COVID-19: Considerations, Strategies, and Resources for Emergency Medical Services Crisis Standards of Care

Product (EMS14) Purpose

In response to the COVID-19 pandemic, emergency medical services (EMS) agencies (including fire service, third government service, hospital-based, private for-profit, and private non-profit services) may need to adjust operations and standards of care in order to preserve and effectively allocate limited EMS and healthcare system resources in the face of overwhelming demand due to the national pandemic response. This document provides an overview of general considerations, potential strategies, and existing resources that EMS agencies may use to inform changes to their operations and standards of care. Sample documents are provided for illustrative purposes only and should be modified to locally adopted protocols as necessary. NOTE: This document contains weblinks to non-Federal websites and webpages. Linking to a non-Federal website does not constitute an endorsement by the U.S. government, or any of its employees, of the information and/or products presented on that site. Those websites will be indicated throughout the document with an "*".

Developed By

The Federal Healthcare Resilience Task Force (HRTF) is leading the development of a comprehensive strategy for the U.S. healthcare system to facilitate resiliency and responsiveness to the threats posed by COVID-19. The Task Force's EMS/Pre-Hospital Team is comprised of public and private-sector Emergency Medical Service (EMS) and 911 experts from a wide variety of agencies and focuses on responding to the needs of the pre-hospital community. This Team is composed of subject matter experts from NHTSA Office of EMS, CDC, FEMA, USFA, US Army, USCG, and non-federal partners representing stakeholder groups and areas of expertise. Through collaboration with experts in related fields, the team develops practical resources for field providers, supervisors, administrators, medical directors and associations to better respond to the COVID-19 pandemic.

Intended Audience

State, Local, Tribal, and Territorial Governments (SLTTs) EMS and 911 agencies.

Expected Distribution Mechanism

EMS.gov webpage, 911.gov webpage, EMS/911 GOVdelivery, USFA webpage, USFA GOVdelivery and USFA social media, Stakeholder Calls, EMS stakeholder organization's membership distribution, email mechanisms.

Primary Point of Contact

NHTSA Office of EMS, nhtsa.ems@dot.gov, 202-366-5440 **Date Published** April 25, 2020

1 April 16, 2020 *This document contains weblinks to non-Federal websites and webpages. Linking to a non-Federal website does not constitute an endorsement by the U.S. government, or any of its employees, of the information and/or products presented on that site.

This guidance applies to all EMS delivery models including but not limited to; free standing, municipal third-service; fire-based, hospital-based, private, independent, volunteer, and related emergency medical service providers.

COVID-19: Considerations, Strategies, and Resources for Emergency Medical Services Crisis Standards of Care

2 April 16, 2020 *This document contains weblinks to non-Federal websites and webpages. Linking to a non-Federal website does not constitute an endorsement by the U.S. government, or any of its employees, of the information and/or products presented on that site.

This guidance applies to all EMS delivery models including but not limited to; free standing, municipal third-service; fire-based, hospital-based, private, independent, volunteer, and related emergency medical service providers.

Table of Contents

Overview	4
General Considerations	
Continuum of Care, Indicators, and Triggers	
Legal	5
Ethical	5
Sample Continuum of Care	6
Sample Indicators and Triggers	7
Sample Texas Press Release	
Call-Taking & Dispatch	. 11
Potential Strategies	
Dispatch	
Sample Call COVID-19 Screening Questions	
Response & Operations	. 13
Potential Strategies	
Response	
Operations	
Treatment & Transport	. 14
Potential Strategies	
Treatment	
Transport	
Sample Maryland COVID-19 Triage Protocol	
Sample California COVID-19 Treatment Protocol	
Sample Texas COVID-19 Alternative Disposition Protocol	
Procedure:	. 21
Sample Nevada COVID-19 Transport Protocol	
Sample Illinois COVID-19 Alternative Destination Algorithm (Non-COVID-19 Illness)	
Sample Texas COVID-10 Self-Monitoring Instructions	
Actions You Should Take*:	. 25
Resources	. 26

3 April 16, 2020 *This document contains weblinks to non-Federal websites and webpages. Linking to a non-Federal website does not constitute an endorsement by the U.S. government, or any of its employees, of the information and/or products presented on that site.

This guidance applies to all EMS delivery models including but not limited to; free standing, municipal third-service; fire-based, hospital-based, private, independent, volunteer, and related emergency medical service providers.

