 15800 State St. South Holland | Hours: 0800-1600 (max 800 specimens)

Waukegan: 102 W. Water St. | Hours: 0800–1600 while supplies last (max 750 specimens)

- No physician referral needed. Bring work photo ID & evidence of insurance (not mandated to get tested)
- Persons using drive-thru testing sites must be seated at a functioning window. Once in line at the CBTS, you will not be permitted to exit your car. Could be significant wait times. Drive-thru sites cannot accommodate walk-up individuals except in Peoria and East St. Louis, at this time
- Patients will receive verbal confirmation of CARS-Co-V-2 testing results within 3-7 days.

Instructions on what to do while waiting for your test results

<https://www.dph.illinois.gov/topics-services/diseases-and-conditions/diseases-a-z-list/coronavirus/personal-guidance-and-testing/undergoing-testing>

Corona Virus Disease (COVID-19) EMS PLAYBOOK COVID-19 TESTING cont.



Types of testing available: molecular and immunologic

- **Direct (molecular):** Nucleic acid amplification tests
 - **Reverse transcriptase polymerase chain reaction (RT-PCR)** test detects viral RNA to diagnose COVID-19 infection. Clinical sensitivity can be affected by the quality of specimen collection technique, sample handling, and timing of sampling since viral load changes throughout disease course. RNA is detectable before symptom onset and in those who remain asymptomatic. A negative RT-PCR test + a negative clinical exam is extremely accurate in identifying persons with minimal risk of COVID-19.
 - **Antigen testing:** Sofia® 2 SARS Antigen FIA (Quidel Corp.), a POC test is approved for the rapid detection of SARS-CoV-2 viral proteins in nasal or nasopharyngeal specimens rather than genetic code (RNA) - results in 15 minutes. (Detects active infection)
 - 5-8-20: FDA issued an EUA to Rutgers Clinical Genomics Laboratory for the first diagnostic test that uses **saliva samples** self-collected by pts at home using their Spectrum Solutions LLC SDNA-1000 Saliva Collection Device (prescription only). Once collected, the saliva sample is returned to the Rutgers Clinical Genomics Lab in a sealed package for testing.
- **Indirect (serology/immunologic):** Looks for presence of **antibodies** (AB) developed in reaction to an infection. Once fully validated, can be used for evidence of past infection. It is currently unknown if presence of AB correlates with clinical immunity.

SARS COVID-19 PCR testing (nasopharyngeal or nasal swabs) done within an approved lab

- Hologic Molecular Test (nasal swab) [NEW]
- Abbott ID NOW™ point of care rapid test: False negative results possible (FDA, 5-18-20): Nasal swab needs to be the laboratory within one hour of collection.
- Cepheid GeneXpert Platform : Specimen collected with nasopharyngeal (NP) swab

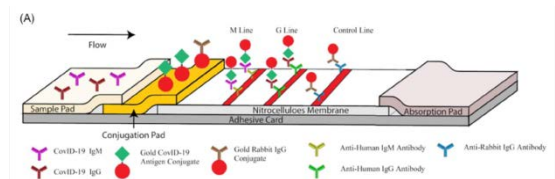
SARS COV-2 IgG Antibody Testing

Validated AB testing and an effective vaccine will be needed to make COVID-19 history. On **5-11 2020, the FDA adopted more stringent standards for COVID-19 AB tests.** The agency enforced new standards of accuracy and required AB test manufacturers to submit information proving the testing quality. It also required manufacturers to apply for emergency use authorization (EUA) within 10 business days of their products' release. <https://www.fda.gov/medical-devices/emergency-situations-medical-devices/emergency-use-authorizations#covid19ivd>; <https://www.fda.gov/regulatory-information/search-fda-guidance-documents/policy-coronavirus-disease-2019-tests-during-public-health-emergency-revised>; <https://www.aha.org/news/headline/2020-05-22-fda-removes-tests-list-antibody-tests-under-review>

IgG is the most abundant immunoglobulin to be produced in response to an antigen and is maintained in the body after initial exposure for long-term response. **IgM** is the first immunoglobulin to be produced in response to an antigen and is primarily detected during the early onset of disease and then falls off.

Forms of AB testing:

- POC immunoassay (rapid AB test) IgM-IgG - Does not quantify AB amount – One drop of blood is placed on a cartridge - Capillary action tests if IgM or IgG AB are present.
- Enzyme Linked Immunosorbent Assays (ELISA) detects COVID-19 IgG and IgM in human serum
- Microparticle immunoassay – new ELISA



CAVEATS:

- AB tests are NOT used to diagnose active COVID-19 infection in pts presenting soon after symptom onset due to the risk of false-negative results. For most, seroconversion starts to occur 8 to 11 days post-symptom onset. Specimens collected and tested prior to this time may be negative.
- False-positive results may occur in a small percentage of pts due to cross-reactivity between AB to COVID-19 virus and other commonly circulating coronavirus strains.
- If clinical suspicion of COVID-19 persists in pts with a high likelihood of infection based on exposure hx and/or clinical S&S, a single negative test does not r/o infection and repeat testing is advised.

CDC Criteria for Return to Work for Healthcare Personnel with Confirmed or Suspected COVID-19 (Interim Guidance) updated April 30, 2020 <https://www.cdc.gov/coronavirus/2019-ncov/hcp/return-to-work.html>
Discontinuation of Isolation for Persons with COVID-19 Not in Healthcare Settings has been updated as well. See <https://www.cdc.gov/coronavirus/2019-ncov/hcp/disposition-in-home-patients.html>

Changes on April 30th / May 3

- Changed the name of the ‘non-test-based strategy’ to the ‘symptom-based strategy’ for those with symptoms and the ‘time-based strategy’ for those without symptoms.
- Removed reference to “home isolation” to encompass all settings instead of just home, including hotels, dormitories, or group isolation facilities.
- When **symptom-based strategies** are used, 10 days is now consistent for return to work criteria for both HCWs and non-HCWs.
- All **time-based strategies** for individuals **with symptoms** continue to include additional requirement that 72 hours have passed since recovery, defined as resolution of fever without the use of fever-reducing meds and improvement in respiratory symptoms (e.g., cough, shortness of breath).
- A test-based strategy is also an option, but could prolong release from isolation.
- Removed specifying use of nasopharyngeal swab collection for the Test-Based Strategy and linked to the [Interim Guidelines for Collecting, Handling, and Testing Clinical Specimens for 2019 Novel Coronavirus \(2019-nCoV\)](#), so that the most current specimen collection strategies are recommended.

Decisions about return to work for those with confirmed or suspected COVID-19 should be made in the context of local circumstances.

Return to Work Criteria for Persons with Suspected or Confirmed COVID-19

Symptomatic with suspected or confirmed COVID-19 (Either is OK depending on local circumstances):

- **Symptom-based strategy** - Exclude from 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 **10 days** have passed *since symptoms first appeared*
- **Test-based strategy** - Exclude from work until:
 - Resolution of fever without the use of fever-reducing medications; **and**
 - Improvement in respiratory symptoms (e.g., cough, shortness of breath); **and**
 - Negative results of a COVID-19 molecular assay for detection of SARS-CoV-2 RNA from at least two consecutive respiratory specimens collected ≥ 24 hours apart (two negative specimens). See [Interim Guidelines for Collecting, Handling, and Testing Clinical Specimens for 2019 Novel Coronavirus \(2019-nCoV\)](#). There have been reports of prolonged detection of RNA without direct correlation to viral culture. Language about the test-based strategy being preferred was removed.

Asymptomatic: Lab-confirmed COVID-19 for person with NO symptoms

- **Time-based strategy** - Exclude from work until:
 - **10 days** have passed - since the date of their first positive COVID-19 diagnostic test assuming they have not subsequently developed symptoms since their positive test.
 - If they develop symptoms, then the *symptom-based* or *test-based strategy* should be used.
 - Note, because symptoms cannot be used to gauge where these individuals are in the course of their illness, it is possible that the duration of viral shedding could be longer or shorter than 10 days after their first positive test.
- **Test-based strategy** - Exclude from work until:
 - Negative results of an FDA authorized COVID-19 molecular assay for detection of SARS-CoV-2 RNA from at least 2 consecutive respiratory specimens collected ≥ 24 hours apart.
 - Due to absence of S&S, it is impossible to gauge where these persons are in the disease course. Same concern over prolonged detection of RNA without direct correlation to infectious state.

All test results should be final before isolation is ended, i.e., in persons with a persistent productive cough, SARS-CoV-2-RNA might be detected for longer periods in sputum specimens than in upper respiratory tract specimens.

Consider consulting with local infectious disease experts when making decisions about discontinuing Transmission-Based Precautions for individuals who might remain infectious longer than 10 days (e.g., severely immunocompromised).

If HCP had COVID-19 ruled out and have an alternate diagnosis (e.g., tested positive for influenza), criteria for return to work should be based on that diagnosis.

Return to Work Practices and Restrictions

After returning to work, a HCP should:

- Adhere to hand hygiene, respiratory hygiene, and cough etiquette (e.g., cover nose and mouth when coughing or sneezing, dispose of tissues in waste receptacles)
- Wear a facemask for source control at all times while in the workplace until all symptoms are completely resolved or at baseline. A facemask instead of a cloth face covering should be used by these HCP for source control during this time period while in the facility. After this time period, these HCP should revert to their agency policy regarding [universal source control](#) during the pandemic.
 - A facemask for source control does not replace the need to wear an N95 or higher-level respirator (or other recommended PPE) when indicated, including when caring for patients with suspected or confirmed COVID-19.
 - Of note, N95 or other respirators with an exhaust valve might not provide source control.
- Self-monitor for symptoms, and seek re-evaluation from occupational health if respiratory symptoms recur or worsen
- Be restricted from contact with severely immunocompromised patients (e.g., transplant, hematology-oncology) until 14 days after illness onset

Corona Virus Disease (COVID-19) EMS PLAYBOOK SOP Guidelines - Proning



COVID-19 EMS Standard Operating Procedures (Rev 7-1-20) (Appendix C) caveats:

- Goal: Keep things as normal as possible for as long as possible w/o unnecessary change.
- Ask all responsive pts/bystanders COVID-19 **screening questions**:
 1. Have you had a new onset of any of the following? Fever (measured temp >100.0°F), chills, cough, SOB, runny nose, loss of taste or smell, muscle pains, vomiting, diarrhea, sore throat, headache?
 2. Have you had exposure to someone in the past 14 days with confirmed or suspected COVID-19?
 3. Have you been tested for or had a diagnosis of COVID-19 in the last 30 days?
- **Limit HCP exposed**: to all persons on scene with suspected or confirmed COVID-19 OR they are known to be high risk for disease by age, comorbidities, contacts, or congregate living situation (receiving hemodialysis, group home/shelter, skilled nursing facility (SNF), incarceration.)
Source control for patient/bystanders; one or two rescuers should **don standard contact/droplet PPE** before advancing to less than 6 feet from the patient.
- **Be particularly vigilant for severe hypoxia per SpO₂ without SOB**; hypotension, dysrhythmia, & hyperglycemia. Place hypoxemic pts on O₂ and/or consider ETI per COVID-19 SOP & Procedure.
- **Nebs and CPAP reinstated under specific conditions – see updated SOP**
- **Consider if awake proning protocol may be indicated**
 - Awake patient with good inspiratory effort; severe hypoxia (SpO₂ <90%) despite O₂
 - Grossly hemodynamically stable
 - Can communicate on their own and can cooperate in self-positioning

A prone position recruits posterior lung areas and helps with perfusion to oxygenated lung segments. Front line clinicians increasingly report the benefits of proning hypoxic COVID-19 pts who are awake in an effort to improve oxygenation and stave off intubation (RebelEM 4-26-20).

Caputo, N.D., Strayer, R.J., Levitan, R. (2020). Early self-proning in awake, non-intubated patients in the emergency department: a single ED's experience during the COVID-19 pandemic. Acad Emerg Med. Pub. on-line April 22, 2020.

EMS Contraindications to prone positioning:

- Need for immediate ETI
- Pregnancy; patients with larger abdominal girth
- Concerns for increasing ICP (intra-cranial hemorrhage)
- Massive hemoptysis
- Tracheal surgery or sternotomy during the previous 15 days
- Serious facial trauma or surgery during the previous 15 days
- Deep venous thrombosis treated less than 48 hours
- Cardiac pacemaker inserted in the last 48 hours
- Unstable spine, femur, or pelvic fractures
- MAP <65mmHg (OK to proceed if patient on Norepinephrine to keep MAP >65mmHg)
- Chronic respiratory failure on home O₂, BiPAP/CPAP
- Frequent ventricular arrhythmia
- DNR/DNI

Considerations: Ask about history of rotator cuff tear, stroke, nerve damage, brachial plexus injury, osteoarthritis of shoulder complex, Hx of clavicle fx, or hyperflexible joints. If pt experiences pain when turning over to a prone position, STOP and return to supine position.

Prone positioning basics:

- Continue O₂; cardiac, BP, and SpO₂ monitoring. Place ECG leads in the lateral limb position (left and right deltoid; L & R 12th intercostal space midaxillary line). Obtain VS & Oximetry reading right before proning and 10 minutes after position change.
- Pts must not be left alone
- Have 2 HCP stand on either side of stretcher to keep it stable and protect pt during movement
- Position stretcher flat. Ask pt to turn over onto stomach unless contraindicated. Give them sufficient pillows to support head, shoulders and arms. Rotate head to one side. Avoid pressure on the eyes and ear. Place a blanket roll under ankles to elevate both feet. May be more comfortable with one arm above head and one at side (swimmer's position). Ensure a position of comfort.

Intubation/advanced airway placement – See procedure (Rev. 5-24-20) – Appendix E

- COVID-19 patients have unique needs for ETI indications, equipment, and process steps.
- BVMs and other ventilatory equipment must be used with a **HEPA filter** for expired air.
- If possible, the back doors of the ambulance should be opened and the exhaust system activated during aerosol-generating procedures (AGPs). This should be done away from pedestrian traffic.
- Do not delay intubation if IMC and/or proning is contraindicated and/or O₂ is not working (SpO₂ crashing and doesn't improve). **Concerning S&S:** ↑ RR, WOB, tidal volume (↑ depth of inspiration).
- **Do NOT over-ventilate.** Use only enough tidal volume to see chest rise
- The System **IS NOT endorsing the plastic cube** marketed for protection during ETI procedures. They unnecessarily restrict the HCP's movements while intubating. Because the King Vision device rides high, it would be difficult to visualize the cords and the bougie could not be used effectively. It adds one more thing to be cleaned and disinfected and poses a challenge to where it might be stored on an EMS vehicle. If intubating, please follow the System COVID-19 ETI procedure posted on the System website. If paramedics are performing DAI – ensure adequate sedation prior to blade insertion to avoid stimulating a gag reflex.

CARDIAC ARREST ADAPTATIONS

- One person dons full PPE and confirms unresponsiveness/pulselessness (reconnaissance)
- **If a candidate for resuscitation:**
 - **Add airborne precautions (N95 mask) to PPE** for all those working within 6 feet of patient (number should be limited). Add CPR device ASAP.
 - **# EMS personnel in full PPE:**
 - If CPR device immediately available: 3 (manual to mechanical CPR & 1 for airway/O₂; then 1 for airway/O₂/ventilation; 1 for pad placement & defibrillation; 1 for vascular access/meds)
 - If CPR device NOT immediately available: 5 per usual pit crew roles
 - Only open equipment as needed; do not cross-contaminate airway/IV/drug bags
- **ApOx contraindicated in these patients** - generally have severe hypoxia prior to cardiac arrest.

GLYCEMIC CONTROL CHALLENGES

Evidence is mounting that **hyperglycemia** and **diabetic ketoacidosis (DKA)** are contributing to morbidity and mortality in patients with COVID-19, including among those without a prior diabetes diagnosis.

Patients are presenting with severe insulin resistance, persistent hyperglycemia and DKA (hyperglycemic and euglycemic) with type 1 and type 2 DM. Fasting blood glucose predicts multiorgan injury, poor outcomes, and death. Persistent hyperglycemia (≥ 180 mg/dL) has been associated with a 4X greater risk for mortality, rising to sevenfold among those without a pre-existing diabetes diagnosis.

EMS implications for glucose assessment & mgt in pts with suspected COVID-19

- If patients with known DM are transported, **bring all the equipment they currently use** (glucose meters, test strips, [insulin pump](#) supplies). Also bring their insulin, particularly if the pt is taking a type not typically available on hospital formularies, such as [insulin degludec](#) (*Tresiba*, Novo Nordisk) or faster [insulin aspart](#) (*Fiasp*, Novo Nordisk). Transitioning from degludec to glargine [*Lantus*, Sanofi] or detemir [*Levemir*, Novo Nordisk] at the hospital can be problematic.
- **Check blood glucose levels on ALL persons with possible COVID-19**
- **Shortness of breath is a COVID-19 symptom but may also be d/t metabolic acidosis, as with DKA. EMS should check ETCO₂ for evidence of acidosis.**
- **Fluid mgt in critically ill pts with COVID-19 + DKA:** Presents a dilemma as most have acute kidney injury resulting in fluid overload. Guidelines generally recommend withholding fluids to avoid cardio-pulmonary compromise but this is the exact opposite of what's needed to treat DKA. In this case, treating DKA dehydration is the priority. Pts need a certain amount of fluid to just get past the ketosis-forming stage," Checklist to Manage Hyperglycemia, DKA in Severe COVID-19 - *Medscape* - Apr 21, 2020.



Background

On April 26, 2020, clinicians in the United Kingdom reported previously healthy children presenting with a severe inflammatory syndrome with Kawasaki disease-like features. Cases occurred in children testing positive for current or recent infection by SARS-CoV-2 or an epidemiologic link to a COVID-19 case.

S&S may include: **Persistent fever**¹, abdominal pain, vomiting, diarrhea, rash, sore throat, cough (respiratory symptoms not prevalent), irritability, headache, conjunctivitis, swollen lymph nodes in the neck, swollen hands and feet, cracked lips and a tongue that is redder than usual.

In a multisystem inflammatory state, cytokines are produced that lead to leaky blood vessels, causing **low BP and fluid accumulation in the lungs and other organs** resulting in a state that resembles cardiogenic or distributive shock **with coronary artery abnormalities and myocardial impairment/dysfunction**.

