To: Ohio EMS providers, EMS agencies, and EMS medical directors  
From: Carol A. Cunningham, M.D., FAAEM, FAEMS  
State Medical Director  
Date: March 16, 2020  
RE: Conservation of Personal Protective Equipment  
Considerations for Non-Transport Protocols

Conservation of Personal Protective Equipment

The appropriate utilization of personal protective equipment (PPE) is an imperative measure for the protection of our EMS providers and their families and loved ones and for the maintenance of our EMS workforce. The response needs during the COVID-19 pandemic will tax, and potentially overwhelm, the available PPE resources. Contact your local emergency management agency (EMA) for resource requests.

The Centers for Disease Control and Prevention (CDC) has identified steps that can be taken by healthcare professionals to conserve PPE. The CDC has also provided guidance for optimizing the supply of N95 respirators through conventional, contingency, and crisis strategies. The CDC’s guidance is directed toward all healthcare professionals, including hospitals. While I recommend that you review the entire guidance for each level of strategy, I strongly advise that you direct your focused attention to the Personal Protective Equipment and Respiratory Protection sections of the contingency and crisis strategies as these are most pertinent measures for the EMS community as you develop your local and regional operational procedures for PPE during the COVID-19 response.

The definitions for conventional, contingency, and crisis set by CDC followed by the respective link with the suggested measures for conservation of PPE are as follows:

Conventional: In the continuum of care, measures can be categorized as conventional capacity, which consists of providing patient care without any change in daily practices. This set of controls should already be implemented in general infection prevention and control plans in healthcare settings. Strategies for hospitals operating at conventional capacity:

Contingency: In the continuum of care, measures can be categorized as contingency capacity, which may change daily practices but may not have any significant impact on the care delivered to the patient or the safety of the healthcare professional. Measures may be considered in the setting of a potential impending shortage of N95 respirators. The decision to implement these practices should be made on a case by case basis taking into account known characteristics of the SARS-CoV-2 and local conditions (e.g., number of disposable N95 respirators available, current respirator usage rate, success of other respirator conservation strategies, etc.). Strategies for hospitals operating at contingency capacity:


Crisis: Crisis capacity or alternate strategies accompany and build on the conventional and contingency capacity strategies. Measures are not commensurate with current U.S. standards of care. However, individual measures or a combination of these measures may need to be considered during periods of expected or known N95 respirator shortages. It is important to consult with entities that include some combination of: local healthcare coalitions; federal, state, or local public health officials; appropriate state agencies that are managing the overall emergency response related to COVID-19. Even when state/local healthcare coalitions or public health authorities can shift resources between health care facilities, these strategies may still be necessary. Strategies for hospitals operating at crisis capacity:


Considerations for Non-Transport Protocols

During any pandemic, the number of 911 calls to public safety answering points (PSAPs) and requests for EMS services inherently escalates and, at times, can be overwhelming. Emergency medical dispatch (EMD) via PSAPs is the gatekeeper for emergency response and, as such, plays a critical role in resource allocation, including the conservation of PPE. As an element of contingency or crisis strategies, the development and implementation of non-transport protocols should be considered.

The Ohio Department of Public Safety, Division of EMS does not oversee PSAPs in the State of Ohio as they function under the authority of the Ohio Department of Administrative Services. Unfortunately, the State of Ohio does not currently provide immunity provisions specific to non-transport measures. As such, we strongly encourage EMS agencies and EMS medical directors to work collaboratively with local and regional PSAP and EMD organizations and their respective legal counsels during the consideration and creation of non-transport protocols.
As you are aware, non-transport protocols can be fraught with liability risk especially when the protocol is not crafted properly or if a non-transport results in a poor patient outcome. However, the overall morbidity and mortality of the local community and the general public can be reduced when EMS resources are utilized appropriately especially during periods of time when call volume is anticipated to be higher than usual.

During the development of non-transport protocols, I suggest that your local or regional EMS response system include, but are not limited to, the following considerations during the development of non-transport protocols for the COVID-19 response:

1. Perform an assessment of available resources that includes known and potential fluctuations (e.g. staffing matrix, equipment, facility capabilities) during each hour of the day for weekdays, weekends, and holidays.