Document Developed by the Healthcare Resilience Task Force

Emergency Medical Services (EMS) Prehospital Team

Overview

In response to the COVID-19 pandemic, emergency medical services (EMS) agencies (EMS delivery models including but not limited to; free standing, third-service; fire-based, hospital-based, private, independent, volunteer, and related emergency medical service providers) may need to adjust operations and standards of care in order to preserve and effectively allocate limited EMS and healthcare system resources in the face of overwhelming demand due to the national pandemic response. This document provides an overview of general considerations, potential strategies, and existing resources that EMS agencies may use to inform changes to their operations and standards of care. Sample documents are provided for illustrative purposes only and should be modified to locally adopted protocols as necessary.

NOTE: This document contains weblinks to non-Federal websites and webpages. Linking to a non-Federal website does not constitute an endorsement by the U.S. government, or any of its employees, of the information and/or products presented on that site. Those websites will be indicated throughout the document with an "*".

General Considerations

Continuum of Care, Indicators, and Triggers

- Changes to standards of care should take place along a continuum of levels of care:
 - *Conventional*: normal level of healthcare resources
 - o Contingency: demand for healthcare resources begins to exceed supply
 - *Crisis*: resources are exceeded by demand or depleted; functionally equivalent care is no longer possible to address all requirements
- Advanced planning for alterations in response procedures and in the allocation of resources will be required at the contingency level of care, with the primary goal of avoiding a transition into the crisis level of care.
- EMS agencies should clearly identify indicators that will signal a shift in the level of care that is able to be provided and that will trigger changes to standards of care. Triggers should be established in conjunction with local and state EMS and public health agencies.
- The level of care that can be delivered may be dynamic and shift rapidly. Standards of care should be adjusted up or down to match the circumstances (resource availability vs. demand) at a given time, consistent with pre-identified indicators and triggers.

April 16, 2020

This guidance applies to all EMS delivery models including but not limited to; free standing, municipal third-service; fire-based, hospital-based, private, independent, volunteer, and related emergency medical service providers.

Legal

- National and state emergency declarations were issued to carry out activities under the nationwide emergency and for COVID-19 may provide EMS agencies additional flexibility and liability protections, including the waiver and/or suspension of certain state laws and regulations governing EMS.
- EMS agencies should nonetheless ensure that any changes to their operations and standards of care ٠ comply with the EMS laws and regulations in their respective jurisdictions.
- EMS agencies should also coordinate operational adjustments with relevant state, regional, and local • EMS authorities—including relevant medical direction.
- Civil rights norms and laws are not suspended in the disaster context. Federal civil rights laws and regulations apply, and have not been suspended or waived, during the COVID-19 national health emergency.
 - 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 ageincluding generalizations and judgments about the quality of life, or relative value to society.
 - If particular groups receive favorable treatment, this priority should stem from relevant factors (e.g., greatest likelihood of survival) and/or promote important community goals (e.g. achieving the best outcomes for the largest number).
- There is never a justification for careless decision making or willful misconduct, especially in the setting of a disaster response, when patients are at their most vulnerable.

Ethical

- 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 ٠ to sustain life and well-being to the greatest extent possible for the greatest number possible.
- EMS medical directors 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.

Communications

- Changes to standards of care should be communicated to the public in a proactive, honest, transparent, and accountable manner.
- EMS clinicians should also 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.

5

This guidance applies to all EMS delivery models including but not limited to; free standing, municipal third-service; fire-based, hospital-based, private, independent, volunteer, and related emergency medical service providers.

Document Developed by the Healthcare Resilience Task Force

Emergency Medical Services (EMS) Prehospital Team

EMS/Prehospital Team

	Conventional	Contingency	Crisis
Call-Taking & Dispatch	Consider initial auto-answer during times of high call volume for the purpose of filtering high-acuity calls	Prioritize calls according to potential threat to life; "pend" apparently non- life-threatening calls (note this requires a medically trained dispatcher)	Decline response to calls without evident potential threat to life (also requires a medically trained dispatcher)
Response & Operations	Modify resource assignments (e.g., only fire/rescue dispatched to motor vehicle crashes unless EMS are clearly required, single-agency EMS responses if fire agencies are overtaxed) Seek mutual-aid assistance from surrounding areas	Modify resource assignments to a greater extent Change EMS assignments to closest available unit rather than advanced life support (ALS)/basic life support (BLS) Consider staffing configuration changes (e.g., from two paramedics to one paramedic plus one emergency medical technician [EMT])	 Request EMS units from emergency management (if possible) Utilize scheduled BLS providers to answer emergency calls Change staffing to one medical provider, one driver Further modify resource assignments as possible Attempt no resuscitation of cardiac arrests (except ventricular fibrillation [VF] witnessed by EMS) Consider use of National Guard ambulances or other first responder assets (SAR teams, etc.).
Treatment & Transport	Allow patients with very minor injuries to use their own transportation Transport patients to the closest appropriate facility (rather than the	Encourage patients with minor injury/illness to use their own transportation to appropriate facilities. Consider batched transports—answer	Assess patients and decline to transport those without significant injury/illness (according to guidance from EMS medical director)
	facility of the patient's choice)	subsequent call(s) before transporting stable patients to the hospital	Decline transports as above; employ batch transports as needed

Sample Continuum of Care

Adapted from Institute of Medicine (2012). Potential EMS Response Adaptations Under Conventional, Contingency, and Crisis Conditions.