On May 14, 2020, the CDC issued an official Health Advisory dealing with Multisystem Inflammatory Syndrome in Children (MIS-C) associated with Corona Virus Disease 2019 (COVID-19). This advisory was based on the rapid emergence of peds cases of severe inflammatory syndrome with Kawasaki disease-like manifestations.

CDC Case Definition for Multisystem Inflammatory Syndrome in Children (MIS-C)

- Individual aged <21 years presenting with fever¹, laboratory evidence of inflammation², and evidence of clinically severe illness requiring hospitalization, with multisystem (>2) organ involvement (cardiac, renal, respiratory, hematologic, gastrointestinal, dermatologic or neurological); **AND**
- No alternative plausible diagnoses; **AND**
- Positive for current or recent SARS-CoV-2 infection by RT-PCR, serology, or antigen test; or COVID-19 exposure within the 4 weeks prior to the onset of symptoms.

1. Fever >38.0°C for ≥24 hours, or report of subjective fever lasting ≥24 hours

2. Including, but not limited to: an elevated C-reactive protein (CRP), erythrocyte sedimentation rate (ESR), fibrinogen, procalcitonin, d-dimer, ferritin, lactic acid dehydrogenase (LDH), or interleukin 6 (IL-6), elevated neutrophils, BNP, troponins, and reduced lymphocytes and/or low albumin

Additional comments

- Some individuals may fulfill full or partial criteria for Kawasaki disease but should be reported if they meet the case definition for MIS-C
- Consider MIS-C in any pediatric death with evidence of SARS-CoV-2 infection
- There appears to be a delay of 2-6 weeks after possible COVID infection before onset of MIS-C or pt may have been asymptomatic for COVID-19. Hospitals will need to check inflammatory markers.

It is unknown if adults will also present with these or similar findings. Recognition of cases meeting this definition needs to be coupled with rapid reporting to the appropriate public health agency.

There is limited information currently available about risk factors, pathogenesis, clinical course, and treatment for MIS-C. CDC is requesting HCP report suspected cases to public health authorities to better characterize this newly recognized condition in the pediatric population.

For additional info, contact **CDC's 24-hour Emergency Operations Center** at 770-488-7100.

EMS implication: NEED SCREENING 12 L ECG on all of these children

References

<https://www.cdc.gov/kawasaki/index.html>

CDC. Emergency Preparedness and Response. (May 14, 2020). Multisystem Inflammatory Syndrome in Children (MIS-C) Associated with Coronavirus Disease 2019 (COVID-19).

https://emergency.cdc.gov/han/2020/han00432.asp?deliveryName=USCDC_511-DM28431



NO TRANSPORT CALLS Initiated by EMS: See **Appendix J:** NT forms (English & Spanish) Rev. 5-25-20
 Refusal of transport calls: Follow all elements in R6: Refusal of Service Policy

During COVID-19 pandemic, hospitals may become overwhelmed with pts, requiring EMS to consider alternative options for disposition of pts who would otherwise be transported under normal circumstances.

Remember, **these patients can crash rapidly and without warning**

Before accepting a refusal of service or determining that a patient meets criteria for No Transport - **patient must meet the following criteria:**

Clinical assessment: See COVID-19 SOP and NT form

- Decisional mental status; normal vital signs for patient (based on age; previous norms)
- Absence of chest pain/pressure; SpO₂ ≥94% on room air
- Normal ventilatory effort; No dyspnea, air hunger; or labored work of breathing (WOB)
- Age <65 + Absence of comorbid conditions / risk factors for severe disease (See page 4)
- Absence of clinical S&S of moderate to severe disease (See below)

Social assessment

- Patient must be capable of safely performing activities of daily living (ADLs)
- Pt must have responsible adult who can assist with recovery or call for help if needed
- Patient should have a separate room for in-place isolation
- Pt must have adequate access to food, meds, and necessities for period of isolation
- Those living with pt must be able to adequately practice protective precautions
- Determine if pt has household members with high risk of COVID complications and morbidity

S&S suggesting moderate to severe COVID-19 illness

Fever > 100° F (may not have a fever)	Abnormal vital signs for pt; severe fatigue or weakness
Shortness of breath; SpO ₂ <94%; ↑ work of breathing	Severe headache or new onset altered mental status
Chest pain; abn. breath sounds/sputum production	Leg pain, asymmetric swelling/loss of distal pulses
Evidence of abnormal clotting (S&S heart attack or stroke)	S&S of sepsis or septic or cardiogenic shock

EMS CAVEATS for Patient DISPOSITION:

- All patients should receive proper care, in the most appropriate setting.
- **INELIGIBLE for NO Transport:** Pt has any of the comorbidities and/or high risk factors for severe illness and/or S&S of moderate-severe disease, and/or is socially unsafe to be left where residing.
- If a physician has asked for transport – pt is high risk – please transport. Refusal must be **AMA**.
- If pt does not require urgent medical evaluation or intervention but additional medical assessment or testing is indicated, they may be instructed to self-transport to a COVID-19 clinic or same day primary care. Transporting an asymptomatic or low/no risk pt just for PCR testing is not required.

EMS shall offer clear guidance to NT patients & those refusing transport regarding:

- Disclosure of risk; expected clinical course of disease; symptomatic treatment
- **Signs and symptoms to trigger further medical evaluation**
- Where further evaluation should be sought (PCP, urgent care, ED)
- Isolation precautions to avoid community spread (See CDC link under Resources and References page)

OLMC NO TRANSPORT or Refusal of Service calls – include the following:

- Patient age; decisional capacity; SAMPLE history; absence of risk factors for severe disease
- Chief complaint; S&S; full set of VS (+measured temp & SpO₂); lung sounds unless refused by pt
- Confirmation that social assessment/environment meets CDC requirements for shelter in place (See Reference page)

Documentation: In addition to all clinical and social assessments -

Confirm that pt/legal representative has consented to EMS signing the **NO TRANSPORT or Refusal form** or the NT or Refusal screens in Image Trend. Agencies may take photo of signed paper form and attach electronically to ePCR. Delete photo from electronic device.



Processing/documenting Triple Zero patients with suspected COVID-19

- County health departments may not be prepared to give EMS clear direction on disposition of the deceased. Explain your situation and get the name and title of the person to whom you are communicating.
- County coroners / medical examiners may not be willing to come to the scene, do not want all the bodies for autopsy, and may simply release the body to you pending removal by a funeral home. Get the name of the coroner/medical examiner releasing the body.
- Local law enforcement may be reluctant to do body removals if not transporting for an autopsy. Nor do they appropriate body bags in which to place the remains. Get the name and star number of a law enforcement officer on scene who may helping you make the notifications of the Health Department and/or Coroner/Medical Examiner's office.
- Document all names in the narrative section of the PCR and what they directed you to do.
- Family members are understandably upset and likely not in a good state of mind for us to just leave the deceased in the home and wait for them to make arrangements for removal by a funeral home. Please remember the importance of the **HUMAN SIDE OF CARING** – this is our strength!

Work with on-scene family members to identify a funeral home they would wish to use or predetermine a funeral home in your jurisdiction that would be willing to be available to you for urgent removals until the family can make up their mind. Assist them in making phone calls and work with family members who seem in crisis for a mutually acceptable disposition plan based on your staffing resources. Transport to a hospital should be a last resort.

Deceased individuals with confirmed COVID-19 and those who had **developed fever and/or symptoms of acute respiratory illness (e.g., cough, difficulty breathing) prior to death** must be made known to the local COUNTY HEALTH DEPARTMENT for direction on disposition before EMS leaves the scene.

- IDPH has issued a Siren Alert regarding postmortem testing and autopsy guidelines for these decedents.
- “Factors that support testing: documented COVID-19 infections, known community transmission, contact with a known COVID-19 case, or being a part of a cluster of respiratory illness in a closed setting (e.g., a long-term care facility).”
- “Medical examiners, coroners, and other healthcare professionals should use their judgment to determine if a decedent had signs and symptoms compatible with COVID-19 during life and whether postmortem testing should be pursued. Testing for other causes of respiratory illness (e.g., influenza) is strongly encouraged.”
- It is our **preference that the bodies of deceased individuals are NOT transported to a hospital** at this time.
- Work with the local health department, medical examiner/coroner; law enforcement and funeral homes to determine to whom the remains are to be released.
- If a high risk person is transported after death, IDPH recommends **placing them into 2 body bags**. Check your supplies and make sure you are able to get 2 bags to the scene if needed.

Corona Virus Disease (COVID-19) EMS PLAYBOOK PCR DOCUMENTATION



Emergency (paper) PCR: See Appendix I: Given the difficulty of maintaining social distancing in most hospital paramedic chart rooms, on March 19th, the System issued an Emergency paper PCR (Rev. 5-25-20) designed to serve as a temporary EMS record to be left with the receiving hospital ED staff until the crew can return to their vehicle/ quarters and complete the Image Trend ePCR. Fax to the ED ASAP.

Guidelines for completing an Image Trend PCR on a person with suspected or confirmed COVID-18

Reference: Webinar slides Page, Wolfberg and Wirth (PWW) – April 17, 2020

(See <https://www.pwwemslaw.com/>)

Document the following for all possible COVID-19 pts (transported and NT):

- **Who exactly entered the scene** and their distance from a patient or contacts
 - Level of contact that each caregiver had with the patient
 - “No contact w/patient”
 - “Provided direct patient care”
 - Note all potential exposures.
- **Who was there?** Identify agencies, personnel, and all family members and bystanders present.
- Complete description of **PPE and isolation precautions used by EMS personnel**
Documenting PPE used serves two purposes:
 - Documents your compliance with self-protection infection control practices
 - Protects EMS personnel from claims they may have contaminated a patient or others
- **Patient ASSESSMENT & mgt per NWC EMSS IMC + COVID-19 SOP**
 - What does the patient generally look like? Level of distress/acuity?
 - **SpO₂ & evidence of hypoxia** before and after O₂ administration.
 - **Source control measures when giving O₂:** Document steps used to correct hypoxia and prevent aerosolization and infecting others - surgical mask over a NC, NRM, or BVM with HEPA filter when ventilating patients in severe respiratory distress
 - **Patient history:** Present or recent (SAMPLE; OPQRST); ask about and document usual and *unusual* COVID-19 S&S; co-morbidities and risk factors.
 - **Physical exam:** Assessment must support treatment given and patient disposition
Document full set of VS (including temperature); breath sounds in all lung fields; anterior and posterior. Note presence of wheezes, crackles - specific location. Note glucose level.
 - **Treatment given;** why indicated
 - **Reassessment** after EMS interventions
 - **Patient disposition:** TRANSPORT or NO TRANSPORT. Complete NO TRANSPORT form if appl.
 - **OLMC** contact; Medical direction given
- **NARRATIVE**

EMS documentation in the ePCR and narrative must be detailed and accurate to make the case why a COVID-19 patient cannot be safely transported by other means.

Example of acceptable charting in narrative to prove Medical Necessity:

 - “Pt confirmed COVID-19 positive on 3/30/20 via positive test result from county health dept.
 - Infectious disease protocols in place.
 - Crew in full PPE and isolation precautions being followed.
 - Patient currently complaining of SOB with SpO₂ of 88%.
 - Patient has fever of 102.2° F and experiencing dry cough.
 - Patient placed on O₂ at 15 L/NRM and transported to isolation section of ED.”

How was the patient’s known or suspected COVID-19 status determined?

 - Positive test? What facility? When was patient tested?
 - “Presumptive positive - waiting for test results?”
 - PUI based on S&S
 - Exposure to a known COVID-19 patient? When?

If you suspect COVID-19 as a primary or contributing factor, document the term “COVID” somewhere in the clinical narrative so it becomes a searchable term.

PRIMARY and SECONDARY IMPRESSIONS (Image Trend)

- **Provider Primary Impression** should be the "patient's primary problem or most significant condition which led to the management given to the patient (treatments, medications, or procedures), so in a COVID-19 patient it should be the signs/ symptoms that the patient was treated for (shortness of breath, fever, etc.)
- **Provider Secondary Impression:** patients with suspected/confirmed COVID-19 or with signs/ symptoms of a viral illness that are suspicious of being coronavirus-related:
 - COVID-19 Confirmed by testing
 - Patient with known or suspected exposure to COVID-19
 - Pt with signs/symptoms consistent with infectious disease but unknown exposure to COVID-19

DOCUMENTING SIGNATURES OBTAINED

VERBAL CONSENT: CMS announced on April 13, 2020, that it is improper to ask physically and mentally decisional patients or surrogate decision makers for patients with suspected or known COVID-19 illness to handle styluses, pens, and other devices or equipment used to obtain signatures on EMS forms due to the risk of infection. They authorize ambulance crews to obtain "verbal consent" from the patient to sign on the patient's behalf.

Process suggested by PWW (4-20-20): Depends on the form provided or electronic screen format. Image Trend Software templates allow for patient verbal consent attestation.

Patient/surrogate line is left blank. Check the box if patient/surrogate gave verbal consent for EMS to sign on their behalf. Then, sign your own name below and have one EMS witness sign.

In the **narrative section of the PCR, document the following:**

1. That the patient had suspected or known COVID-19 illness (clinical documentation must support that conclusion); **and**
2. That verbal consent of the patient or surrogate decision-maker to sign on their behalf was obtained by the EMS crew.

CDC set preliminary standards for digital COVID-19 contact tracing tools: The CDC issued [preliminary guidance](https://www.cdc.gov/coronavirus/2019-ncov/downloads/php/prelim-eval-criteria-digital-contact-tracing.pdf) for the development of contact tracing apps that can help slow the spread of COVID-19. The guidance defines minimum and preferred characteristics of digital contact tracing tools "to help health departments overcome one or more obstacles in the COVID-19 contact tracing workflow." CDC said it based this resource on preliminary research and targeted discussions with contact tracing and informatics experts across county, state and federal government and other stakeholders in the areas of case management and proximity tracking. Additional fields have been activated in the Image Trend software to allow EMS to enter some of the needed data to make future contact tracing easier. See: <https://www.cdc.gov/coronavirus/2019-ncov/downloads/php/prelim-eval-criteria-digital-contact-tracing.pdf>

Corona Virus Disease (COVID-19) EMS PLAYBOOK CPR cards / Provisional Certificates



AHA CPR CARD Extensions

For Instructor Cards expiring beginning in March 2020:

- AHA Instructor cards will be valid for 120 days beyond their recommended renewal date.
- Instructor candidates will have 10 months from the completion of their Instructor course to complete monitoring.

For AHA Provider Cards expiring beginning in March 2020:

- AHA Provider Cards will be valid for 120 days beyond their recommended renewal date.
- Management of this extension, and any record-keeping, will be the responsibility of the Training Center. If you have any questions regarding the NCH training center implementation of these guidelines, please contact the CTC Coordinator (Dara Sordo at dsordo@nch.org).

IDPH waiver guidelines and Provisional Certificates during COVID-19 pandemic: (Rev 5-7-2020)

- IDPH is authorizing EMS Systems to grant Provisional Certificates to eligible persons until **6-30-2021**.
- Candidates eligible for a Provisional EMS Certificate: EMT, A-EMT, EMT-I, Paramedic, TNS, ECRN, EMD, PHRN, PHPA, PHAPN students or expired EMS personnel. Some exclusions do apply.
 - Paramedic students who have completed the last semester of class (EMS 216) but have not completed the Field Internship capstone experiences.
 - EMT students who have completed the last semester of class (EMS 113) but have not yet completed the ED and/or Field ride time experiences;
 - ECRNs who have completed the academic portion of the class without completing required field ride time)
 - PHRNs, PHPA, PHAPN Seeking Provisional Certification (without completing required ALS calls as required in the rule)
 - Previously licensed EMS personnel whose licenses have been expired for less than 60 months as of 3-23-20.
- Provisional EMS Certificates are NOT an IDPH State License. This is only an EMS System approval recognized by IDPH and every effort should be made to obtain state licensure as classes and testing become available during the COVID-19 pandemic response.
- Candidates eligible for a Provisional EMS Certificate must **pass EMS system entrance requirements** for that level of participation **after passing a refresher course** (didactic, so skills). NCH EMT and paramedic students must pass the course summative final exams. The EMSS must validate that the person is knowledgeable and has the skills to perform based on the level of certification or licensure desired. The **System should test for any skills needed**.
- They must also have a current CPR for HC provider card (with grace period of 120 days since expiration) and have no felony convictions that would exclude them from holding an EMS license.
- Anyone granted a certificate under this special waiver shall only practice with and under the direct supervision or another state-licensed EMS professional at or above the level of the licensee. Two individuals granted a certificate under this special waiver shall not practice together and must be paired with a regular licensee.
- The System must submit a plan amendment to the REMSC for approval
- The System must submit a roster with the names of the personnel who successfully complete the system entrance requirements. The class roster will include:
 1. Name of expired licensee, expired license number, phone number, social security number, level of function approved by the EMS System for this individual and date approved.
 2. Name of the student, class site code, phone number, social security number level of function approved by the EMS system for this individual and date approved.
 3. Name, system number, EMS MD signature of EMS System
- Provisional certificate approval shall require full compliance with all: (i) DPH and (ii) EMS system requirements.

Corona Virus Disease (COVID-19) EMS PLAYBOOK EMS EDUCATION Programs



On April 29, 2020, the National Highway Traffic Safety Administration (NHTSA) published a document titled, **Emergency Medical Service (EMS) Education Pipeline** (Appendix K) that listed modifications to EMS education endorsed by stakeholder organizations due to the restrictions imposed by the pandemic.

These organizations include the National Registry of Emergency Medical Technicians (NREMT), the National Association of EMS Educators (NAEMSE), the Committee on Accreditation for the EMS Professions (CoAEMSP), the Commission on Accreditation for Pre-Hospital Continuing Education (CAPCE), the National Association of State EMS Officials (NASEMSO), the International Association of Fire Chiefs, the American Ambulance Association, the National Association of Emergency Medical Technicians (NAEMT), the American College of Surgeons (ACS), and the Interstate Commission for EMS Personnel Practice.

Based on the Pipeline document plus allowances made by CoAEMSP and IDPH, also on April 29, 2020, we issued our action plans for class platform changes, content delivery, scheduling, student progression through the program, modifications to the hospital clinical and field internship experiences; documentation requirements; communicating with students, stakeholders, faculty and IDPH; best practice models to keep students engaged during virtual learning; administering summative assessments/ evaluations while restrictions are in place; and plans to resume Validation testing for incoming fall paramedic class cohort.