2. PSAPs or EMD centers can be provided with a standard script to screen callers who are exhibiting flu-like or respiratory symptoms.  
   A. The identification of persons with signs or symptoms and risk factors for COVID-19 can provide EMS clinicians to don the appropriate PPE prior to arrival on scene.  
   B. The query process should never supersede the provision of pre-arrival instructions to the caller when immediate lifesaving interventions (e.g., chest compressions and CPR) are indicated.

3. Non-transport protocols, whether generated from the EMD center or the medical director of the EMS agency, do not need to be applicable only to patients potentially with signs, symptoms, and risk factors for COVID-19.  Dependent upon the procedures of your local or regional healthcare system and the level of the state of disaster, high-risk and/or low-risk patients may be directed to alternate care facilities (e.g., tertiary care centers, urgent care centers, specific facilities with negative pressure rooms).  As an example, the city of Vancouver instituted contingency protocols during the 2010 Winter Olympics.  During that period of time, 911 callers with closed ankle injuries were directed to take public transportation or a private vehicle to a source of medical care while 911 callers with hip injuries had an EMS unit dispatched for transport.  The stark reality is that 911 calls for time-critical diagnoses (STEMI, stroke, and trauma) and other significant illnesses and injuries will continue to exist on a daily basis.  Even during the pandemic, the goal is to ensure that EMS resources remain as readily available to these patients as humanly possible.

4. EMS agencies, PSAPs, EMD centers, and EMS medical directors typically have liability insurance policies that cover their administrative and operational activities, policies, protocols, and standard operating procedures.  The majority of liability insurance companies are in the private sector.  The policies they generate contain varied language, inclusions and exclusions, or requirements that are either not affected or amendable by
governmental organizations. With respect to non-transport initiatives, a liability insurance provider may elect to charge an additional premium, provide a discount, or terminate the client’s policy. It is imperative that this information is obtained from all parties involved as it may impact the proposed non-transport protocol.

5. Collaboration with the local and regional healthcare system is critical as well as with organizations that staff designated alternate care facilities sites that are sources of medical care.

6. Communication of non-transport protocols to the community is essential for success. The general public’s expectations for a 911 response will not change or have an opportunity to be appropriately adjusted unless the community is informed of the altered procedures, which includes the possibility of non-transport, as far in advance as possible.

**NOTE:** The conventional, contingency, and crisis strategies that have been cited by the CDC originated from the *Crisis Standards of Care: A Systems Framework for Catastrophic Disaster Response*, a document published by the Institutes of Medicine (now the National Academies of Science). This a wonderful resource for disaster planning and avenues to mitigate the depletion of critical and/or scarce resources. The document can be accessed at [https://www.nap.edu/catalog/13351/crisis-standards-of-care-a-systems-framework-for-catastrophic-disaster](https://www.nap.edu/catalog/13351/crisis-standards-of-care-a-systems-framework-for-catastrophic-disaster), and it can be viewed or downloaded free of charge.

The *Crisis Standards of Care: A Toolkit for Indicators and Triggers*, a subsequent document published by the Institutes of Medicine, is an excellent resource for operational planning. This document, which contains an EMS toolkit, can be accessed at [https://www.nap.edu/catalog/18338/crisis-standards-of-care-a-toolkit-for-indicators-and-triggers](https://www.nap.edu/catalog/18338/crisis-standards-of-care-a-toolkit-for-indicators-and-triggers), and it also can be viewed or downloaded free of charge.

Clearly, the needs and initiatives during the COVID-19 pandemic are, and will remain, dynamic as more information is discovered about the virus and the effective parameters for prevention and mitigation. The Ohio Department of Public Safety, Division of EMS will continue to provide you with additional information and resources as they become available. Once again, I thank you for the dedicated service that you provide to Ohio's residents and visitors during this pandemic as well as on each and every day. Your efforts are truly appreciated!