April 16, 2020

*This document contains weblinks to non-Federal websites and webpages. Linking to a non-Federal website does not constitute an endorsement by the U.S. government, or any of its employees, of the information and/or products presented on that site.

6

This guidance applies to all EMS delivery models including but not limited to; free standing, municipal third-service; fire-based, hospital-based, private, independent, volunteer, and related emergency medical service providers.

Sample Indicators and Triggers

	Contingency	Crisis	Return to Conventional
Surveillance Data	Increased patient encounters by EMS	Indicators Patient care demands exceed the available EMS resources, including mutual aid	Indicators Stabilization or decrease in patient encounters by EMS
	Increased emergency department and/or hospital census	Patient care demands exceed the available hospital resources	Stabilization or decrease in emergency department and/or hospital census
	<u>Triggers</u> Significantly elevated number of dispatch requests Significantly increased patient care	Surveillance data are impacted due to overwhelmed health care providers, public health, or collapse of data entry systems	<u>Triggers</u> Stabilization or decrease in the number of dispatch requests
	encounters with similar signs and symptoms or high patient acuity	Incidence of illness and injury continues to escalate despite mitigation measures	Stabilization or decrease in calls with similar signs and symptoms or high patient acuity calls
	Significantly increased data registry entries from state or regional electronic prehospital patient care record systems	<u>Triggers</u> Multiple hospitals closed to EMS Mutual aid partners not able to answer calls involving potential life threats	
Community and Communications Infrastructure	Indicators Compromised public safety communications systems	<u>Indicators</u> Emergency medical dispatch overwhelmed by call volumes and unable to answer all calls	<u>Indicators</u> Stabilization or decrease in calls to emergency medical dispatch
	Increased calls or ambulatory presentation of patients to EMS agencies seeking medical advice or treatment	Operational or structural collapse of the communication centers	Stabilization or decrease in calls to medical advice hotlines Communication systems, networks, and physical infrastructure returning to baseline
	<u>Triggers</u> >20% increase in emergency medical dispatch or medical advice hotlines	<u>Triggers</u> Inability of high-acuity patients to access the emergency response system	functional state

7

April 16, 2020

*This document contains weblinks to non-Federal websites and webpages. Linking to a non-Federal website does not constitute an endorsement by the U.S. government, or any of its employees, of the information and/or products presented on that site.

This guidance applies to all EMS delivery models including but not limited to; free standing, municipal third-service; fire-based, hospital-based, private, independent, volunteer, and related emergency medical service providers.

EMS/Prehospital Team

	Contingency	Crisis	Return to Conventional
		Patient tracking mechanisms and systems are overwhelmed	<u>Triggers</u> Number of requests to emergency medical dispatch and for EMS are returning to baseline levels
Staff	Indicators Members of the EMD and EMS workforce within the at-risk population Members of the EMD and EMS workforce unable to report for duty due to illness, injury, or physical entrapment in residences Triggers EMS crews are at or approaching minimal staffing Loss of 10% or more of the workforce	IndicatorsOverwhelming number of patients with insufficient staff to meet the demand for triage, treatment, and transportSignificant portion of the emergency medical dispatch and EMS workforce is sustaining illness or physical fatigue due to extended work shifts and incident stressSignificant number of the EMD and EMS workforce are affected and are unavailable to respondEMS and medical personnel are becoming victims of criminal activity by individuals seeking medications, medical supplies, 	Indicators Approaching normal baseline levels of staffing Return to normal shift level and staffing <u>Triggers</u> The number of emergency medical dispatch and EMS personnel reporting for duty is starting to stabilize Recovery of EMS personnel from illness

8

April 16, 2020

*This document contains weblinks to non-Federal websites and webpages. Linking to a non-Federal website does not constitute an endorsement by the U.S. government, or any of its employees, of the information and/or products presented on that site.

This guidance applies to all EMS delivery models including but not limited to; free standing, municipal third-service; fire-based, hospital-based, private, independent, volunteer, and related emergency medical service providers.