IDPH and CoAEMSP have declared that **educational programs may employ a broader array of approaches in determining competency in didactic, laboratory, clinical, and field experiences/internships during the pandemic restrictions** including simulations, case studies, and scenarios as well as the adjustment of minimum competencies to satisfy the requirements of these standards for EMS educational programs through December 31, 2020. (Last update: 20200507_IDPH_COVID-19_EMS_Updates slide deck.)

Directives regarding business continuity of critical infrastructure and education of essential workers (IL Dept. of Commerce and Economic Opportunity (DCEO) Essential Businesses and Operations FAQs (5/2/20) (See <https://www2.illinois.gov/dceo/Documents/Essential%20Business%20FAQ.pdf>), coupled with the NHTSA document, IDPH authorizations for contingency staffing, expanded EMT scope of practice and Provisional Certificates; approval by our EMS MD, and endorsement of our Advisory Committee make these steps possible.

EMT class changes

- Transitioned to virtual on line classes on 3-19 with participation by all students.
- Students with complete files who successfully pass EMS 213 and the summative final written exam without completing the hospital and field experience clinical rotations shall be awarded a **System Provisional EMT Certificate** per IDPH guidelines that will authorize them to temporarily work as EMTs under the direct supervision of a qualified partner during the declared emergency. (See previous page)
- See Playbook section on Staffing and Credentialing for Image Trend activation.
- Patient care contacts completed and documented during employment as a Provisional EMT will be evaluated, and if approved, accepted in lieu of hospital and field experiences during the pandemic.
- Students, who choose not to become employed with a Provisional EMT Certificate, will have one month to complete all course clinical requirements when limitations on student participation are lifted and hospital clinical rotations and Field Internships are reinstated.
- After completing all course requirements, graduates will be authorized to sit for the NREMT written exam. Instructions will be sent for signing up with the NREMT. If passed, they will be licensed as an IL EMT. All Online Proctored examinations for EMTs are scheduled through Pearson Vue's OnVUE system. See About OnVUE: <https://www.youtube.com/watch?v=h-0E9jGEOa> and the OnVUE Testing Experience: <https://www.youtube.com/watch?v=Gm1PqdbwBP0>

Paramedic class changes

The paramedic class had completed EMS 210, 211, 212, 213, 217, 218, and had just started EMS 215 (Field Internship) when classes were suspended in mid-March. The last class in the program is EMS 216.

On April 29, we issued instructions to students regarding the resumption of on-line academic classes for EMS 216. Students already employed as EMTs by System Agencies were given expanded scope of practice ALS privileges commensurate with those awarded to PM students during the Field Internship. Upon completion of EMS 216 and meeting IDPH criteria, they were awarded a System Provisional Paramedic Certificate that authorizes them to temporarily work as provisional paramedics, under the direct supervision of a qualified partner, until the Capstone and graduation requirements are met and NREMT testing and Illinois licensure can be accomplished.



ALL Paramedic students must:

- Starting May 4th: Complete pre-class assignments to watch selected videos and complete homework that can be accomplished during the assigned day but at times determined by the student.
- Starting May 11th: Attend all portions of the virtual on line videoconference classes M-F that must be attended on the scheduled dates and times using an electronic device; complete assignments on time
- Successfully complete, submit, and pass the student-generated (completed at home) video simulations
- Successfully complete **six live summative psychomotor exam stations** (also testing leadership skills) done at NCH with individual appointments. These will serve as the program's summative practical exam and will also be counted toward the Capstone portfolio.
- Successfully complete the final summative written exam

Electronic device and internet requirements:

- Students must have a reliable laptop or desktop computer with camera and speaker capabilities (do not use a cell phone) and a reliable high speed internet connection that will allow them to log in to a Zoom meeting or Google classroom. They should familiarize themselves with where all the tools are located and which buttons to use. They should know which search engines work best with each platform for their device and internet plan. Have a hot spot or Wi-Fi that is working and can be accessed as a backup. Computer must be fully charged or plugged in for continuous power throughout the class.
- NCH faculty hosting the virtual class must clearly see each student's face on video feed throughout the class to ensure engagement and pick up on visual learning cues just like in an actual classroom
- The student's video window must not be minimized or blacked out, and must be in the forefront at all times
- Students must be able to type into the chat feature or answer polling questions during class.
- Students must have a microphone that will allow them to be unmuted and to ask and answer questions or participate in class conversations.
- Students must be able to create and submit a video recording of themselves with clear visual and audio quality performing a simulated assessments (at home)

We value student safety! Precautions for the practical exam stations conducted at NCH:

- All students will be given a specific time for testing and must not be early or late.
- Upon arrival at the hospital, all will be asked to do the following:
 - Wear a cloth or surgical face mask in compliance with NCH universal masking policies.
 - Answer health screening questions and be screened for a fever using a non-contact thermometer
 - Refrain from testing if experiencing any S&S of COVID-19 or other communicable disease.
 - Maintain 6 feet of social distance from each other and faculty members.
 - Perform hand hygiene via washing with soap and water for at least 20 seconds prior to testing.
- Students will wear gloves in addition to masks while testing. Faculty will also wear masks.
- When testing is complete, they will appropriately remove and dispose of the gloves, complete hand hygiene, and leave the building immediately.
- All manikins and equipment will be cleaned and disinfected between students.

Modified path to licensure S2020 class

While we cannot fully eliminate the need for live patient encounters with demonstrated team leadership skills to meet Capstone requirements, we can modify the number of real patients required by substituting carefully designed simulated calls until October 31, 2020. For S20 class only, we are combining phases 1 and 2 of the field internship and modifying the options for completing those calls by adding simulated scenarios requiring higher order thinking and leadership ability to the capstone competency assessments.

Amended Capstone experience and Student Portfolio S2020: Each student must complete the following:

- 6 scripted self-videotaped ALS assessments graded as acceptable
- 6 complex simulated ALS calls demonstrating leadership skills (final practical exam) with passing grade
- 8 real-patient complex ALS calls demonstrating critical thinking and problem solving and entry-level competence as a PM plus team leadership skills. Will accept calls completed while working under EMT expanded scope privileges or a Provisional Paramedic Certificate. See options table next page.
- Successful completion of amended minimum numbers of pt contacts by age and diagnoses, and skill competencies tracked through the labs, clinicals and capstone experience in Fisdap software. Minimums approved by EMS MD/endorsed by Advisory Committee (CoAEMSP **Appendix G**).



Paramedic portfolio – Real patient experience options

Option 1	Option 2	Option 3
<p>Student chooses not to do any ride time to complete portfolio during pandemic</p> <p>They elect to delay employment, internship, graduation and NREMT testing until pandemic restrictions are lifted in our area of Illinois</p> <p>Must complete modified internship requirements within one month of restrictions being lifted with host agency.</p>	<p>Student currently employed as an EMT by a System Provider Agency</p> <p>Eff. April 29th: Granted expanded scope of practice ALS privileges when working with and under the direct supervision of a qualified partner (fully licensed PM who is credentialed in the System as a Peer II, III, or IV educator or is an approved preceptor).</p> <p>Neither of these options is considered a resumption of the Field Internship under student enrollment limitations at Harper College. Both allow individuals to get credit for calls during which they are authorized to provide ALS care and serve as the team leader.</p> <p>Must do 100% QI monitoring on calls where they performed ALS skills, served as the team leader, and were evaluated as a competent entry level paramedic.</p> <p>QI documentation: Complete the critique form for each call (signed by the qualified partner) and submit with blinded PCRs to Connie Mattera or the designated HEMSC/educator.</p> <p>If a submitted call meets criteria, it will be credited towards the student's Appendix G requirements for the Capstone experience.</p> <p>Require at least 8 acceptable real patient ALS team lead calls</p> <p><u>Outstanding patient contacts and skills may be simulated: See System memo 394.</u></p>	<p>Student not currently employed by a System Provider Agency as an EMT:</p> <p>Successfully complete EMS 216.</p> <p>Gain System Provisional Paramedic (PP) Certificate</p> <p>Gain employment with a System Provider agency as a PP or be <u>accepted as a PP Apprentice</u> and be assigned with and under the direct supervision of a qualified partner (same as option 2).</p>

If the complete body of student work and summative evaluation instruments clearly show that they have achieved the class primary program goal and required terminal competencies; the student will graduate and be eligible to take the NR exam.

"To prepare competent entry-level Paramedics in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains with or without exit points at the Advanced Emergency Medical Technician and/or Emergency Medical Technician, and/or Emergency Medical Responder levels." (CoAEMSP, 2019)

Known now:

- **Individual graduation dates** will fully depend on when a student is able to complete EMS 216 and the required Capstone experience.
- **NREMT practical exam** timing depends on when we are able to have more than 10 people in one space and NREMT practical testing resumes. We have a date secured in ~~June~~ and on July 17, 2020.
- Graduates will be authorized to take the **NREMT cognitive exam**. A limited number of testing sites are open in the Chicago metro area.
- With current limitations on the practical exam, graduates may take the **NREMT written as an assessment exam**. A passing score makes them eligible for **Illinois licensure as a paramedic**. Those that take the written only are not eligible for NREMT certificates or registration. When the practical exam is also completed, they will earn NREMT certification.

Validation testing for incoming paramedic applicants has resumed. See System website. www.nwcmss.org / Education tab

Corona Virus Disease (COVID-19) EMS PLAYBOOK Continuing Education



Philosophical statement re: best practice models in CE:

While we worked rapidly and responsibly on contingency planning due to the constraints of the COVID-19 pandemic, it is our strong conviction that high standards of excellence in education, patient care, and professional performance should not be compromised until a crisis situation exists.

It remains our assertion based on educational literature that a live, face to face classroom provides the most effective method of conducting EMS entry level and continuing education classes.

"Education is the process of facilitating learning, or the acquisition of knowledge, skills, values, beliefs, and habits" (Forest, 2019).

Benefits of live; face to face instructions: Engagement, focus, and improved understanding

E-learning for many in the past has essentially just involved unidirectional communication while watching a live video stream or playback or reading texts/slides, graphics and bullet points that are BORING and then submitting assignments. The nature of it allows many distractions to easily affect the learner unless strongly self-disciplined; the program ensures active ongoing engagement with individual participants providing input and answers as the class progresses, and observational strategies that ensure the learner is paying full attention at all times. Many persons using e-learning (or participating in virtual meetings) will end up 'multi-tasking' or zoning out because they start doing something else while listening in and it affects what they actually gain from the offering.

With well-done face-to-face education, multi-modal strategies are used to keep participants involved and engaged, thus retaining attention and encouraging better long-term learning.

Pain points of on-line learning for us to overcome:

- Lack of learner motivation
- It's hard for some to learn this way
- It's unclear what to learn currently and moving forward;
- It's hard to find the right resources to achieve learning goals and objectives;
- It's difficult to figure out how to practically apply knowledge acquired;
- It's hard to catalog information for later retrieval and retention and stay consistent with the application of knowledge;
- It lacks proper mentorship and is difficult to meet various learning styles and abilities
- **Short attention spans:** We will look carefully at how the learner must interact with our content. They will have opportunity to use the information, make decisions, and get feedback.
- Wasted time **presenting content irrelevant to the learner; sharing information that is already available in other places** (internet, System website). A big part of the new "normal" will be holding us all accountable for learning how to find resources already available to us.
- Technology and infrastructure limitations
- Budget considerations for purchasing additional electronic devices

Timeline of NWC EMSS CE responses to pandemic restrictions for this academic year:

- 3-18-20: Face to face CE classes suspended when initial shelter in place executive order issued. March CE was suspended for last half of the month. (System memo #385)
- 4-20: Social distancing and shelter in place restrictions continued – no CE classes held in April. Two CE hours excused and annual required hours for paramedics decreased from 30 to 28.
- 5--20 A CE module on **Environmental Emergencies** was issued as an independent or group study packet along with multiple videos created by Dr. Jordan that presented **cardiac arrest data** and **new CA documentation requirements**.
CE: Up to 3 hours if packet complete +all case scenarios reviewed: time verified by PEMSC

Current situation:

We are poised to see all of Illinois move to Phase 3 of the Restore Illinois Plan at the end of May. However, given the lack of a universally effective treatment protocol or vaccine, we will only return to face to face classes when we can ensure that appropriate precautions are in place for the health and safety of our faculty and participants. Given the persistently high patient numbers in our area, coupled with the high degree of asymptomatic community spread, we will continue remote learning in June and July.

"COVID-19 may steal our comforts of routine, face-to-face interaction, and predictability, but the deepest danger is allowing COVID-19 to rob us of the next generation of innovators..."
(George Fox University).

Corona Virus Disease (COVID-19) EMS PLAYBOOK Continuing Education cont.



March CE Make up: We conducted 6 live streaming classes using Zoom Platform:

June 16, 17, 18 1330-1500

June 22, 23, 24 0930-1100

A link to a class recording will be made available to those who missed the class.

CE credit questions must be submitted for full credit per C2 policy. **No fee for grading.**

Skill delegated to Peer II, III, and IV at agencies: Medical Restraint competency (+1 hr CE)

Electronic device and internet requirements for ZOOM classes:

- Agencies/individuals must have a reliable laptop or desktop computer with camera and speaker capabilities (do not use a cell phone unless needed for camera as a secondary device) and a reliable high speed internet connection that will allow them to log in to a Zoom meeting. They should familiarize themselves with where all the tools are located and access codes for joining the class. Know which search engines work best for full access for your device and internet plan. Have a working hot spot or Wi-Fi that can be accessed as a backup plan. Computer must be fully charged or plugged in for continuous power throughout the class.
- NCH faculty presenting the virtual class must clearly see each room space and participants on a video feed throughout the class to ensure engagement and pick up on visual learning cues.
- The participant's video window must not be minimized or blacked out, and must be in the forefront at all times
- Participants must be able to type into the chat feature or answer polling questions during the live classes and complete those queries in the student handout if watching the recorded event.
- Participants must have a microphone that will allow them to be unmuted and to ask and answer questions or participate in class discussions.

2019-2020 Annual required Paramedic CE Hours: 28

Due date: July 31, 2020

Note: CE from the July 2020 class does not count toward the July 2019-June 2020 Academic year

2019-2020 Annual competencies and maximum hours: allowed:

- **Bloodborne pathogen** and PPE annual review recognized as completed:
May award up to 2 CE hours for review of System memos #382 (2/7) to #392 (4/20) verified by PEMSC
May award up to 3 hours for complete review of the COVID-19 Playbook & updates verified by PEMSC
- 4th quarter **Advanced Airway** competency – due date extended until July 31st (2 hrs for all 4 performed)
- **Restraint competency** - due date extended until July 31st if needed (up to 1 hour)
- **CPR:** Annual competency renewal extended until July 31st (may award up to 3 hours).

July 2020 CE: Virtual learning adaptations continue

TOPIC: Stroke and Seizure

Method: Hybrid, blended approach with 6 live streaming interactive Zoom class plus video from Dr. Jordan on Proning and MIS-C; along with Case studies (agency or independent review)

We will be electronically forwarding a participant handout in advance of the classes to the PEMSCs for them to duplicate for all EMS personnel.

It is expected that attendees will use it for taking notes during the presentation. It is also an expectation, that participants will be answering Chat and polling questions during the live presentation to optimize engagement and augment learning.

Dates: July 13, 14, 15 0930-1100

July 20, 21, 22 1330-1500

If you have a Peer IV educator that usually does your agency's CE, you are welcome to have them conduct the July classes live within social distancing and PPE rules.

Makeup: Will record of one of the classes and make the link available to those who missed the class. The handout will have spaces for participants to provide notes and answer polling questions. Must be complete and submitted to HEMSC for full credit per C2 policy. No fee for grading.



See **S3- ALS/BLS Staffing Requirements** (Rev. 3/27/20) (Appendix H) for language that addresses: Contingency and Crisis staffing options and practice privileges: EMS and ECRN personnel and Changes to System Entry credentialing during pandemic

Temporary System Practice privileges for licensed paramedics and ECRNs

On March 18 (See System memo #385), due to the rapidly evolving pandemic and shelter in place restrictions, Dr. Jordan agreed to give temporary emergency practice privileges in the NWC EMSS without the usual and customary System Entry testing to any licensed paramedic or ECRN currently working in good standing in any EMS System agency or hospital in Region 9 or in pre-identified hospitals and agencies in DuPage County while pandemic restrictions are in place

Paramedic licensees with emergency temporary privileges were intended to serve as backup/support practitioners and NWC EMSS personnel shall ensure that standards of care are met until testing and/or lab restrictions can be lifted and usual System Entry practices can be reinstated.

EFFECTIVE JUNE1, 2020: System Entry - partial restoration to usual procedure

SOP and Policy Manual Self-assessments prior to testing is reinstated for all

Written System entry testing will resume with a maximum of 6 testers each day. We will add additional testing days as needed to catch up on all those who were awarded Temporary Contingency Privileges and new hires. **Due date for catch up testing: July 31, 2020.**

All will be required to observe these disease surveillance, hand hygiene, PPE, and social distancing requirements:

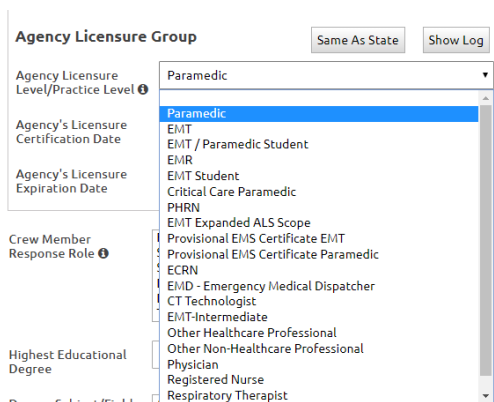
On the day of written testing

- Report to the EMS offices in the 901 Kirchoff building on the first floor wearing a CDC approved cloth or procedure facemask and remain at least six feet apart from other persons. Do not enter the building more than 10 minutes prior to the scheduled exam start. All System entry paperwork must have been submitted electronically in advance.
- Upon entering the building, you will have your temperature taken using a non-touch thermometer. If you have any S&S of illness, you will not be allowed to test on that date.
- We will provide all writing implements and test materials. Do not bring anything else with you.
- You may not have any electronic devices with you during the exam. Either leave them in your vehicle or you will be asked to place them in a container in the secretary's office.
- We will visually observe you perform hand hygiene prior to entrance into the testing environment.
- Candidates will be seated at least 6 feet apart at designated spaces and are asked to leave the building as soon as the exams are turned in. You will be informed of your scores electronically.