EMS/Prehospital Team

	Contingency	Crisis	Return to Conventional
Supplies	Indicators	Indicators	Indicators
	EMS agencies report increased use of PPE,	EMS reports inadequate or depleted supply	Demand for PPE for EMS personnel is
	medical supplies, medications, or airway	of PPE, medical supplies, medications, or	subsiding
	management equipment	airway management equipment	
			Demand for medical supplies or airway
	Manufacturers of PPE, medical supplies,	Manufacturers of PPE, medical supplies,	management equipment is reduced
	vaccines, medications, or ventilators report	vaccines, medications, or ventilators report	
	decreased stock available	insufficient or depleted stock	Manufacturers of PPE, medical supplies,
			medications, or airway management
	Triggers	Manufacturers of disaster supplies and	equipment report improving product
	Available PPE is less than what is needed	recovery equipment report factory closures	availability
	for the EMS workforce	and/or halted production due to loss of	
		workforce	Triggers
	Use of medical supplies, medications,		Incident command is receiving reduced
	vaccines, and antidotes begins to exceed	Triggers	requests for additional PPE and medical
	their replacement	PPE is no longer available	supplies from EMS personnel
		Vaccinations, medications, or antidotes are	Emergency departments, emergency care
		depleted to the point that equivalent	facilities, and hospitals have reduced
		treatment cannot be provided	requests for medications, antidotes,
			vaccinations, and ventilators
		Hospitals can no longer provide supplies or	
		medications to restock ambulances	Manufacturers of disaster supplies and
			recovery equipment report a return to
			production
			·

Adapted from Institute of Medicine (2013). Crisis Standards for Care: A Toolkit for Indicators and Triggers (Emergency Medical Services)

9

April 16, 2020

*This document contains weblinks to non-Federal websites and webpages. Linking to a non-Federal website does not constitute an endorsement by the U.S. government, or any of its employees, of the information and/or products presented on that site.

This guidance applies to all EMS delivery models including but not limited to; free standing, municipal third-service; fire-based, hospital-based, private, independent, volunteer, and related emergency medical service providers.

Sample Texas Press Release

Community Release: MedStar EMS System Modifying Patient Referral Procedures

Move aims to navigate patients to the most appropriate resources for their medical care

EMS agencies within the Metropolitan Area EMS Authority (MedStar) system are modifying on-scene procedures for patients assessed with *low-acuity* medical complaints who are identified as potentially COVID-19 related.

Patients will receive a screening assessment on scene by EMS personnel. If the patient has signs and symptoms that are consistent with COVID-19, but does not have any priority conditions, or significant risk factors, the patient will be informed that they are in a low risk category, and therefore will most likely will not be tested or receive additional emergency medical treatment at the Emergency Department based on their current symptoms and condition.

The EMS personnel will recommend that the patient <u>not</u> go to the ED for evaluation.

The patient will be instructed to contact their primary care provider or other telehealth resource and will be provided with information on home care and self-monitoring instructions, including contact information for the county public health agency, or other resources for further evaluation.

These modifications are being implemented for the following reasons:

- 1. To ensure patients receive the proper care, in the most appropriate setting
- 2. To reduce the risk of patients being exposed to contagious illnesses
- 3. To help ensure essential hospital services are available for critical patients

Adapted from Metropolitan Area EMS Authority (MedStar) (2020).

10

This guidance applies to all EMS delivery models including but not limited to; free standing, municipal third-service; fire-based, hospital-based, private, independent, volunteer, and related emergency medical service providers.

Call-Taking & Dispatch

- As care is stratified during the COVID-19 response, more front-end triage of patient complaints should be performed to limit the burden on healthcare resources.
- A central dispatch or call center may activate medically approved dispatch protocols and prearrival instructions designed to alleviate the burden on EMS response capabilities that are being overwhelmed.

Potential Strategies

Call-Taking

- Caller Screening
 - Add specific caller queries for COVID-19 like symptoms (i.e., fever, cough, shortness of breath, etc.). <u>CDC COVID19 Symptoms</u>
- Call Triage
 - Identify patients who don't require an ambulance response when ambulance resources are depleted by overwhelming system demand.
- Referral to Non-Emergency Resources
 - Determine which specific call types can be transferred to a secondary triage center (e.g., nurse triage, aligned telehealth resources or advice line).
- Auto-Answer with Pre-Recorded Message
 - Use pre-recorded messages to filter calls that require direct contact with a calltaker and refer callers with a non-acute illness to non-emergency resources.

Dispatch

- Prioritized Dispatch
 - Prioritize calls according to potential threat to life.
 - Delay apparently non-life-threatening calls until resources are available and communicate the delay to the caller.
- Dispatch of Non-Emergency or Non-Ambulance Vehicles
 - Dispatch non-emergency transport vehicles for low-acuity patients.
 - Dispatch non-ambulance vehicles (e.g., passenger vans, Uber/Lyft).
- Callback System
 - Utilize a call-back system when emergency response will be delayed.
- Non-Dispatch
 - Decline response to calls without evident or potential threat to life.
 - Refer callers to non-emergency resources.

April 16, 2020

*This document contains weblinks to non-Federal websites and webpages. Linking to a non-Federal website does not constitute an endorsement by the U.S. government, or any of its employees, of the information and/or products presented on that site.

11

This guidance applies to all EMS delivery models including but not limited to; free standing, municipal third-service; fire-based, hospital-based, private, independent, volunteer, and related emergency medical service providers.

Document Developed by the Healthcare Resilience Task Force

Sample Call COVID-19 Screening Questions

COVID-19 like Symptoms

- 1. Does the caller have any of the following symptoms?
 - o Fever
 - Cough
 - o Shortness of Breath

COVID-19 Test Status

- 2. Has the caller tested positive for COVID-19?
- 3. Has the caller been tested for COVID-19 but not yet received a result?

See Centers for Disease Control and Prevention (2020). <u>Interim Guidance for Emergency Medical Services (EMS)</u> Systems and 911 Public Safety Answering Points (PSAPs) for COVID-19 in the United States.

April 16, 2020

*This document contains weblinks to non-Federal websites and webpages. Linking to a non-Federal website does not constitute an endorsement by the U.S. government, or any of its employees, of the information and/or products presented on that site.

This guidance applies to all EMS delivery models including but not limited to; free standing, municipal third-service; fire-based, hospital-based, private, independent, volunteer, and related emergency medical service providers.

EMS/Prehospital Team

Response & Operations

- It may be necessary to modify the provision of prehospital emergency medical care during the COVID-19 response.
- Fundamental changes in prehospital operations may be required, including changes to scope of practice, response models, and staffing for ambulances.

Potential Strategies

Response

- Modified Resource Assignments
 - Reduce multi-unit responses unless clearly required.
 - Assign units irrespective of level of care (ALS, BLS, EMR).
 - Adopt timely care over appropriate level of care for highest levels of triage when transport resources are severely limited.
- Modified Staffing Configurations
 - Staff ambulances with the trained personnel that are available, irrespective of certification level (ALS, BLS, EMR).

Operations

- Modified Licensure/Re-Licensure Requirements (e.g., staffing and equipment)
 - Deploy ambulances irrespective of level of care and required equipment.
 - Permit delivery of certain treatments by lower levels of care (e.g. supraglottic placement).
- Use of Non-EMS Support Personnel
 - Permit non-EMS and non-EVOC personnel to drive ambulances.
- Optimization of Personal Protective Equipment
 - Consider extended use and limited re-use of PPE consistent with CDC guidance.

*This document contains weblinks to non-Federal websites and webpages. Linking to a non-Federal website does not constitute an endorsement by the U.S. government, or any of its employees, of the information and/or products presented on that site.

This guidance applies to all EMS delivery models including but not limited to; free standing, municipal third-service; fire-based, hospital-based, private, independent, volunteer, and related emergency medical service providers.

Treatment & Transport

- EMS provider practice should be based on updated COVID-19 clinical recommendations and treatment protocols/information from appropriate public health authorities and EMS medical direction.
- During the COVID-19 response, healthcare facilities may become overwhelmed with patients, making it necessary to consider alternative options for disposition of patients who would be otherwise transported to the hospital under normal circumstances.
- The Centers for Medicare & Medicaid Services (CMS) has temporarily expanded the list of allowable destinations for ambulance transports for the duration of the COVID-19 public health emergency. More information can be found in the <u>CMS Fact Sheet on</u> <u>Ambulances: CMS Flexibilities to Fight COVID-19</u>.
- The status of local hospitals and alternative care site facilities should be communicated and updated continuously, in order to inform transport destination decisions. In rapidly evolving scenarios, local, state and regional access to care sites is likely to be dynamic and frequently changing.

Potential Strategies

Treatment

- Modified Treatment Protocols
 - Aerosolizing Procedures
 - Invasive Procedures
 - Resuscitation
 - Termination of Care
 - Treatment in Place (Treat & Release)

*This document contains weblinks to non-Federal websites and webpages. Linking to a non-Federal website does not constitute an endorsement by the U.S. government, or any of its employees, of the information and/or products presented on that site.

This guidance applies to all EMS delivery models including but not limited to; free standing, municipal third-service; fire-based, hospital-based, private, independent, volunteer, and related emergency medical service providers.

Transport

- Batched Transport
 - Respond to multiple calls prior to transporting several low-acuity patients at one time.
- Transport by Alternate Means
 - Encourage low-acuity patients to use their own transportation or commercial transportation (Uber/Lyft, etc.) to a hospital or alternative care site.
 - Transport low-acuity patients using non-transport vehicles (e.g. chase cars).
- Transport to Alternative Destinations
 - Transport patients to pre-identified alternative care site destinations. Consider load balancing to prevent overloading any particular destination.
- Non-Transport
 - Decline to transport patients without significant injury/illness.