System entry practical labs will remain suspended until we can safely accommodate more than 10 persons in one space.

Activating persons holding Provisional Certificates (EMT / Paramedic) in Image Trend

Three new Agency Level License/Practice Level options have been added for NCH students who are allowed to complete course clinical requirements as an agency employee: EMT expanded scope; Provisional EMS Certificate EMT; and Provisional EMS Certificate Paramedic.



Corona Virus Disease (COVID-19) EMS PLAYBOOK Image Trend credentialing activations



EMT Student awarded a Provisional EMT Certificate and hired by an EMS Agency

- Start a new staff record; Demographics: normal entries
- Certifications tab
 - Since they don't have a license yet, **create a 9 integer state license ID #**. Use first 3 letters of their last name followed by their DOB numbers only (MM/DD/YY) (e.g., MTJ122597). IDPH data export only requires that each patient record have one valid number, so we're OK there.
 - **State license level** = Other Healthcare Worker (you can change it when you eventually update the staff record with the license ID and lapse date)
 - **State license lapse date** = leave blank
 - **Agency cert level** = Provisional EMS Certificate EMT
 - **Expiration Date** = 6/30/2021 – updated 5-07-20

PROVISIONAL CERTIFICATEHOLDER EMT Student

Demographics | Certifications | Employment | Account Details | Permission Objects | Elite Viewer | Records | Emergency Contacts | Documents (0)

National Registry Certification Level National Registry Certification Number National Registry Certification Date National Registry Expiration Date	Agency Licensure Group Agency Licensure Level/Practice Level Agency's Licensure Certification Date Agency's Licensure Expiration Date
State Licensure Group State of Licensure State Licensure ID # State Licensure Level State's Licensure Certification Date State's Licensure Expiration Date	Crew Member Response Role Fire Company Scene - Primary Caregiver Scene - Secondary Caregiver Driver - Response Driver - Transport Transport - Primary Caregiver
	Highest Educational Degree Degree Subject/Field of Study

Paramedic student already hired as an EMT and given expanded scope ALS privileges or Paramedic student given Provisional Paramedic Certificate and hired by an EMS Agency

- New or Existing staff record;
- Enter or Update Demographics (old work email addresses will prevent password resets)
- Certifications tab
 - Since they have an EMT license, you can enter (or use) that state license ID #.
 - State license level = EMT (this is just like a paramedic student entry)
 - State license lapse date = enter (or use) existing EMT license lapse
 - Agency cert level = EMT- Expanded Scope or Provisional EMS Certificate Paramedic
 - Expiration Date = 6/30/2021 (IDPH updated 5-7-20)

PROVISIONAL CERTIFICATEHOLDER Paramedic Student

Demographics | Certifications | Employment | Account Details | Permission Objects | Elite Viewer | Records | Emergency Contacts | Documents (0)

National Registry Certification Level National Registry Certification Number National Registry Certification Date National Registry Expiration Date	Agency Licensure Group Agency Licensure Level/Practice Level Agency's Licensure Certification Date Agency's Licensure Expiration Date
State Licensure Group EMT License Info State of Licensure State Licensure ID # State Licensure Level State's Licensure Certification Date State's Licensure Expiration Date	Crew Member Response Role Fire Company Scene - Primary Caregiver Scene - Secondary Caregiver Driver - Response Driver - Transport Transport - Primary Caregiver
	Highest Educational Degree Degree Subject/Field of Study

Corona Virus Disease (COVID-19) EMS PLAYBOOK LEGAL: Exec Orders; Restore IL / CMS



Executive Actions (Federal):

- January 27, 2020 –HHS declares a national Public Health Emergency
- March 1, 2020 – President Trump invokes the National Emergency Act
- April 26, 2020 – HHS extends the Public Health Emergency; currently set to expire June 25, 2020

Centers for Medicare and Medicaid Services Action:

- March 30, 2020 –CMS issues an IFC and additional waivers and flexibilities
- May 19, 2020 – COVID-19 Emergency Declaration Blanket Waivers for Health Care Providers. See <https://www.cms.gov/files/document/summary-covid-19-emergency-declaration-waivers.pdf>

Congressional Action:

- March 6, 2020 –H.R. 6074: Coronavirus Preparedness and Response Supplemental Appropriations Act of 2020
- March 18, 2020 –H.R. 6201: Families First Coronavirus Response Act (FFCRA)
- March 27, 2020 –H.R. 748: Coronavirus Aid, Relief, and Economic Stimulus (CARES) Act
- April 24, 2020 –H.R. 266: Paycheck Protection Program and Healthcare Enhancement Act

National and state emergency declarations were issued to provide additional flexibility and liability protections, including the waiver and/or suspension of certain laws and regulations during the pandemic.

- EMS agencies should ensure that any changes to their operations and standards of care comply with the laws, regulations, and guidelines in their respective jurisdictions. They should also coordinate operational adjustments with relevant state, regional, and local EMS authorities (EMS MD).
- **Federal civil rights laws and regulations are not suspended or waived.** Changes to standards of care, including denials of care, must be made after nondiscriminatory consideration of each situation, free from stereotypes and biases based on disability or age, including judgments about the quality of life, or relative value to society. Under crisis operations may consider achieving best outcomes for largest number.
- **There is never a justification for careless decision making or willful misconduct,** especially in a disaster situation, when pts are at their most vulnerable (Healthcare Resilience Task Force EMS Prehospital Team, 2020).

Gubernatorial Disaster Proclamation issued March 9, 2020; Updated/extended April 30, 2020.

Executive orders available at <https://coronavirus.illinois.gov/s/resources-for-executive-orders>

Executive Order 2020-19: HEALTH CARE FACILITIES, PROFESSIONALS, AND VOLUNTEERS

Declares that health care facilities, professionals, and volunteers are immune from civil liability for any injury or death alleged, unless caused by gross negligence or willful misconduct. [Executive Order 2020-19 \(HTML\)](#) [\(English\)](#)

RESTORE ILLINOIS PLAN: See <https://www.dph.illinois.gov/restore> Moved to phase 4 June 26th

- Regionally driven – knowing that no regional grouping is perfect
Uses existing EMS Regions and allows IDPH to move away from a full-state approach and allows some regions to open if their disease activity is lower and healthcare capacity is sufficient.
- IDPH collaborates with the Dept. of Commerce and Economic Opportunity (DCEO) for guidance for business community to operate safely
- Metrics by region available at www.dph.illinois.gov/COVID19
- <https://www.natlawreview.com/article/cdc-issues-guidelines-reopening>

Sending **EMS vehicles out of state to other disaster hot spots:** See IDPH memo from Ashley Thoele forwarded on 4-14-20; 041320_Authority System Amendments for Providers .docx

Centers for Medicare & Medicaid Services (CMS): Increase Hospital Capacity:

- CMS temporarily permits **non-hospital buildings and spaces (e.g. hotels) to be used for patient care and quarantine sites**, provided the location is approved by the State and ensures the safety and comfort of patients and staff.
- CMS allows hospitals to test/screen patients for COVID-19 at drive-through and off-campus sites.
- During pandemic, EMS can transport pts to a wider range of locations when other transportation is not medically appropriate. These include community mental health centers, federally qualified health centers (FQHCs), physician's offices, urgent care facilities, ambulatory surgery centers, and any locations furnishing dialysis services when an ESRD facility is not available. The NWC EMSS has not activated this option yet.



- Hospital EDs can use **telehealth services** to quickly assess pts to determine the most appropriate site of care, freeing hospital space for those that need it most. New rules ensure that pts can be screened at alternate treatment and testing sites which are not subject to the **Emergency Medical Labor and Treatment Act (EMTALA)** as long as the national emergency remains in force. This will allow hospitals, psychiatric hospitals, and critical access hospitals (CAHs) to screen patients at a location offsite from the hospital's campus to prevent the spread of COVID-19.
- For a complete list of CMS actions, visit the [Current Emergencies Website](#)

The **National Law Review** serve as a hub for information across many legal, health, employer and employee, human resources, and many more industry sectors. They publish hourly updates, seven days a week, to make sure the latest legal information is always available as soon as it is reported. See https://www.natlawreview.com/type-law/coronavirus-news?utm_content=a4b53da0b8c8773d399d7e03e1cacf17&utm_campaign=2020-5-22Coronavirus%20Legal%20News&utm_source=Robly.com&utm_medium=email

HIPAA for EMS and Law Enforcement

Disclosures to law enforcement, EMS, other first responders and public health authorities

We must be aware of all HIPAA guidelines for maintaining patient privacy. Accessing or sharing patient information should be limited to what is necessary to do your job. PHI includes written, electronic and oral communication.

The HIPAA Privacy Rule permits a covered entity to **disclose the protected health information (PHI)** of an individual who has been infected with or exposed to, COVID-19, with law enforcement, EMS, other first responders, and public health authorities without the individual's HIPAA authorization, in certain circumstances:

- When the disclosure is needed to provide treatment. Ex: HIPAA permits a covered skilled nursing facility to disclose PHI about an individual who has COVID-19 to EMS personnel who will provide treatment while transporting the person to a hospital ED. 45 CFR 164.502(a)(1)(ii), 45 CFR 164.506(c)(2).
- When such notification is required by law. Ex: HIPAA permits a covered entity, such as a hospital, to disclose PHI about an individual who tests positive for COVID-19 in accordance with a state law requiring the reporting of confirmed or suspected cases of infectious disease to public health officials. 45 CFR 164.512(a).
- To notify a public health authority in order to prevent or control spread of disease. Ex: HIPAA permits a covered entity to disclose PHI to a public health authority (such as the Centers for Disease Control and Prevention (CDC), or state, tribal, local and territorial public health departments) that is authorized by law to collect or receive PHI for the purpose of preventing or controlling disease, injury, disability, including for public health surveillance, public health investigations, and public health interventions. 45 CFR 164.512(b)(1)(i), 45 CFR 164.501.
- When first responders may be at risk of infection. A covered entity may disclose PHI to a first responder who may have been exposed to COVID-19, or may otherwise be at risk of contracting or spreading COVID-19 if the covered entity is authorized by law, such as state law, to notify persons as necessary in the conduct of a public health intervention or investigation. ED: HIPAA permits a covered entity health department, in accordance with a state law, to disclose PHI to a police officer or other person who may come into contact with a person who tested positive for COVID-19, for purposes of preventing or controlling the spread of COVID-19. 45 CFR 164.512(b)(1)(iv),
- When the disclosure of PHI to first responders is necessary to prevent or lessen a serious and imminent threat to the health and safety of a person or the public, when such disclosure is made to someone they believe can prevent or lessen the threat, which may include the target of the threat. Ex: HIPAA permits a covered entity, consistent with applicable law and standards of ethical conduct, to disclose PHI about individuals who have tested positive for COVID-19 to EMS personnel, child welfare workers, mental health crisis services personnel, or others charged with protecting the health or safety of the public if the covered entity believes in good faith that the disclosure of the information is necessary to prevent or minimize the threat of imminent exposure to such personnel in the discharge of their duties.



General Considerations: Except when required by law, or for treatment disclosures, a covered entity must make reasonable efforts to limit the information used or disclosed under any provisions listed above to that which is the “minimum necessary” to accomplish the purpose of the disclosure. 45 CFR 164.502(b). In some cases, more than one provision of the HIPAA Privacy Rule may apply to permit a particular use or disclosure of PHI by a covered entity. The illustrative examples below involve uses and disclosures of PHI that are permitted under 45 CFR 164.512(b)(1), and/or 164.512(j)(1), depending on the circumstances.

Example: A covered entity, such as a hospital, may provide a list of the names and addresses of all individuals it knows to have tested positive, or received treatment for COVID-19 to an EMS dispatch agency for use on a per-call basis. The EMS dispatch center (even if it is a covered entity) would be allowed to use information on the list to inform EMS personnel who are responding to any particular emergency call so that they can take extra precautions or use PPE.

Discussion: Under this example, a covered entity should not post the contents of such a list publicly, such as on a website or through distribution to the media. A covered entity under this example also should not distribute compiled lists of individuals to EMS personnel, and instead should disclose only an individual’s information on a per-call basis. Sharing the lists or disclosing the contents publicly would not ordinarily constitute the minimum necessary to accomplish the purpose of the disclosure (i.e., protecting the health and safety of first responders from infectious disease for each particular call.)

Example: A 911 call center may ask screening questions of all callers, for example, their temperature, or whether they have a cough or difficulty breathing, to identify potential cases of COVID-19. To the extent that the call center may be a HIPAA covered entity, the call center is permitted to inform a police officer being dispatched to the scene of the name, address, and screening results of the persons who may be encountered so that the officer can take extra precautions or use PPE to lessen the officer’s risk of exposure to COVID-19, even if the subject of the dispatch is for a nonmedical situation.

Discussion: Under this example, a 911 call center that is a covered entity should only disclose the minimum amount of information that the officer needs to take appropriate precautions to minimize the risk of exposure. Depending on the circumstances, the minimum necessary PHI may include, for example, an individual’s name and the result of the screening.

<https://www.hhs.gov/hipaa/for-professionals/special-topics/hipaa-covid19/index.html>

Information about HIPAA Privacy and COVID-19 is available at <https://www.hhs.gov/sites/default/files/february-2020-hipaa-and-novel-coronavirus.pdf> - PDF.

[Disclosures of PHI to Law Enforcement, Paramedics, Other First Responders and Public Health Authorities - PDF*](#) (printable version)

Ethical considerations

- Standards of care at all levels of care should adhere to core ethical principles, including fairness, duty to care, duty to steward resources, transparency in decision-making, consistency, proportionality, and accountability.
- When resource scarcity reaches crisis levels, clinicians are ethically justified to use available resources to sustain life and well-being to the greatest extent possible for the greatest number possible.
- EMS MDs should synthesize relevant ethical considerations into clear guidance for EMS agencies and clinicians on resource allocation and clinical decision-making in the context of crisis standards of care (Healthcare Resilience Task Force Emergency Medical Services (EMS) Prehospital Team, 2020).

Communications: EMS clinicians should be provided clear guidance by their medical director on:

- Relevant changes to EMS laws, regulations, policies, and procedures; including changes in legal protections for providers.
- How to apply changes to standards of care in an informed and consistent manner, in order to ensure that decisions are reasonable under the circumstances.

Corona Virus Disease (COVID-19) EMS PLAYBOOK Addtl References & Resource Links



Also see System Website: www.nwcmss.org / Standards of Practice COVID-19 / and Infection Control References

CDC

Updated frequently. <https://www.cdc.gov/coronavirus/2019-nCoV/hcp/index.html>

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

<https://www.cdc.gov/coronavirus/2019-ncov/if-you-are-sick/steps-when-sick.html>

CDC INFO: [website](#) | 1-800-CDC-INFO (1-800-232-4636) | TTY: 1-888-232-6348

Evaluating and Testing Persons for Coronavirus Disease 2019 (COVID-19) –

<https://www.cdc.gov/coronavirus/2019-ncov/hcp/clinical-criteria.html>

Current recommendations if your agency has someone that tests positive for COVID-19:

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

Current recommendations for implementing homecare:

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

[Interim Guidance for Emergency Medical Services \(EMS\) Systems and 911 Public Safety Answering Points \(PSAPs\) for COVID-19 in the United States](#)

[CDC Strategies for Optimizing the Supply of PPE](#)

[CDC Release of Stockpiled N95 Filtering Facepiece Respirators Beyond the Manufacturer-Designated Shelf Life](#)

IDPH

<https://www.dph.illinois.gov/covid19>

Illinois Emergency Operations Plan (IEOP):

<https://www2.illinois.gov/iema/Preparedness/Pages/IEOP.aspx>

"Emergency Support Function 8 (ESF-8) Plan," Feb. 2018:

<http://www.dph.illinois.gov/sites/default/files/publications/idph-esf-8-plan-2018-final-public-version-032718.pdf>

"ESF-8 Plan: Catastrophic Incident Response Annex," March 2018:

<http://www.dph.illinois.gov/sites/default/files/publications/catastrophic-incident-response-annex-052218.pdf>

[20200327_COVID-19_Guidance_Transporting_High_Risk_Patients_for_Routine_Treatments](#)

www.siren.illinois.gov

"Guidance Pregnant Women" SIREN Document Library under Documents/HAN Notifications/IDPH/ COVID-19 (2019 nCoV): www.siren.illinois.gov

NHTSA

<https://www.cms.gov/outreach-education/partner-resources/coronavirus-covid-19-partner-toolkit>

Resources for EMS: https://www.ems.gov/projects/coronavirus_covid-19_resources.html

https://www.ems.gov/pdf/Federal_Guidance_and_Resources/Crisis_Standards_of_Care/COVID-19_Considerations_for_EMS_Crisis_Standards_of_Care.pdf

NIOSH/OSHA/CMS

[NIOSH Workplace Safety and Health Topic website](#)

[NIOSH Interim Training for Emergency Responders: Reducing Risks Associated with Long Work Hours](#)

[Interim Guidance for Businesses and Employers to Plan and Respond to Coronavirus Disease 2019 \(COVID-19\)](#)

[OSHA COVID-19 website](#)

<https://www.ems.gov/pdf/ASPR-EMS-Infectious-Disease-Playbook-June-2017.pdf>

<https://covid19treatmentguidelines.nih.gov/introduction/>

CMS Hospitals without Walls – See System memo #389

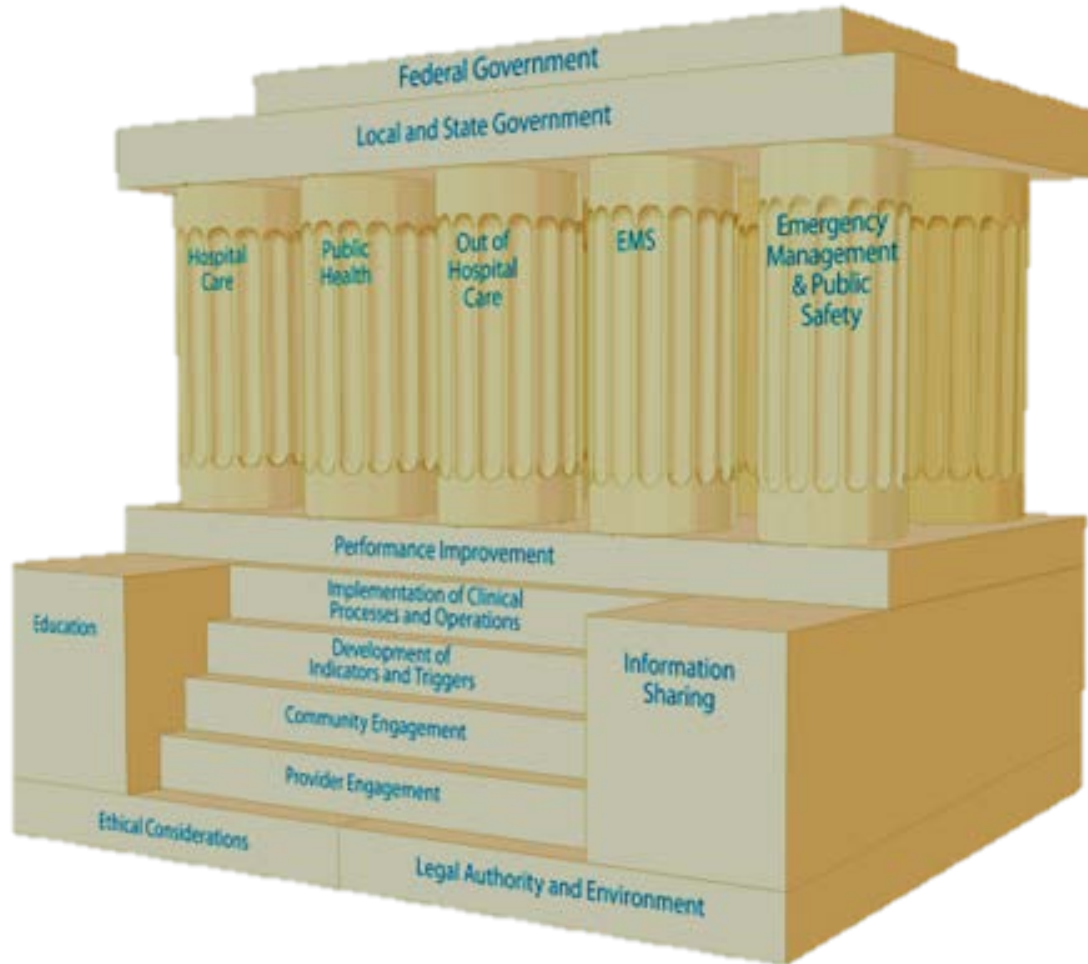
<https://www.hhs.gov/hipaa/for-professionals/special-topics/hipaa-covid19/index.html>

HIPAA Privacy and COVID-19: <https://www.hhs.gov/sites/default/files/february-2020-hipaa-and-novel-coronavirus.pdf> - PDF.

[Disclosures of PHI to Law Enforcement, Paramedics, Other First Responders and Public Health Authorities - PDF*](#) (printable version)

National Academies of Sciences, Engineering, and Medicine. (2020). *Crisis Standards of Care: Ten Years of Successes and Challenges: Proceedings of a Workshop*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/25767>

Building blocks and essential infrastructure of integrated healthcare planning and operations
(NAP, 2012)

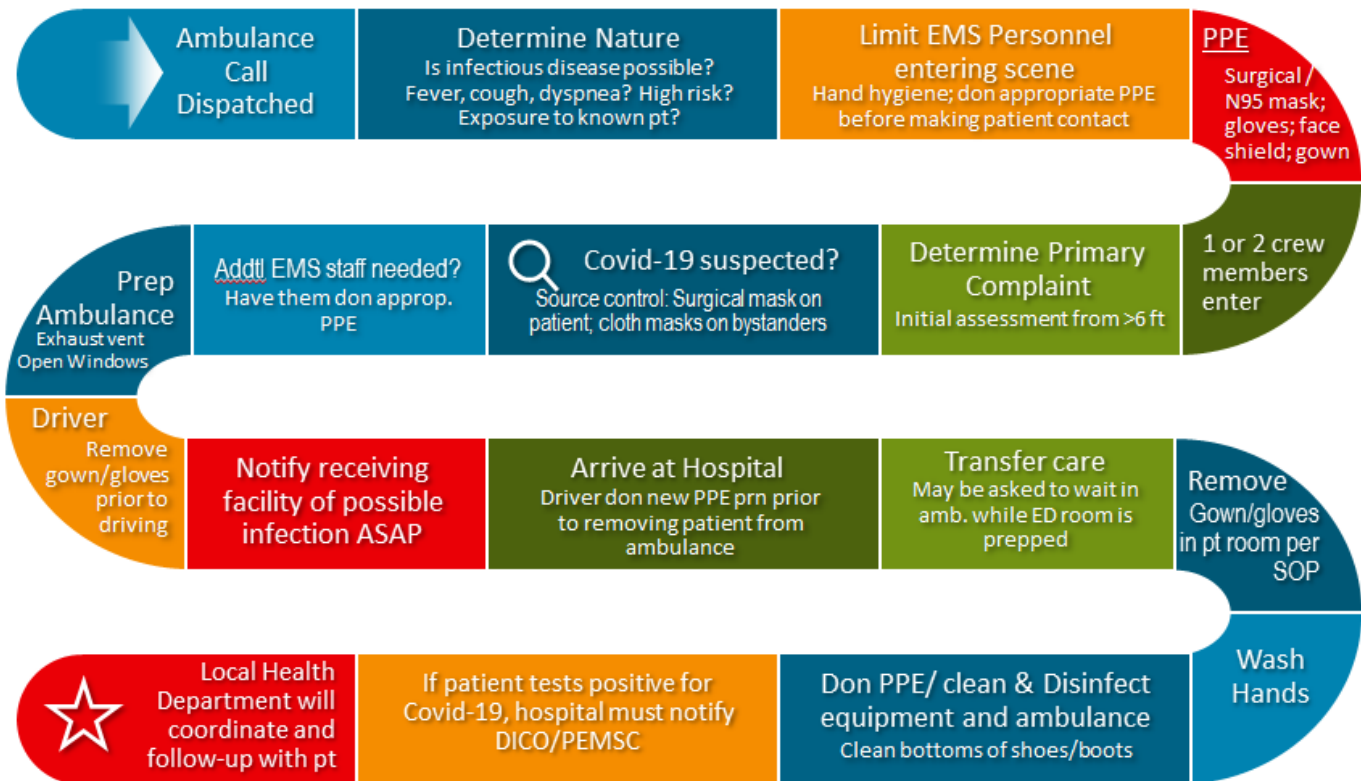
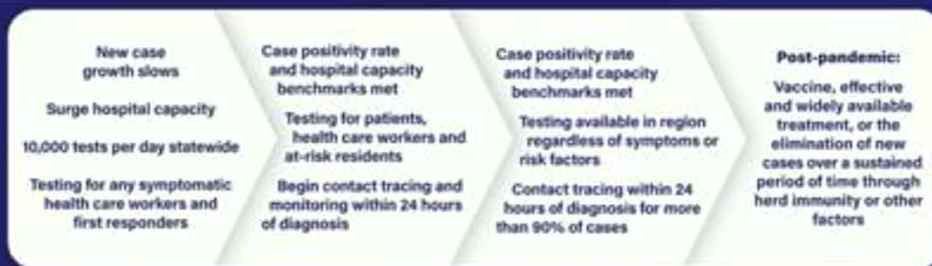




RESTORE ILLINOIS

A Public Health Approach To Safely Reopen Our State

Phase 1 Rapid Spread	Phase 2 Flattening	Phase 3 Recovery	Phase 4 Revitalization	Phase 5 Illinois Restored
<p>Strict stay at home and social distancing guidelines are put in place, and only essential businesses remain open.</p> <p>Every region has experienced this phase once already and could return to it if mitigation efforts are unsuccessful.</p>	<p>Non-essential retail stores reopen for curb-side pickup and delivery.</p> <p>Illinoisans are directed to wear a face covering when outside the home and can begin enjoying additional outdoor activities like golf, boating & fishing while practicing social distancing.</p>	<p>Manufacturing, offices, retail, barbershops and salons can reopen to the public with capacity and other limits and safety precautions.</p> <p>Gatherings of 10 people or fewer are allowed.</p> <p>Face coverings and social distancing are the norm.</p>	<p>Gatherings of 50 people or fewer are allowed, restaurants and bars reopen, travel resumes, child care and schools reopen under guidance from the Illinois Department of Public Health.</p> <p>Face coverings and social distancing are the norm.</p>	<p>The economy fully reopens with safety precautions continuing.</p> <p>Conventions, festivals and large events are permitted, and all businesses, schools and places of recreation can open with new safety guidance and procedures.</p>



All patients should be considered to be infected with COVID-19 until proven otherwise.

RISK FACTORS for SEVERE ILLNESS from COVID-19 (CDC, 6-25-20)

- Age alone: risk increases with age, older adults at highest risk
- Any age with these comorbid conditions: Chronic kidney disease; COPD; Obesity (BMI of 30 or higher); serious heart conditions, such as heart failure, coronary artery disease, or cardiomyopathies; Sickle cell disease; Type 2 DM
- Immunocompromised state: Primary, secondary, or acquired immune-deficiencies due to a condition or immunosuppressive Rx and/or chronic disease assoc. w/ immune dysfunction organ dysfunction or failure or severe inflammatory disease. Ex: Cancer, solid organ transplantation, rheumatological autoimmune, inflammatory, and metabolic bone disorders
- Children who are medically complex, have neurologic, genetic, metabolic conditions, or who have congenital heart disease.

Might be at an increased risk for severe illness from COVID-19:

- Asthma (moderate-to-severe); Cerebrovascular disease (affects blood vessels and brain blood supply)
- Cystic fibrosis; Hypertension or high blood pressure
- Immunocompromised state from blood or bone marrow transplant, immune deficiencies, HIV, use of corticosteroids, or use of other immune weakening medicines
- Neurologic conditions, such as dementia
- Liver disease; Pulmonary fibrosis (having damaged or scarred lung tissues); Smoking
- Thalassemia (a type of blood disorder); Type 1 and gestational diabetes mellitus

Pregnant Hispanic and non-Hispanic black pregnant women appear to be disproportionately affected by SARS-CoV-2 infection during pregnancy. Among reproductive-age women with SARS-CoV-2 infection, pregnancy was associated with hospitalization and increased risk for ICU admission, and receipt of mechanical ventilation, but not with death (CDC, June 26, 2020 / 69(25); 769-775).

Minimize chance for exposure: Implement safety measures before and upon arrival, throughout the duration of patient care, and until the ambulance is cleaned and disinfected.

- Don contact/droplet precaution PPE before approaching any patient.
- Limit responders who initially don PPE and approach patient within 6 feet to one or two persons

PPE required

- **NO aerosol generating procedures (AGPs):** PPE on 2 EMS responders
Nonsterile gloves; procedure (surgical) mask (*N-95 OK if available and restocked by agency*); isolation gown or coveralls (if available); eye protection (goggles or face shield). Expected # per front line ambulance (non-cardiac arrest): 3 surgical masks (2 EMS personnel; 1 pt), 3 gowns, 2 eye protection/face shields; 3 sets of gloves.
- **+ Aerosol generating procedures (AGPs)¹ (add Airborne precautions):**
Nonsterile gloves; **N-95 mask** (unless wearing an alternate respirator); gown or coveralls; eye protection (face shield preferred if N95 is not splash resistant or place surgical mask over N95). Expected # N95 masks/vehicle: 2

Patient: Procedure (surgical) mask. Ensure they adhere to respiratory hygiene and cough etiquette

Source control all bystanders: At least cloth facemasks

¹**Aerosol generating procedures (AGPs):** Open suctioning of airway secretions, CPR; Endotracheal intubation (advanced airway placement); manual ventilation with a BVM, nebulized meds; CPAP (See COVID-19 Playbook for all)

Screening questions for COVID-19

- Have you had exposure to someone in the past 14 days with confirmed or suspected COVID-19?
- Have you been tested for or had a diagnosis of COVID-19 in the last 30 days?

Do you have any of the following S&S?

<input type="checkbox"/> Fever > 100° F ² ; chills	<input type="checkbox"/> Congestion nose or lungs	<input type="checkbox"/> Unusual fatigue/weakness	<input type="checkbox"/> Bruising/discoloration
<input type="checkbox"/> Cough (new or worsening)	<input type="checkbox"/> Abdominal cramping/pain	<input type="checkbox"/> New onset confusion	<input type="checkbox"/> Rash; discoloration
<input type="checkbox"/> Dyspnea; ↑ WOB	<input type="checkbox"/> Anorexia/nausea/vomiting	<input type="checkbox"/> Lightheadedness	<input type="checkbox"/> Red eye
<input type="checkbox"/> Chest pain (positional/pleuritic)	<input type="checkbox"/> Diarrhea or loose stools	<input type="checkbox"/> Severe headache	<input type="checkbox"/> Abn. eye movement
<input type="checkbox"/> Loss of smell or taste	<input type="checkbox"/> Sore throat	<input type="checkbox"/> Muscle pain/myalgia	<input type="checkbox"/> Leg pain/swelling

S&S Multisystem Inflammatory Syndrome in Children (MIS-C) (Age <21 years)

There appears to be a delay of 2-6 weeks after possible COVID infection before onset of MIS-C or pt may have been asymptomatic for COVID-19.

S&S may include: **Persistent fever**², abdominal pain, vomiting, diarrhea, rash, sore throat, cough (respiratory symptoms not prevalent), irritability, headache, conjunctivitis, swollen lymph nodes in the neck, swollen hands and feet, cracked lips and a tongue that is redder than usual. (See COVID-19 Playbook Standards of Practice section for full summary)

Leaky blood vessels cause **low BP and fluid accumulation in the lungs and other organs** resulting in a state that resembles cardiogenic or distributive shock **with coronary artery abnormalities and myocardial impairment/dysfunction**.

²Fever >38.0°C for ≥24 hours, or report of subjective fever lasting ≥24 hours

EMS Assessment/Care

1. IMC:

- Be particularly vigilant for severe hypoxia per SpO₂ without dyspnea; O₂ per SOP.
- Anticipate hypotension, dysrhythmia, myocardial dysfunction: Assess baseline ECG; 12 L if indicated. Place ECG leads in the lateral limb position (left and right deltoid; L & R 12th intercostal space midaxillary line).
- **Assess glucose and hydration status** for evidence of hyperglycemia and acidosis (↑ RR and ↓ ETCO₂). (Severe insulin resistance may cause glycemic control issues and DKA with no Hx of DM).
- **Transport pt. w/ known DM with all their DM-related equipment** (glucose meters, test strips, insulin pump supplies); plus their insulin. Some insulins are not typically available in hospitals, e.g. **insulin degludec** (*Tresiba*, Novo Nordisk) or **insulin aspart** (*Fiasp*, Novo Nordisk). Transitioning from degludec to glargine [*Lantus*, Sanofi] or detemir [*Levemir*, Novo Nordisk] at the hospital can be problematic.
- Full set of VS including measured temperature for evidence of fever
- ROS: Assess all for typical AND atypical S&S. Assess children carefully for S&S of MIS-C.
- Assess extremities for asymmetric swelling/loss of distal pulses; rashes, discoloration fingers/toes

Mild illness/low risk for complications:

- **IMC: Supportive care:** Encourage rest, adequate fluids, and OTC pain relievers and fever reducers.
- Determine if patient meets non-transport criteria.

Moderate distress: Bilaterally wheezing/crackles; dyspnea; moderate hypoxia; ↑ WOB; MAP ≥ 65mmHg)

1. Hx Asthma or COPD (not ARDS) or HF with wheezing or crackles and good ventilatory effort

- **Nebulized medications and/or CPAP** reinstated as indicated by SOP if COVID-19 status negative or unknown and no dx suspected based on Hx or S&S. Do not reinstate if pt. known to be COVID-19 positive within in last 10 days or PMH and clinical condition strongly suggest COVID-19 disease. N95 masks on all EMS personnel in close contact w/ pt. Inform hospitals PTA; may ask for suspension of procedure during transfer into ED.
- **Alternatives: ALBUTEROL MDI** (90 mcg/puff) with spacer: - may use after expiration date
 - Adult:: 8 puffs every 20min up to 4 hours then every 1-4 hr
 - Peds: 8 puffs every 20 min for 3 doses
- **IPRATROPIUM MDI** (18mcg/puff) with spacer:
 - Adult: 8 puffs every 20min, as needed for 3 hours
 - Peds: (severe asthmatic cases only): 4-8 puffs every 20 min as needed, up to 3 hours **OR**
- **Combination Inhaled MDI:** Albuterol with Ipratropium (90 mcg albuterol with 18 mcg ipratropium per puff)
 - Adult: 8 puffs every 20min, as needed for 3 hours 3
 - Peds: (severe asthmatic cases only): 4-8 puffs every 20 min as needed, up to 3 hours

3. Consider if awake proning protocol may be indicated

- Indications: Awake patient with good inspiratory effort; severe hypoxia (SpO₂ <90%) despite O₂ Grossly hemodynamically stable; can communicate on their own and can cooperate in self-positioning
- Continue O₂; cardiac, BP, and SpO₂ monitoring. Obtain VS & Oximetry readings right before proning and 10 minutes after position change. Pts must not be left alone.
- Have 2 HCP stand on either side of stretcher to keep it stable and protect pt during movement. Position stretcher flat. Ask pt to turn over onto stomach unless contraindicated. If pt experiences pain when turning, STOP and return to supine position. Provide sufficient pillows to support head, shoulders and arms. Rotate head to one side. Avoid pressure on the eyes and ear. Place a blanket roll under ankles to elevate both feet. May be more comfortable with one arm above head and one at side (swimmer's position). Ensure comfort.