15 April 16, 2020 *This document contains weblinks to non-Federal websites and webpages. Linking to a non-Federal website does not constitute an endorsement by the U.S. government, or any of its employees, of the information and/or products presented on that site.

This guidance applies to all EMS delivery models including but not limited to; free standing, municipal third-service; fire-based, hospital-based, private, independent, volunteer, and related emergency medical service providers.

EMS/Prehospital Team

Sample Maryland COVID-19 Triage Protocol

Sta	Viral Syndrome Pandemic
	EFFECTIVE March 17, 2020 until rescinded or superceded
	For Use By BLS and ALS Clinicians
YES (NO
	Patient age is between 2 and 55 years
	Patient has a suspected viral syndrome with at least two (2) of the following symptoms: fever, cough, body aches, or sore throat
	Patient has a history of immunosuppression, or is taking medicines that depress the immune system (cancer undergoing chemotherapy, transplant patient, HIV, etc.)
	Patient has a history of diabetes
	Patient has a history of heart disease
	Patient has a history of COPD or lung disease
	Patient has a heart rate between : 50 - 110 bpm (age 13-55 years); (age 2-5 years: 80-140 bpm; age 6-12 years: 70-120 bpm)
	Patient has a systolic blood pressure between: 110-180 mmHg (age 13-55 years); (age 2-5 years: > 80mmHg; age 6-12 years: > 90mmHg)
	Oxygen saturation (SpO2) greater than or equal to 94%
	Clear lung sounds
	Respiratory rate between 12 - 22 breaths per minute, and the patient does not complain of shortness of breath
	Patient is able to ambulate without difficulty
	Patient is agreeable to home self-care
ANY CHECKS in a shaded box indicate that patient transport should be encouraged.	
If <u>ALL</u> CHECKS are in non-shaded boxes, patient may provide self-care at home. Refer to no-transport instructions for patients.	
Any patient may be transported at the EMS Clinician's discretion.	
This emergency protocol was issued by the Maryland institute for Emergency Medical Services Systems, after approval by the Executive Director and Chairman of the State Emergency Medical Services Board, in response to the COVID-19 pandemic, and in accordance with Education Article Section 13-516(d)(1) and COMAR 30.03.05.02(i) and a catastrophic health emergency proclamation.	

Maryland Institute of EMS Services (2020). Viral Syndrome Pandemic Triage Protocol.

April 16, 2020

*This document contains weblinks to non-Federal websites and webpages. Linking to a non-Federal website does not constitute an endorsement by the U.S. government, or any of its employees, of the information and/or products presented on that site.

This guidance applies to all EMS delivery models including but not limited to; free standing, municipal third-service; fire-based, hospital-based, private, independent, volunteer, and related emergency medical service providers.

Document Developed by the Healthcare Resilience Task Force Emergency Medical Services (EMS) Prehospital Team

16

EMS/Prehospital Team

Sample California COVID-19 Treatment Protocol

Clinical Treatment for Patient with Suspected COVID-19 Crisis Standards of Care Purpose: To reduce the increased risk associated with the performance of treatments and procedures on patients who screen positive for risk of COVID-19 infection. Ι. Applicable patients Request for EMS should be screened for risks of COVID-19. Refer to Emergency Protocols 8-37 & 8-39 a. Each EMS provider should exercise due caution when responding to all emergency calls and assure that each patient is thoroughly vetted through a screening process for risk of COVID-19 infection, based on community spread. A patient reporting any of the following symptoms will be considered at risk for COVID-19 infection. i. Symptoms include: 1. Fever: a. Pediatrics: low grade b. Adults: low grade c. Elderly (> 65) May not present with a fever 2. Difficulty breathing a. Shortness of breath b. Chest tightness/chest pain 3. Nausea/Vomiting II. Treatment a. Follow General Prehospital Care Protocol with the following exceptions, listed below. ii. For patients identified as at risk for COVID-19 infection, whenever possible, avoid performing aerosolizing procedures, even when clinically indicated. Aerosolizing procedures include: 1. Non-rebreather mask 2. CPAP/BiPAP 3. Assisted ventilations 4. ET intubation

- 5. Nebulized medication
- 6. Suction
- ii. Alternative treatments that present a low risk of producing aerosolized droplets should be utilized to mitigate the risks to EMS providers associated with the performance of these procedures.

¹⁷ April 16, 2020 *This document contains weblinks to non-Federal websites and webpages. Linking to a non-Federal website does not constitute an endorsement by the U.S. government, or any of its employees, of the information and/or products presented on that site.