EMS Contraindications to prone positioning

- | | |
|---|---|
| <ul style="list-style-type: none"> - Need for immediate ETI - Pregnancy; patients with larger abdominal girth - Concerns for increasing ICP (intra-cranial hemorrhage) - Massive hemoptysis - Tracheal surgery or sternotomy during previous 15 days - Serious facial trauma or surgery during previous 15 days - Deep venous thrombosis treated less than 48 hours - Cardiac pacemaker inserted in the last 48 hours - Unstable spine, femur, or pelvic fractures | <ul style="list-style-type: none"> - MAP <65mmHg (OK if pt on Norepi to keep MAP ≥65mmHg) - Chronic respiratory failure on home O₂, BiPAP/CPAP - Frequent ventricular arrhythmia - DNR/DNI <p>Considerations: Ask about Hx of rotator cuff tear, stroke, nerve damage, brachial plexus injury, osteoarthritis of shoulder complex, Hx of clavicle fx, or hyperflexible joints.</p> |
|---|---|

CRITICAL (Severe distress): Severe SOB, ↑ RR & WOB, inadequate ventilations; speaks in syllables, lung sounds have wheezes, crackles, are diminished or absent; HR & BP may be dropping; SpO₂ <90%; ventilatory failure with severe hypercarbia (ETCO₂ >45). Monitor carefully for evidence of clotting, CV dysfunction, and development of sepsis and septic shock (use qSOFA criteria).

Time sensitive

2. IMC special considerations:

ALS

- Assess **ETCO₂**: SOB is a COVID-19 symptom but may also be d/t metabolic acidosis, as with DKA.
- Unique needs for BVM ventilations and ETI/Advanced airway insertion; see procedure.
 - Do not delay ETI if severe hypoxia persists despite O₂ and/or proning is contraindicated unless contraindicated (DNR/DNI order).
 - **If BVM ventilations and/or ETI indicated: ADD N95 mask to EMS PPE.**
 - Preoxygenate with 15 L O₂/BVM (tight mask seal/2-person technique). (HEPA filter required)
Do NOT over-ventilate. Use only enough tidal volume to see chest rise
- Prepare resuscitation equipment – **anticipate rapid development of cardiac arrest**
ApOx contraindicated in these patients – generally have severe hypoxia prior to cardiac arrest.

ASTHMA Hx ONLY – Severe distress; no improvement from above or critically ill:

EPINEPHRINE (1 mg/1mL)

- ADULT: (1mg/1mL) **0.3 mg IM** [BLS]
- PEDS: Typical dosing: <25 kg (**54 lbs**): 0.15 mg ≥25 kg (**55 lbs**): 0.3 mg **IM** (vastus lateralis muscle) [BLS].
- **Begin transport as soon as Epi is given; Do not wait for a response;** May repeat X 1 in 10 min if needed

If severe distress persists: **MAGNESIUM** (50%)

- **Adult: 2 Gm** in 16 mL NS (slow IVP/IO) over 5-10 min. Max 1 Gm / minute.
- **PEDS: 25 mg/kg (max 2 Gm) in NS to total volume of 20 mL (slow IVP) over 10 min. Max 1 Gm/5 min.**

2. **IV NS TKO** -Do not fluid overload; the lungs are like sponges due to inflammatory processes
IVF COVID-19 + DKA: NS just to correct dehydration and ketosis, See Glucose Emergencies SOP.
3. If ETCO₂ ≤31: **Assess qSOFA criteria** and treat **SEPTIC Shock** with **NOREPINEPHRINE** if hypotensive for pt.

TRANSPORT

- Transport patients at high risk for severe illness and/or with moderate to severe symptoms.
- Contact OLMC before leaving scene. Notify receiving hospital ASAP of imminent receipt of a potential COVID-19 pt.
- **Generally, no support person may accompany a patient. Exceptions (DPH):** Minors and pts with intellectual and/or developmental disabilities (I/DD) or cognitive impairments. If needed, these pts must be accompanied by a support person essential to their care (e.g., a guardian, family member, caregiver, or paid support worker) and be provided reasonable accommodations that afford meaningful access to information and an equal opportunity to benefit from treatment provided that essential precautions can be taken to contain the spread of infection.
<https://www.team-ihh.org/files/non-gated/quality/support-persons-in-health-care-facilities.aspx>

UPON ARRIVAL at a HEALTHCARE FACILITY

- Follow pandemic procedures for pt transfer into a receiving facility (wheel directly into an exam room).
Hospitals may ask EMS to hold pts in the ambulance for a few minutes while opening an exam room.
None of these patients should be “admitted to the wall”.
- **Remove/dispose of gloves and gowns before leaving the receiving space** per guidelines and perform hand hygiene. **Do not cross contaminate ED** wearing gown or gloves used in direct pt care. **DO NOT immediately remove or discard face masks/eye protection if cleaning ambulance.** Remove after cleaning is done.

EMS CAVEATS for Patient DISPOSITION:

- All patients shall receive proper care in the most appropriate setting.
- **CONTRAINDICATIONS for NO Transport:** Pt has any of the high risk factors and/or comorbidities for severe illness and/or S&S of moderate-severe disease, and/or is socially unsafe to be left where residing.
- If a physician has requested transport – consider pt high risk – transport. Do NOT accept a refusal unless a decisional adult with SpO₂ ≥94% on RA signs out **AMA**.
- If pt does not require urgent care but additional assessment or testing is indicated; they may be instructed to self-transport to a COVID-19 clinic or same day primary care. Not required to transport just for PCR testing. See below.

NO TRANSPORT CALLS – Initiated by EMS: See NT form Rev. 4-20-20

(Pt. initiated Refusal of transport calls: Follow all elements in R6: Refusal of Service Policy)

During a pandemic, hospitals may become overwhelmed with pts, requiring EMS to consider alternative destinations for pts who would otherwise be transported to the nearest hospital.

These pts can crash rapidly and without warning. Patients must meet the following criteria:

Clinical assessment:

- Decisional mental status; normal vital signs for patient (based on age; previous norms)
- No S&S of moderate to severe disease (see below)
- Normal ventilatory effort; no dyspnea, air hunger; or labored work of breathing (WOB); SpO₂ ≥94% on RA
- Age <65 + Absence of comorbid conditions / risk factors for severe disease
- Age <21: No evidence of EMS-C

Social assessment

- Patient must be capable of safely performing activities of daily living (ADLs)
- Pt must have responsible adult who can assist with recovery or call for help if needed
- Patient should have a separate room for in-place isolation
- Pt must have adequate access to food, meds, and necessities for period of isolation
- Those living with pt must be able to adequately practice protective precautions
- Determine if pt has household members with high risk of COVID complications and morbidity

Must have NO S&S suggesting moderate to severe COVID-19 illness

Fever > 100° F (may not have a fever)	Abnormal VS for pt; severe weakness
Dyspnea; SpO ₂ <94%; increased WOB	Severe headache or new onset confusion/AMS
Abn. breath sounds/sputum production (pneumonia)	Chest pain, leg pain, asymmetric/loss of distal pulses
Evidence of clotting (venous or arterial)	S&S of sepsis or septic shock (qSOFA; ETCO ₂)

EMS shall offer clear guidance to NT patients & those refusing transport regarding:

- Disclosure of risk; expected clinical course of disease; symptomatic treatment
- **Signs and symptoms that trigger need for further medical evaluation; where to seek help**
- Isolation precautions to avoid community spread (See CDC link under Resources and References page)

Refusal disclosure to patient: (See NT Form)

Based on your age, medical history, and our current assessment, you may have an infectious condition that could include Covid-19, but your condition currently appears mild. Currently, hospitals are unable to test everyone who presents to the ED and immediate care for mild cases consists of rest, hydration, taking acetaminophen (Tylenol) for fever and muscle aches.

Fortunately, you do not currently meet the criteria for evaluation in the ED. In order to limit exposures and preserve resources, we will not be transporting you to the hospital. We encourage you to contact your personal healthcare practitioner. Many medical groups are able to conduct a virtual visit if you have computer access. There are also state and county hotlines set up if you would like to call them for information, If your condition worsens please do not hesitate to call your doctor, call us again, or have someone take you to the emergency department.

OLMC Report for NO TRANSPORT or Refusal of Service calls – include the following:

- Patient age; decisional capacity; SAMPLE history; absence of risk factors for severe disease
- Chief complaint; S&S; full set of VS (+measured temp & SpO₂); lung sounds unless refused by pt
- Confirmation that social assessment meets CDC requirements for shelter in place (See Reference page)

Documentation: In addition to all clinical and social assessments, confirm that pt/legal representative has consented to EMS signing the **NO TRANSPORT or Refusal form** or the **NT or Refusal screens in Image Trend**. Agencies may take photo of signed paper form and attach electronically to ePCR. Delete photo from electronic device.

10 Golden Considerations for EMS Regarding COVID-19 Thrombotic Complications

1. Patients with **baseline cardiovascular disease**, such as hypertension, diabetes, or obesity, appear to be at **increased risk for complications** from COVID-19.
2. Microthrombi in cardiac or pleural tissue may manifest as **chest tightness** that may be positional in nature or change with deep respirations even in the face of normal oxygen saturations or unremarkable electrocardiographs.
3. **Microthrombi formation** may play a role in multiorgan dysfunction that can first present in an isolated manner in one organ system or as multiple symptoms and signs, be they in the lungs, brain, heart, gastrointestinal tract, kidneys, skin, or even as a cardiac arrest.
4. Intuitively, as is the case with pulmonary embolism, leg pain or swelling may be a manifestation of a blood clot within the venous circulation of the leg, but arterial clots may also cause the involved extremity to lose pulses with or without associated pain, discoloration, or loss of motor/sensory function. Such an arterial complication can lead to a potential loss of the extremity if not recognized and treated quickly enough. **Asymmetric distal pulses** may not be appreciated and are usually a late sign.
5. Signs or symptoms of **neurological deficits** such as those seen in a **stroke** could be another manifestation of blood clotting triggered by COVID-19. Young patients can have such deficits, and a presentation of **confusion or altered mental status**, such as that seen in any encephalopathy, may be another sign of neurologic involvement. As described, **changes in smell or taste**, even if isolated symptoms, also should not be ignored.
6. COVID-related blood clotting problems and respiratory distress may contribute to **preterm labor** in pregnant women.
7. Responders should look for **strange rashes, hematomas, petechiae, and purpura** (bruise like findings) they may not see on a regular basis. These findings may be a sign of cutaneous injury due to microthrombi formation, especially at the fingertips and toes. In addition, reddened conjunctiva, erythematous skin blotches, and strawberry-colored tongue appearance may be manifestations of COVID-19 in children, resembling the syndrome of inflamed arteries often seen with Kawasaki disease, including coronary artery involvement.
8. **Diarrhea and cramping** can be associated with COVID-19 and may not be a benign process. **Abdominal pain with a minimally tender abdominal exam**, whether in a younger or older person, may actually be due to blood clot formation in the vessels supplying blood to the intestines. This could be catastrophic if not appreciated early, and in the setting of COVID-19, it needs to be considered.
9. **Flank pain** could be a manifestation of renal microinfarction and swelling from microembolic ischemia in the kidney. At the same time COVID-19 could also be creating microinfarction-induced myonecrosis (muscle cell injury), either in the flank or elsewhere.
10. COVID-19 is a **great masquerader**, and its clotting complications can lead to pulmonary, cardiac, neurologic, gastrointestinal, cutaneous, genitourinary, renal, musculoskeletal, face, eye, nose, and tongue problems—whether individually or in conjunction with one another. Overall, the most predictable pattern in COVID-19 is that the signs and symptoms of SARS-CoV-2 infection are often not predictable. Awareness needs to remain at a heightened level.







Possible indications for ETI (advanced airway) in Covid-19 patients







- SpO₂ remains <90% on FiO₂ of ≥60% and awake proning is contraindicated or unsuccessful
- Cardiogenic or Septic shock
- Hypercapnia with ETCO₂ >45 OR acidosis (ETCO₂ <31), ventilatory failure and labored work of breathing (WOB)
- Altered mental status so patient cannot protect airway

Identify Roles and Responsibilities

- **Optimize 1st attempt success:** Use best/most qualified intubator with at least 1 (preferably 2) assistants
 - **Assistant(s)** must function within scope of practice: Help with PreOx; IV/IO, drugs; monitoring ECG/VS; opening needed supplies. Prepare and practice for worst case scenario: 1 Paramedic and 1 EMT
 - **PPE Intubator:** Isolation gown (or droplet/splash resistant equivalent), fluid-resistant N95 mask (check seal) or put surgical mask over N-95; goggles that surround eyes with facial contact or full face shield (preferred); hair cover (if available). Wear shoes you can disinfect.
 - **PPE Assistants:** Contact/droplet + Airborne Precautions: Add N95 mask
1. **IMC:** SpO₂, NC ETCO₂: evaluate before and after airway intervention; confirm patent IV/IO; monitor ECG
Anecdotal: Oximetry looks terrible before pts appear dyspneic. Monitor carefully!
 2. **Prepare patient:** Optimize position; If SBP > 100: Elevate head of stretcher 15° - 30°
Gains alveolar recruitment while reducing risk of aspiration
 3. **Preoxygenate 3 minutes**
 - **Start pre-ox early** so ETI is done under controlled circumstance rather than a crisis
 - **Option 1:** Adequate rate/depth/effort: O₂ 15 L/ETCO₂ NC; NRM mask (no O₂) over NC to capture droplets.
 - **Option 2 – Inadequate rate/depth/effort/apneic/ventilatory failure/shock/airway impaired:**
Manual airway maneuver; OPA/NPA; O₂ 15 L/ETCO₂ NC with BVM mask held over NC to face with 2 person technique to minimize air leaks
Required add on: High-Efficiency Particulate Air (**HEPA**) filter on mask or bag (varies by type); 10 BPM
 4. **Prepare equipment and rescuers**
 - Create **airway plan for all ill pts with severe dyspnea**. What are you prepared to do to secure this airway?
 - Stage equipment kits but **do not open until needed**² - attempt in this order unless contraindicated
 - Option 1 – Standard ETI supplies; suction
 - Option 2 – I-Gels; suction available to assistant; ready to go, not opened.
 - Option 3 – Cric kit; suction available, not opened. Use "Scalpel Finger Bougie" technique

²**Create airway kit supplies and store in slider bags**; do same for septic shock IVF/drug + IV tubing
Minimize opening stock to limited # of items to avoid contamination from contact or aerosolization
Intubator: Do not reach into bags or drawers after starting procedure; common source of cross contamination
Assistant can reach into drug/airway bag prn and pass to intubator without contaminating other supplies.
 5. **Medications**
 - **Sedation – KETAMINE IVP** - Use **simplified dosing during crisis**
 - 100 kg (220 lbs) or less: 100 mg
 - Over 100 kg (220 lbs): 150 mg
 - **Plan on hypotension in ill patients:** IVF limitations and **NOREPINEPHRINE** IVPB per Covid-19 SOP
 6. **Tube insertion/confirmation**
 - Skip all assessments (Mallampati, LEMON, etc.) that will expose you to aerosolization
 - Approach all ETIs as a difficult tube; use videolaryngoscopy, curved channeled blade, preloaded bougie in ETT
 - Anticipate rapid desaturation during procedure; keep O₂ 15 L/NC running
 - **If CPR in progress:** Pause chest compressions < 10 sec while passing tube to minimize aerosolization
 - Visualize black line of ETT at level of cords to avoid auscultating for depth before HEPA filter in place
 - Inflate cuff; place **HEPA filter** on ETT or BVM (varies by device) prior to ventilating
 - Confirm tube placement with ETCO₂, not deep auscultation
 - Auscultate over anterior neck to detect airflow past balloon cuff; **ensure minimal leak** to ↓ risk of aerosolization
 7. **Post Intubation**
 - **Sedation:** Preference: Ketamine **pain dose**/Advanced Airway SOP; avoid midazolam due to risk for hypotension
 - **When intubator doffs PPE**, use hand sanitizer on neck and ears if not covered by PPE
 - Discard disposables per policy before leaving space

Respirator (N95/half mask)	Fluid Resistance	Seal Check Information
<p>3M - 1860</p> 	<p>Fluid Resistant</p>	<p>Place both hands completely over the respirator, being careful not to disturb the position, and exhale sharply. If air leaks around your nose, adjust the nosepiece. If air leaks at respirator edges, adjust the straps back along the sides of your head.</p>
<p>3M -1860s</p> 	<p>Fluid Resistant</p>	<p>Same as 1860.</p>
<p>3M - 1870+</p> 	<p>Fluid Resistant</p>	<p>Place one or both hands completely over the middle panel. Inhale and exhale sharply. If air leaks around your nose, re-adjust the nosepiece. If air leaks around respirator edges, adjust panels and position of straps.</p>
<p>3M – 8110s</p> 	<p>Not Fluid Resistant; SURGICAL MASK REQUIRED TO COVER N95</p>	<p>Place both hands completely over the respirator and exhale sharply. If air leaks around nose, readjust the nosepiece. If air leaks at the respirator edges, work the straps back along the sides of your head.</p>
<p>3M - 8210</p> 	<p>Not Fluid Resistant; SURGICAL MASK REQUIRED TO COVER N95</p>	<p>Same as 3M 8110s</p>
<p>3M - 8511</p> 	<p>Fluid Resistant SURGICAL MASK REQUIRED TO COVER N95 DUE TO EXPIRATORY VALVE *Only when performing sterile procedure*</p>	<p>Place both hands completely over the respirator and inhale sharply. A negative pressure should be felt inside the respirator. If air leaks around nose, readjust the nosepiece. If air leaks at the respirator edges, work the straps back along the sides of your head.</p>

<p>Moldex 1511</p>		<p>Fluid Resistant</p>	<p>Cover front of respirator by cupping both hands. INHALE SHARPLY. A negative pressure should be felt inside respirator. If any leakage is detected at respirator edges, adjust straps by pulling back along the sides and/or reposition respirator.</p>
<p>Moldex 1513</p>		<p>Fluid Resistant</p>	<p>Same as Moldex 1511</p>
<p>Alpha ProTech 695</p>		<p>Fluid Resistant</p>	<p>Forcefully inhale and exhale several times. The respirator should collapse slightly when you inhale and expand when you exhale. You should not feel any air leaking between your face and the respirator.</p>
<p>Kimberly-Clark 62408</p>		<p>Fluid Resistant</p>	<p>Place both hands along the edges of the respirator and exhale. If air escapes around your nose, adjust the nose piece. If air leaks at the respirator edges, unfold or untwist the chin piece.</p>
<p>Moldex 7000</p>		<p>Fluid Resistant Filters not Fluid Resistant</p>	<p><u>Positive Pressure Seal Check:</u> Cover exhalation valve vent without pressing too hard against face and exhale gently to create a slight positive pressure. If air leak is detected, re-adjust face piece position and the tension of both head straps. Repeat seal check until leak is eliminated.</p> <p><u>Negative Pressure Seal Check:</u> Cover both cartridges w/o pressing too hard against face and gently inhale and hold your breath. The face piece should slightly collapse. If air leak is detected, re-adjust face piece position and tension on both head straps. Repeat seal check until leak is eliminated.</p>
<p>Advantage® 200 LS Half-Mask Respirator</p>		<p>Use w/ Advantage® Low-Profile P100 Filters</p>	<p>See above</p>



For ALL masks: Must be fit tested for that mask. Seal check must be performed before each wearing. **If you cannot achieve a proper seal, mask will not perform as a respirator. See your supervisor.** Do not perform AGP without respirator protection.

COVID-19 Employee Screening tool

Please screen when reporting to work and every 12 hours during that duty shift

EMS AGENCY: _____

Name of person being screened: _____

Name and credentials of screener: _____

On March 17, 2020, the U.S. Equal Employment Opportunity Commission (EEOC) issued an **update to its guidance** that expressly acknowledges that employers may implement temperature screening measures in response to the current COVID-19 pandemic. The EEOC noted that “[b]ecause the CDC and state/local health authorities have acknowledged community spread of COVID-19 and issued attendant precautions, employers may measure employees’ body temperature.”

We realize that not all infected persons will have a fever. Implementing temperature screenings may identify some who have a fever (but not necessarily COVID-19) such that an employer may isolate them or send them home from work, but it is not a perfect screening device that will identify all persons who may be contagious with the virus.

Per IDPH guidelines, ALL healthcare workers, regardless of potential/actual exposure, are required to self-monitor by taking their temperature twice daily. Some employers are ensuring compliance with this process by invoking the EEOC guidelines and adding screening before being allowed into the work environment, and if doing a 24 hour shift, at the 12 hour mark.

If your temperature is 100.0 F or greater or you develop any acute symptoms of illness, DO NOT REPORT to WORK!
 If you develop symptoms while at work, immediately notify your supervisor.

Date of screening:		
Have you been in contact with someone who is or was sick? Who?	Y	N
Have you had close contact with someone with lab confirmed, or under investigation for, COVID-19 for a prolonged period of time?	Y	N
Are you currently experiencing any of the following S&S? Check all that apply.		<input type="checkbox"/> No to all
<input type="checkbox"/> Fever > 100° F (HCP) (May not be present!)	<input type="checkbox"/> Abnormal vital signs and/or hypoxia by SpO ₂	
<input type="checkbox"/> Cough (new onset or worsening of chronic cough)	<input type="checkbox"/> Severe headache or new onset lightheadedness/confusion/AMS	
<input type="checkbox"/> Shortness of breath (dyspnea; ↑ WOB))	<input type="checkbox"/> Muscle pain/body aches, unusual fatigue or weakness	
<input type="checkbox"/> Chest pain (positional/pleuritic)	<input type="checkbox"/> GI S&S: anorexia, abd. cramping or pain; nausea/vomiting	
<input type="checkbox"/> Abnormal breath sounds/sputum production	<input type="checkbox"/> Diarrhea (≥3 loose/looser than normal stools/24hr period)	
<input type="checkbox"/> Loss of smell or taste (anosmia and ageusia)	<input type="checkbox"/> Conjunctivitis and/or eye pain; abnormal eye movements	
<input type="checkbox"/> Congestion in the nasal sinuses or lungs; sore throat	<input type="checkbox"/> Rashes, skin discoloration; unilateral limb swelling/distal pulse deficits	
When did S&S begin?		

Measured temperatures

Time	Temp:	Time:	Temp:
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Cleared to work	Y	N
If not cleared; directions given to individual: <input type="checkbox"/> Go home immediately and self-isolate <input type="checkbox"/> Other:		

Northwest Community EMS System POLICY MANUAL			Appendix H
Policy Title: ALS/BLS Staffing Requirements			No. S - 3
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I. Requirements while operating under Conventional capacity: Personnel and staffing

- A. It is assumed through this section that the spaces, staff, and supplies used are consistent with usual and customary daily practices within the System fully meeting all laws, rules, guidelines, policies and procedures.
- B. Each EMS provider agency that operates an emergency transport vehicle shall ensure through written agreement with the EMS System that the agency providing emergency care at the scene and enroute to a hospital meets or exceeds the requirements of the IDPH Rules and System Policy. (Section 515.830 of the EMS Rules Amended at 42 Ill. Reg. 17632, effective September 20, 2018) and System policy.

Levels of acuity: Source document: National EMS Core Content: An acuity level is essential for identifying care priorities in the EMS setting. They are coded to NEMSIS standards and should be documented as such in the ePCR. Critical pts are TIME-SENSITIVE with black box notations throughout the SOPs.

Critical: Symptoms of a life threatening illness or injury with a high probability of mortality if immediate intervention is not begun to prevent further airway, respiratory, hemodynamic and/or neurologic instability.

Emergent: Symptoms of illness or injury that may progress in severity or result in complications w/ a high probability for morbidity if treatment is not begun quickly. These may be identified as time-sensitive on a case by case basis.

Lower Acuity: Symptoms of an illness or injury that have a low probability of progression to more serious disease or development of complications.

- C. Patients requiring **ALS services and determined to be critical, emergent, and/or unstable**, as defined by IDPH, the EMS Act and/or Rules, and System SOPs and/or policy, will be cared for by a minimum of **two licensed ALS personnel** (paramedic or PHRN) with NWC EMSS privileges awarded through the full System entry credentialing process on the scene and while enroute to the receiving destination unless an exemption applies or a variance has been granted by the EMS MD.
- D. Patient requiring **ALS services who are stable and determined to be of a lower acuity rating** may be cared for by **one licensed ALS personnel** and one other EMT with NWC EMSS privileges awarded through the full System entry credentialing process.
- E. All patients requiring **Basic Life Support services** as defined by IDPH, the EMS Act and/or Rules, and System SOPs and/or policy will be cared for by a minimum of two licensed EMTs or higher level of licensure with NWC EMSS privileges at the scene and while enroute to the hospital.
- F. This policy is driven by the level of care required by the patient, not the level at which a vehicle is licensed. Agencies have the option of how they will get adequately licensed individuals and/or vehicles licensed and stocked at the ALS level to the scene if ALS care is required. It also only pertains to an agency's first response capabilities within their primary response area as identified in their EMS System Plan agreement. It **DOES NOT** pertain to second simultaneous calls requiring dispatch of reserve vehicles or mutual aid companies. The System expects EMS agencies to dispatch the highest level of care **available** once all primary response transport vehicles are committed, pending a request for mutual aid.
- G. All mutual aid ALS transport vehicles sent by NWC EMS Provider agencies to other NWC EMSS agencies will be staffed with two licensed ALS personnel.

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- H. At the time of application for initial or renewal licensure, the applicant or licensee shall submit to IDPH and the System for approval a list containing the anticipated hours of operation for each vehicle covered by the license.
1. A current roster shall also be submitted, which lists the EMTs, paramedics, PHRNs, and/or physicians who are employed or available to staff each vehicle during its hours of operation. The roster shall include each staff person's name, license level, license number, expiration date, and contact information (e-mail address or phone number), and shall state whether such person is generally scheduled to be on site or on call.
 2. An actual or proposed four-week staffing schedule shall also be submitted, which covers all vehicles, includes staff names from the submitted roster, and states whether each staff member is scheduled to be on site or on call during each work shift. (EMS Rules Section 515.830(k2A)).
- I. **Special Considerations under Conventional Capacity**
1. **Refusal of service calls:** Situations involving patients who required ALS monitoring and/or interventions that are refusing care and/or transport and the first responding EMS personnel (ALS engine or squad on scene with 1 paramedic) are awaiting arrival of another EMS vehicle to comply with ALS personnel requirements: If the patient is stable and meets eligibility criteria for a refusal of service, the paramedic/PHRN on scene may cancel the responding ambulance and process the refusal per System policy. The refusal of service form must be signed by the paramedic and witnessed by another licensed EMS responder on scene.
 2. **Private ambulance in need of ALS assistance may do one of the following:**
 - a. Weigh the risk/benefit to the patient of waiting for a mutual aid ALS team or rapidly transporting to the nearest hospital for care. Call OLMC for a determination.
 - b. **If the patient is determined to be Critical or Emergent:** Call their dispatch center and request help from the local 911 EMS provider, giving the location, patient condition and rendezvous point or call 911 for mutual aid from the municipality through which they are traveling. If staffing is limited, they may call a System hospital via UHF radio/cellular phone and request that they call the local EMS provider for assistance.
 - c. Under no circumstances should a BLS team wait on scene longer for an ALS vehicle from their own agency to respond than the local municipal ALS agency could respond for a patient categorized as Critical or Emergent under the SOPs.
 - d. If the patient is determined to be lower acuity, but requiring ALS assessment and/or care, a BLS team can call their own agency dispatch center and ask for a vehicle staffed and approved at the ALS level.
 3. **Transfer of care from one agency to another:** Any EMS Agency assuming responsibility for a patient from another provider agency must receive a verbal handover report from personnel who are relinquishing responsibility for the patient noting the chief complaint, presenting signs and symptoms, vital signs, any treatment rendered, and the patient's responses. The originally responding agency must complete a patient care report documenting the assessments and care provided up to the time of patient transfer and forward a copy of the PCR to the receiving hospital as soon as possible. See System policy D4: Data collection and submission.

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4. **Paramedic students**

A student paramedic is recognized under the law as an EMT and cannot fulfill paramedic staffing requirements. The only **EXCEPTION** to this policy is a **TEMPORARY VARIANCE** authorized by the EMS MD or designee during the later portion of the Field internship capstone experience or in the last semester of class (EMS216) after the student has demonstrated competency as a paramedic team leader. A variance must be requested by the Provider Agency in writing, accompanied by a description of the staffing hardship necessitating the variance. It must be reviewed on a case by case basis for each student as stated in System Policy V-1. If approved, the agency may use a current paramedic preceptor and the approved paramedic student as an ALS response team for patients determined to have a lower acuity, non-urgent condition. The student must drive the ambulance to the hospital (leaving the licensed paramedic to provide direct patient care).

II. **Requirements while operating under Contingency capacity**

- A. **Contingency capacity:** The spaces, staff, and supplies used are not consistent with usual and customary daily practices. Spaces or practices may be repurposed, used temporarily during a declared emergency event or on a more sustained basis when the demands of the incident exceed hospital, agency, and/or community resources. Contingency plans may include, but not be limited to the following: changes in staffing, work redeployment, temporary emergency practice privileges for EMS and ECRN personnel, brief deferrals of non-emergency travel, meetings, classes, or services, change in responsibilities, and documentation, etc. as defined by the Contingency Capacity declaration. This results in functionally equivalent or modified education and/or patient care practices meeting defined standards.
- B. EMS providers shall monitor their resources on an ongoing basis. If their workforce is decimated by the effects of the emergency and conventional capacity ALS staffing cannot be achieved. EMS agencies are authorized to operate at minimum IDPH staffing levels per the EMS Rules on all patients. This includes **one licensed ALS personnel** and one other EMT with NWC EMSS privileges.
- C. Notify the EMS Administrative Director by email of the change in staffing per vehicle and estimate the length of time that the alternate staffing will need to be in effect. Alternate staffing plans meeting minimum state standards will not be authorized after the state of emergency is lifted and/or EMS members are safely returned to the workforce.
- D. **Temporary staffing resources and CONTINGENCY practice privileges:**
1. NWC EMSS agencies may share licensed paramedics in good standing with other NWC EMSS agencies with no additional requirements other than to activate them within their agency's Image Trend roster so they are accurately noted on the ePCR.
 2. NWC EMSS agencies may temporarily use licensed paramedics in good standing working for EMS agencies in Region 9 and approved agencies in Region 8 based on Intra- and Inter-Region agreements.
These paramedics may petition for temporary Contingency EMS Privileges by providing written recommendation from their current EMS MD stating that they are qualified and in good standing to practice at the Paramedic level. They shall be added temporarily to the agency's Image Trend Roster so they can be listed on the ePCR. See limitations of Contingency Practice Privileges below.

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3. Agencies who are hiring licensed paramedics from outside of Region 9 during Contingency Operation and suspension of System Entry testing and/or labs may petition for Contingency practice privileges after the licensee opens a file and submits required documents per usual System Entry processes, submits a letter of good standing from the most recent EMS System, and submits the SOP and Policy Manual Self-assessments scored as acceptable.
4. **Contingency privileges are temporary** and shall only be awarded while the state of Contingency operation continues. These individuals shall serve in a support role alongside at least one other licensed ALS practitioner with full NWC EMSS privileges. They shall not perform assessments or procedures using devices or equipment for which they have not been educated, competencied, or credentialed. When the state of Contingency is lifted, those who have been hired by NWC EMSS Agencies must complete the full System Entry testing and credentialing process per System Policy.

III. **CRISIS CAPACITY STAFFING**

- A. **Crisis capacity:** Staffing, equipment, and supply resources are insufficient even after adaptations and allowances made for Contingency capacity. Crisis operation provides for the best proportionate response possible in the setting of catastrophic disease or disaster given the circumstances and resources available. It allows the flexibility to improvise, loosens usual requirements, and balances risk against benefit to provide the greatest good for the greatest number. The System must make known to IDPH and all its member dispatch centers, Provider Agencies; and Hospitals that it is operating under CRISIS capacity standards of care.
- B. **Source authority:** Temporary Waiver for Certain Requirements for EMT and Paramedics Pursuant to authority granted to IDPH by 210 ILCS 50/3.185, the Department will consider a special temporary waiver for certain requirements for EMT and Paramedic Licensure for applicants whose IDPH issued EMS license is expired for less than 60 months, as of 3/23/20.
- C. If the nature of the emergency makes operating at minimum IDPH staffing levels impossible, the EMS MD will consider declaring a state of CRISIS CAPACITY. This declaration must be submitted to IDPH if it is anticipated to last longer than 72 hours. An agency's crisis capacity staffing plan must be submitted to the Resource Hospital who will also forward to the IDPH Regional EMS Coordinator.
- D. No Crisis Capacity staffing plan will be granted for longer than 90 days without a re-evaluation of the request.
- E. If Crisis Capacity staffing is invoked, a QA process must be put in place by the System to have the Agency evaluate at least five calls during the duration of the request to ensure there were no preventable deficiencies in care due to the staffing change. This information shall be provided to and retained by the System and made available to IDPH upon request.
- F. **Options to support staffing during Crisis Capacity operation**
 1. Petition the System who will forward to IDPH to allow crisis staffing to include one licensed practitioner at the level of care required by the patient and consistent with the drugs and supplies available on the vehicle and one other individual to drive the ambulance with CPR certification.
 2. Currently licensed EMS practitioners and ECRNs and currently credentialed MILITARY Medics may petition the System for temporary CRISIS privileges by forwarding a copy of a photo ID, their current license and a letter of good standing from their current EMS System or Commanding Officer to the EMS Administrative Director. If approved, no further actions are needed for temporary Crisis Privileges.

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3. **CRISIS privileges are temporary and shall only be awarded while the state of CRISIS operation continues. Whenever possible, these individuals shall serve in a support role alongside at least one other licensed practitioner with full NWC EMSS privileges. They shall not perform assessments or procedures using devices or equipment for which they have not been educated, competenced, or credentialed. When the state of CRISIS is lifted, those who wish to retain NWC EMSS privileges must complete the full System Entry testing and credentialing process per System Policy.**
4. Per IDPH authorization, the System shall create an educational and testing plan for reinstating retired or expired EMS practitioners to attain temporarily Crisis EMS privileges to work in the System per the following restrictions.
 - a. General requirements for all special licensees issued under this temporary special waiver:
 - (1) The applicant's IDPH EMS license has been expired for less than 60 months, and must have been in good standing at the time it expired, i.e. not suspended or revoked.
 - (2) The applicant must not have been suspended from any Illinois EMS system as of the IDPH license expiration date.
 - (3) The applicant must hold current CPR for healthcare provider certification from the AHA.
 - (4) Any licensee granted a temporary license under this special waiver shall only practice with another System-approved licensee with full practice privileges at or above the level of the licensee. Two licensees granted a temporary (Crisis) license under this special waiver shall not practice together and must be paired with a System approved licensee with full practice privileges.
 - (5) The applicant must submit a written application for the level of license sought, which may be downloaded from the Department's website at: <http://www.dph.illinois.gov/topics-services/emergency-preparedness-response/ems> . The application must demonstrate and comply with all of the following for the particular level of license sought:
 - (a) For applicants seeking a paramedic license, the applicant must demonstrate all of the following:
 - (i) That the applicant has either: (i) Completed all Continuing Education as required by the EMSMD OR (ii) successfully completed an EMS System examination demonstrating competence with all current Paramedic protocols required with respect to the EMS System in which the applicant seeks to practice.
 - (ii) Regardless of (i) and (ii) above, the applicant must also have the written recommendation from a current Illinois EMS System MD stating that the applicant is: (i) qualified to practice at the Paramedic level; and (ii) will be accepted into that EMS Medical Director's EMS system.