This guidance applies to all EMS delivery models including but not limited to; free standing, municipal third-service; fire-based, hospital-based, private, independent, volunteer, and related emergency medical service providers.

EMS/Prehospital Team

- 1. At most, use a nasal cannula to deliver oxygen. Place a surgical mask over the patients nose, mouth and nasal cannula.
- iv. In cases where alternative treatments are ineffective, or cannot be avoided, EMS providers should attempt to isolate themselves from the increased production of aerosolized droplets associated with these procedures. Risk mitigation strategies include:
 - 1. EMS providers should wear a N-95 or greater mask.
 - 2. When performing assisted ventilations, use a BVM with a HEPA filter.
 - a. If a BVM with a HEPA filter is not available, attempt to contain the exhausted air from the BVM by another means.
 - b. Whenever possible, while performing rescue breathing, avoid hyperventilation.
- v. For patients who have a risk of COVID-19 and present in cardiac arrest follow the Cardiac Arrest General Protocol 5-1 with the following modifications:
 - 1. Administer a nasal cannula to deliver oxygen. Place a surgical mask over the patients nose, mouth and nasal cannula.
 - 2. Avoid performing rescue breaths, as well as ET intubation.
 - 3. If the airway must be secured, utilize a supraglottic airway device. Refer to Emergency Airway Protocol, 7-9.
 - 4. **CAUTION:** Do not allow oxygen to flow across the defibrillator's adhesive pads during defibrillation.
 - Patients in continuous cardiac arrest WILL NOT BE TRANSPORTED, regardless of mechanical CPR device. Resuscitation will either be terminated on scene or ROSC sustained (continued palpable pulse and systolic BP ≥60 mmHg for >5 minutes) BEFORE moving the patient to the patient compartment of a vehicle.
 - 6. For witnessed arrests inside the patient care compartment:
 - a. Pull vehicle to the side of the road and perform resuscitation in full PPE, with doors **OPEN**.
 - b. If patient has mechanical CPR device in place and has lost ROSC, the device may be resumed with continued transport to the hospital, as long as all personnel in the patient compartment have sufficient respiratory PPE in place.

April 16, 2020

*This document contains weblinks to non-Federal websites and webpages. Linking to a non-Federal website does not constitute an endorsement by the U.S. government, or any of its employees, of the information and/or products presented on that site.

This guidance applies to all EMS delivery models including but not limited to; free standing, municipal third-service; fire-based, hospital-based, private, independent, volunteer, and related emergency medical service providers.

EMS/Prehospital Team

III. Transport

- a. Interventions should be performed PRIOR to loading into or closing patient compartment of the ambulance.
- b. Only one provider will remain with patient for transport, if possible.

Oakland County Medical Control Authority (2020). Clinical Treatment for Patient with Suspected COVID-19 Crisis Standards of Care.

April 16, 2020

*This document contains weblinks to non-Federal websites and webpages. Linking to a non-Federal website does not constitute an endorsement by the U.S. government, or any of its employees, of the information and/or products presented on that site.

This guidance applies to all EMS delivery models including but not limited to; free standing, municipal third-service; fire-based, hospital-based, private, independent, volunteer, and related emergency medical service providers.

Document Developed by the Healthcare Resilience Task Force Emergency Medical Services (EMS) Prehospital Team

19

Sample Texas COVID-19 Alternative Disposition Protocol

Purpose: The purpose of this directive is to provide alternate disposition for low risk patients with signs and symptoms consistent with COVID-19 during times of pandemic declaration within the jurisdiction of the Metropolitan Area EMS Authority (MAEMSA).

Definition: A COVID-19 pandemic is an epidemic of COVID-19 virus that spreads on a worldwide scale and infects a large proportion of the human population. According to the World Health Organization (WHO), a pandemic can start when three conditions have been met: emergence of a disease new to a population; agents infect humans, causing serious illness; and agents spread easily and sustainably among humans. A local declaration of COVID-19 pandemic and implementation of this directive will be made on a weekly basis by the Medical Director and the Tarrant County Public Health Authority.

Scope: This directive applies to patients within the MAEMSA System during times of a local COVID-19 pandemic.

Indications:

- 1. Patients with signs and symptoms consistent with COVID-19:
 - a. Fever
 - b. Cough
 - c. Sore throat
 - d. Nasal congestion
 - e. Body aches
 - f. Headache
 - g. Chills
 - h. Fatigue
 - Nausea / vomiting i.
 - Diarrhea j.