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- (b) For applicants seeking to practice at the EMT level,
 - (i) That the applicant has either: (i) Completed all Continuing Medical Education as currently required by the EMS System; OR (i) successfully completed an EMS System examination demonstrating competence with all current EMT protocols required with respect to the EMS System in which the applicant seeks to practice, and
 - (ii) Regardless of (i) and (ii) above, the applicant must also have the written recommendation from a current Illinois EMS System MD stating that the applicant: (i) is qualified to practice at the EMT-B level; and (ii) will be accepted into that EMS Medical Director's EMS system.
- (6) For licenses expired less than 60 months as of 3/23/20:
 - (a) The applicant must submit a complete application for the level of license sought; demonstrate successful completion of system entrance requirements to function at the level of the expired license, e.g. expired Paramedic successfully completes system P entrance requirements, may function at the P level.
 - (b) If they cannot successfully complete the system entrance exam for the level of licensure requested, then may function at the level of entrance requirements they can successfully pass, e.g. a person with an expired Paramedic license can only successfully complete the EMT entrance requirements, then may only function at the EMT level.
 - (c) All temporary licenses for those reinstating their status under this special waiver (EMT and Paramedic) shall **automatically expire 6 months** after being issued. License renewal shall require full compliance with all: IDPH and EMS system requirements.
- b. The EMS MD is responsible for all approvals and at what level they may function.
- c. NCH Paramedic students in EMS 216 who are already employees of an ALS Provider Agency within the NWC EMSS: may be given Crisis ALS privileges if they have been declared competent by completing EMS 215 - EMS Field Internship.
- d. "Function" requirements: Expired and student EMS personnel may only function with a licensed EMS practitioner at or above the level of licensure that they are seeking as approved by the EMSMD)
- e. Required Documentation:
 - (1) System plan amendment presented to IDPH for approval
 - (2) System submits a roster with names of expired licensed personnel who successfully complete the system entrance requirements.
 - (3) The roster will include:

Policy Title: ALS/BLS Staffing Requirements			No. S - 3
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- (a) Name of expired licensee, expired license number, phone number, social security#, level of function approved by EMS system for this individual, and date approved
- (b) Name of student, class site code, phone number, social security # level of function approved by EMS system for this individual and date approved
- (c) Name, system number, EMS MD signature

Matthew T. Jordan, M.D., FACEP
EMS Medical Director

Connie J. Mattera, M.S., R.N., PM
EMS Administrative Director

Date	Agency:	Vehicle #:	Incident #	
I N F O H I S T O R Y P H Y S I C A L E X A M V S R x	Pt. Name (PLEASE PRINT)		Address	
	Contact number:		DOB	
			Gender	Weight
	Chief complaint/History of presenting illness (Onset S&S)			
	Yes	No/unsure	Questions to ask/answer	
			Have you had exposure to someone in the past 14 days with confirmed or suspected COVID-19?	
			Have you been tested for or had a diagnosis of COVID-19 in the last 30 days?	
	Do you have any of the following S&S?			
			<input type="checkbox"/> Unknown / cannot assess	
			<input type="checkbox"/> No to all	
<input type="checkbox"/>	Fever > 100° F; chills	<input type="checkbox"/>	Congestion nose or lungs	
<input type="checkbox"/>	Cough (new or worsening)	<input type="checkbox"/>	Abdominal cramping/pain	
<input type="checkbox"/>	Dyspnea; ↑ WOB	<input type="checkbox"/>	Anorexia/nausea/vomiting	
<input type="checkbox"/>	Chest pain (positional/pleuritic)	<input type="checkbox"/>	Diarrhea or loose stools	
<input type="checkbox"/>	Loss of smell or taste	<input type="checkbox"/>	Sore throat	
<input type="checkbox"/>		<input type="checkbox"/>	Fatigue/weakness	
<input type="checkbox"/>		<input type="checkbox"/>	New onset confusion	
<input type="checkbox"/>		<input type="checkbox"/>	Lightheadedness	
<input type="checkbox"/>		<input type="checkbox"/>	Severe headache	
<input type="checkbox"/>		<input type="checkbox"/>	Muscle pain/myalgia	
Medications: <input type="checkbox"/> None <input type="checkbox"/> Unknown				
Past Medical History		Allergies:		
<input type="checkbox"/> COPD <input type="checkbox"/> Cardiac	<input type="checkbox"/> None <input type="checkbox"/> Unknown	<input type="checkbox"/> Asthma <input type="checkbox"/> Cancer	<input type="checkbox"/> NKA <input type="checkbox"/> Unknown	
<input type="checkbox"/> Seizures	<input type="checkbox"/> DM <input type="checkbox"/> GI	<input type="checkbox"/> HTN <input type="checkbox"/> Renal		
	<input type="checkbox"/> Stroke <input type="checkbox"/> Other:			
HEENT/Neuro:			GCS	
Chest:			Eye opening	
Abdomen:			4 Spontaneous	
Extremities: (Check for asymmetric swelling/distal pulse deficits)			3 To sound	
Back:			2 To pressure	
Skin:			1 None	
			Best verbal	
			5 Conversant	
			4 Confused	
			3 Words	
			2 Sounds	
			1 None	
			Best Motor	
			6 Obeys	
			5 Localizes	
			4 Normal flexion	
			3 Abnl. flexion	
			2 Extension	
			1 None	
			Total	
V	Time	BP	P	
S	RR	Temp	ECG rhythm	
	Glucose	SpO ₂	ETCO ₂	
R				
x				
PPE used on EMS responders		EMS responder		
<input type="checkbox"/> Gloves <input type="checkbox"/> Gown			PRINT NAME/Signature	
<input type="checkbox"/> Mask (surgical) <input type="checkbox"/> Goggles/Face shield			EMS responder	
<input type="checkbox"/> Mask (N95) <input type="checkbox"/> Other:			PRINT NAME/Signature	

Attach written stroke screen checklist or suicide screen as applicable – give to receiving facility medical staff

**NORTHWEST COMMUNITY EMS SYSTEM
PATIENT AGREEMENT for NON-TRANSPORT during COVID-19 Pandemic**

Appendix J

EMS Agency:		Incident #:	
Date:		Time:	
Patient name (PRINT):		Address:	
Date of birth:	Gender:	Phone #:	

<input checked="" type="checkbox"/> The patient DOES NOT have any of the below RISK FACTORS for severe illness from COVID-19	
<ul style="list-style-type: none"> • Age 65 years or older • Resident in a congregate living facility • Chronic lung disease; moderate to severe asthma • Heart disease with complications/ uncontrolled HTN • Diabetes mellitus; renal failure, liver disease • Obesity with a BMI of 40 or higher 	Immunocompromised state: Cancer treatment, bone marrow or organ transplantation, immune deficiencies, poorly controlled HIV or AIDS, and prolonged use of corticosteroids and other immune weakening medications. Pregnant

<input checked="" type="checkbox"/> The patient currently denies/does not have any of the S&S suggesting severe illness from COVID-19	
Fever > 100° F (may not have a fever)	Abnormal vital signs for pt; severe fatigue or weakness
Shortness of breath; SpO ₂ <94%; ↑ work of breathing	Severe headache or new onset altered mental status
Chest pain; abn. breath sounds/sputum production	Leg pain, asymmetric swelling/loss of distal pulses
Evidence of abnormal clotting (S&S heart attack or stroke)	S&S of sepsis or septic or cardiogenic shock
X	The patient's social assessment meets CDC requirements for shelter in place

Disclosure to patient / legal representative if a minor

Based on your (patient's) age, medical history, and our assessment, you (the patient) **either appear well or** may have an infectious disease that could include COVID-19, but the **condition appears mild**.

Hospitals are unable to test everyone for COVID-19 who presents to an ED if they are asymptomatic or have mild S&S. National guidelines prioritize testing and there are many community testing sites.

Fortunately, **you** (the patient) **do not currently meet the criteria for evaluation at a hospital**. In order to limit exposures and preserve resources, **we are not transporting** you (the patient) at this time.

We **encourage you to contact your** (the patient's) **physician or primary care practitioner**. Many are able to conduct a virtual exam if you have computer access. There are hotlines you can call or access <https://www.cdc.gov/coronavirus/2019-ncov/if-you-are-sick/steps-when-sick.html>.

If your (the patient's) **condition worsens or you develop any of the S&S above**, please immediately call your (the patient's) doctor, **9-1-1**, or have someone take you to the nearest hospital.

Patient/legal representative acknowledgement

I understand the information received from EMS and acknowledge that I (the patient) was assessed, had an adequate opportunity to ask questions. I am able to follow the instructions provided to manage my health condition at home right now and understand that if my condition worsens, I should immediately seek help by contacting my physician, calling 9-1-1, or going to an emergency department.

_____	_____
Patient / surrogate signature	Date
<input type="checkbox"/> CHECK HERE if patient/surrogate gave verbal consent for EMS to sign on the patient's behalf	
_____	_____
EMS member PRINTED NAME & Signature (Do NOT sign patient's name)	Date
_____	_____
Witness (PRINT Last NAME/Signature Paramedic/ PHRN)	Date

Emergency Medical Service (EMS) Education Pipeline

National Highway Traffic Safety Administration (NHTSA) staff prepared this summary document on the status of the Emergency Medical Services (EMS) education pipeline during a series of recent conference calls with EMS stakeholder organizations. Included is a list of national, State, and local considerations for EMS stakeholders. These considerations do not necessarily reflect official policy positions of the organizations that participated during the conference calls. This document is intended to serve as an informational resource for EMS stakeholders. This summary does not establish legal requirements or obligations, and its content does not necessarily reflect agency recommendations or policy.¹

Contributors to its content included representatives from the National Registry of Emergency Medical Technicians (NREMT), the National Association of EMS Educators (NAEMSE), the Committee on Accreditation for the EMS Professions (CoAEMSP), the Commission on Accreditation for Pre-Hospital Continuing Education, the National Association of State EMS Officials, the International Association of Fire Chiefs, the American Ambulance Association, the National Association of Emergency Medical Technicians, the American College of Surgeons, and the Interstate Commission for EMS Personnel Practice.

Challenges Facing EMS Education

Nationwide social distancing measures have led to closures, delays, and other impacts on the national EMS education system. National, State, and local EMS organizations are collaborating to address these challenges, but prolonged delays are likely in the education, certification, and licensing of tens of thousands of entry-level EMS clinicians.

EMS Education Programs Closed

Community colleges, universities, fire academies, and other programs that provide EMS education throughout the country closed in response to social distancing measures. Many of these institutions created distance learning programs to help current students complete their didactic education. However, not every EMS education program has the resources to support online or distance learning alternatives.

To assist EMS education programs, NAEMSE has led a webinar series on transitioning to the online classroom² and is collaborating with NREMT to develop best practices for distance education.

EMS students must also complete in-hospital and pre-hospital clinical rotations to graduate. Unfortunately, most clinical and field internship sites remain closed to students based on a combination of factors, such as government restrictions and recommendations on traveling and social distancing, lack of personal protective equipment (PPE) for students, or the decision of the clinical site to restrict student access.

CoAEMSP acknowledged the need for its 706 accredited paramedic education programs to modify current graduation requirements.³ On April 5th, 2020, the CoAEMSP Board of Directors issued a statement regarding Coronavirus Disease 2019 (COVID-19) to clarify that Paramedic educational

¹ This document does not have the force and effect of law and is not meant to bind the public in any way. It is offered for informational purposes only.

² <https://naemse.org/forums/Topics.aspx?forum=245511>

³ <https://coaemsp.org> Accessed April 16th, 2020.

Emergency Medical Service (EMS) Education Pipeline

programs may employ a broad array of approaches, including simulation, in determining competency in didactic, laboratory, clinical, field experience, and capstone field internship.

Another option suggested by stakeholders for increasing the number of competent, entry-level EMS clinicians to enter the workforce with advanced life support (ALS) skills may be allowing paramedic students to graduate early and be tested as Advanced EMTs (AEMTs).

Testing and Certification Delayed

NREMT is the national certification agency for EMS clinicians. NREMT testing and certification (after completion of approved education) is a requirement for EMS clinician licensure in most States. NREMT's cognitive (computer-based written) exam is administered by Pearson VUE. On March 17, 2020, Pearson VUE closed most of its nearly 700 testing centers nationwide. Over the subsequent weeks, approximately 450 of Pearson VUE's testing centers have re-opened at reduced capacity, with more projected to open in the future. Many testing sites remain closed under State government orders that closed State colleges and universities. Allowing sites to remain open for the sole purpose of testing EMS and other healthcare professionals would help alleviate the lack of testing capacity. Open testing centers are operating at approximately 50% capacity due to social distancing measures.

NREMT is temporarily not requiring the psychomotor (hands-on skills) examination due to social distancing guidelines. It is offering a provisional certification that requires only successful completion of the EMS education course and the cognitive exam. NREMT has accelerated plans for remote proctoring of the cognitive exam, which will be available for the AEMT examination and the EMT examination in May 2020. These emergency measures will help to continue certifying new EMS professionals. Historically, the NREMT tests over 60,000 EMS clinicians in the spring season. NREMT projects that a significantly lower number of EMS clinicians will be tested this year due to the cancellation of EMS education courses. Consequently, local EMS agencies will face a severe workforce supply shortage within the next three months.

Recertification Deadlines Extended

NREMT has approved a 90-day extension on EMS certifications that were due to expire on March 31, 2020, and waived continuing education requirements for face-to-face instruction. States are beginning to modify relicensing requirements in line with NREMT's actions.

Specialty certification courses (such as Cardio Pulmonary Resuscitation, Pediatric Advanced Life Support, Pre-Hospital Trauma Life Support, Advanced Cardiac Life Support, etc.) are often required as part of EMS education, certification, licensure, or affiliation. Many specialty certification course providers have created online courses for didactic materials, and either waived hands-on skills requirements or provided guidance on safely facilitating in-person instruction. Most have also extended or waived current expiration dates.

Licensure Modifications Underway

State EMS offices license EMS clinicians, regulate local EMS agencies, and support EMS system development. Many State EMS staff are currently deployed to state operations centers supporting the COVID-19 response, including guiding statewide efforts to support crisis standards of care (CSC) planning for EMS. Multiple States have temporarily waived or modified licensure policies to streamline licensure.

Emergency Medical Service (EMS) Education Pipeline

Twenty States are accepting NREMT provisional certification as a condition of licensure; however, some States⁴ have reported that their laws and rules prohibit issuing licenses to holders of the NREMT provisional certification.

A few States require fingerprinting and a criminal background check as a condition for licensure; however, social distancing measures and public building closures have made fingerprinting services largely unavailable. Some States⁵ are offering provisional licensure that defers a criminal background check until the public health emergency ends. Employers cannot assume a provisional licensee had a background check and may now need to do this as part of their hiring process. States are also reactivating expired licenses within specified time frames.

Twenty States are members of the Interstate EMS Licensure Compact (Compact), which was formally activated in response to COVID-19. The Compact will enable interstate recognition of EMS clinician licensure between member States. However, the Compact does not address practice by EMS clinicians in non-traditional settings, such as hospitals. Many States⁶ grant physicians authority to delegate certain aspects of medical practice, which may give hospitals flexibility to use EMS personnel in an expanded clinical role.

Service Impact⁷

In the United States, more than 18,200 EMS agencies, staffed by a total licensed workforce of more than 1.03 million EMS clinicians, provide ubiquitous 24/7 coverage of the entire Nation. In 2019, these EMS agencies responded to more than 28.5 million 911 dispatches.⁸

Stakeholders have reported an average 30 percent decline in EMS transports in areas not yet severely impacted by the public health emergency, which they attribute to less public willingness to be transported to hospitals. This decline in EMS transports has led to a decline in insurance reimbursement revenue⁹ accompanied by an anticipated decline in State and local tax revenue. As a result, EMS stakeholders have reported widespread hiring freezes and potential future furloughs and layoffs.

Despite the need for 24/7 service, stakeholders anticipate that the inability to hire, coupled with workforce supply shortages (attributed to the shutdown of EMS education programs), will lead to prolonged EMS staffing shortfalls. In some cases, these staffing shortfalls may take effect as COVID-19 peaks locally resulting in potentially insufficient staffing to respond to an expected surge of EMS calls.

As components of the workforce pipeline partially resume operations, employers will face additional challenges, such as delays in fingerprint-based background checks and remedial education and testing for provisionally certified and licensed EMS personnel.

⁴ <https://www.nremt.org/rwd/public/document/covid-19>, accessed on April 27, 2020

⁵ <https://www.ncsl.org/research/labor-and-employment/covid-19-occupational-licensing-in-public-emergencies.aspx>, accessed April 27, 2020.

⁶ <https://www.astho.org/preparedness/astho-ems-and-law-report/>

⁷ The information collected on possible economic and service impact is based on discussion with stakeholders. These do not necessarily reflect official policy positions of these entities.

⁸ <https://nasemso.org/news-events/news/news-item/nasemso-releases-2020-national-ems-assessment/>

⁹ The anticipated decrease in insurance reimbursements is based on discussion with stakeholders based on anecdotal examples.

Emergency Medical Service (EMS) Education Pipeline

The long-term impact of system accommodations (e.g., deferred background checks, proctored exams, provisional certification and licensing) is unknown. In addition, there is also growing concern that the pandemic may increase EMS workforce turnover.

State and Local Considerations for EMS Stakeholders

Based upon the issues and challenges discussed above, stakeholders may consider the following measures at the State and local levels:

1. Enable EMS clinicians with a NREMT provisional certification to pursue provisional State licensure.
2. Enable EMS clinicians with expired licenses to pursue provisional State licensure.
3. Prioritize reopening of EMS clinical skills labs when reopening educational institutions.
4. Encourage EMS education programs to provide distance learning resources to all students. Front load didactic education for EMS students until clinical skills labs, clinical internships, and field internships can resume.
5. Enable States, colleges, and educational programs to allow modified approaches to clinical skills labs, clinical internships, and field internships, when they can be conducted safely.
6. Encourage the sharing of best practices by State and local authorities.
7. Encourage collaboration between educational programs to develop online education capabilities.
8. Permit public and private education testing centers to administer the NREMT examination within local jurisdictions, while following strict social distancing protocols.
9. Explore ability to verify course completion and/or testing paramedic students at the AEMT level, provided the state has approved an AEMT course.

National Considerations for EMS Stakeholders

In addition, stakeholders may consider the following measures at the national level to the extent permitted by applicable law:

1. Permit fingerprinting centers to open to support criminal background checks for EMS clinicians as a condition of licensure or employment. Explore other innovative solutions for conducting criminal background checks.
2. Continue convening national EMS organizations to facilitate collaborative and innovative problem solving. Engage additional stakeholders, such as the Accreditation Council for Graduate Medical Education, to coordinate healthcare education efforts.
3. Consider, as essential critical infrastructure workers, those workers involved in the certification, licensing, and credentialing of EMS personnel and other healthcare workers.
4. Consider, as essential critical infrastructure workers, those workers supporting public and private education testing centers for EMS personnel and other healthcare workers.
5. Share EMS educational best practices nationally.
6. Support technology for EMS education programs to conduct remote training, high-fidelity simulation, and other tools to effective training while also supporting social distancing.