Requirements:

- 1. Age 5-64 years of age
- Temperature less than 102 degrees Fahrenheit 2.
- 3. Systolic blood pressure above 90 mmHg (or age-specific) with no signs of hypo-perfusion or dehydration.
- 4. Heart rate less than 110 beats per minute.
- 5. Respiratory rate less than 20
- 6. Pulse oximetry greater than or equal to 94% on room air.
- 7. No contraindications as listed below

Contraindications:

b.

- 1. Children less than 5 years of age
- Adults 65 years of age or older 2.
- Pregnant women or within 2-weeks postpartum 3.
- 4. Following high risk symptoms:
 - Syncope a. Chest pain

20

April 16, 2020

*This document contains weblinks to non-Federal websites and webpages. Linking to a non-Federal website does not constitute an endorsement by the U.S. government, or any of its employees, of the information and/or products presented on that site.

This guidance applies to all EMS delivery models including but not limited to; free standing, municipal third-service; fire-based, hospital-based, private, independent, volunteer, and related emergency medical service providers.

EMS/Prehospital Team

- c. Severe shortness of breath
- 5. Following physical exam findings:
 - a. Neck pain or rigidity
 - b. Abnormal breath sounds or respiratory distress
 - c. EMS provider suspicion for severe illness
- 6. Patients with the following conditions/diseases:
 - a. Chronic lung disease (such as Asthma, COPD, and cystic fibrosis)
 - b. Heart disease (such as congenital heart disease, congestive heart failure, and coronary artery disease)
 - c. Kidney disorders
 - d. Liver disorders
 - e. Diabetes Mellitus
 - f. Weakened immune system due to disease or medication (such as people with HIV or AIDS, cancer, those on chronic steroids, or immunotherapy).
- 7. Unsafe to leave in place or inability to care for themselves

Procedure:

- 1. Patients who meet the inclusion criteria with no contraindications will have a complete history and physical completed and documented.
- 2. The patient will be informed that they are in a low risk category and will most likely not be tested or receive antiviral medications, as there is not one currently available, at the Emergency Department (ED), and do not require transportation to the ED for evaluation.
- 3. If the patient agrees to non-transport
 - a. Instruct the patient to call 911 if condition changes
 - b. Complete patient care report and select COVID-19 Non-transport
 - c. Provide patient with home care and self-monitoring instructions and handout, including contact information for Tarrant County Public Health.
- 4. If the patient continues to request transport to the ED,
 - a. Contact OLPG
- 5. If need for further guidance or questions, contact OLPG.
- 6. OMD will complete 100% review of all patients in which this directive was used.

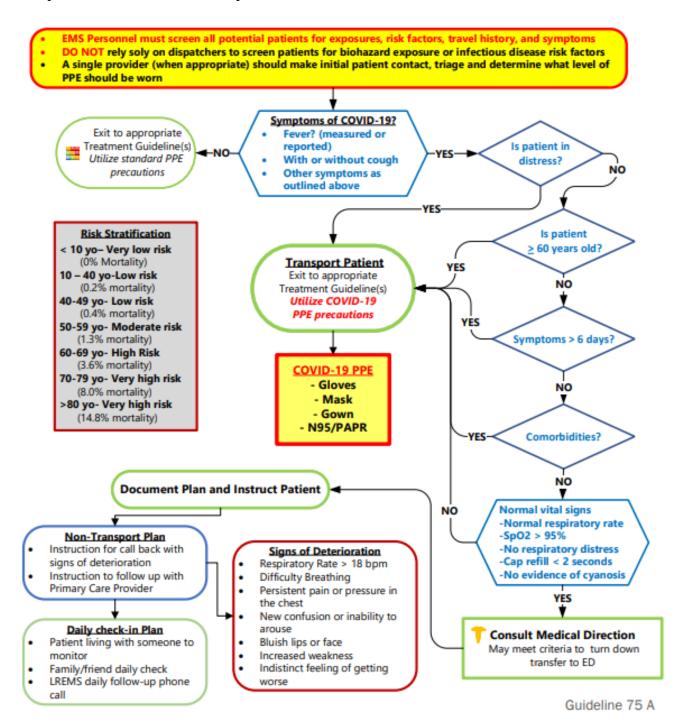
Metropolitan Area EMS Authority (MedStar) (2020). COVID-19 Alternate Disposition.

April 16, 2020

*This document contains weblinks to non-Federal websites and webpages. Linking to a non-Federal website does not constitute an endorsement by the U.S. government, or any of its employees, of the information and/or products presented on that site.

This guidance applies to all EMS delivery models including but not limited to; free standing, municipal third-service; fire-based, hospital-based, private, independent, volunteer, and related emergency medical service providers.

Sample Nevada COVID-19 Transport Protocol



Nevada (2020). Note: Travel history is o longer utilized in screening due to the prevalence of community spread of COVID-19. This document was developed earlier in the event.

22

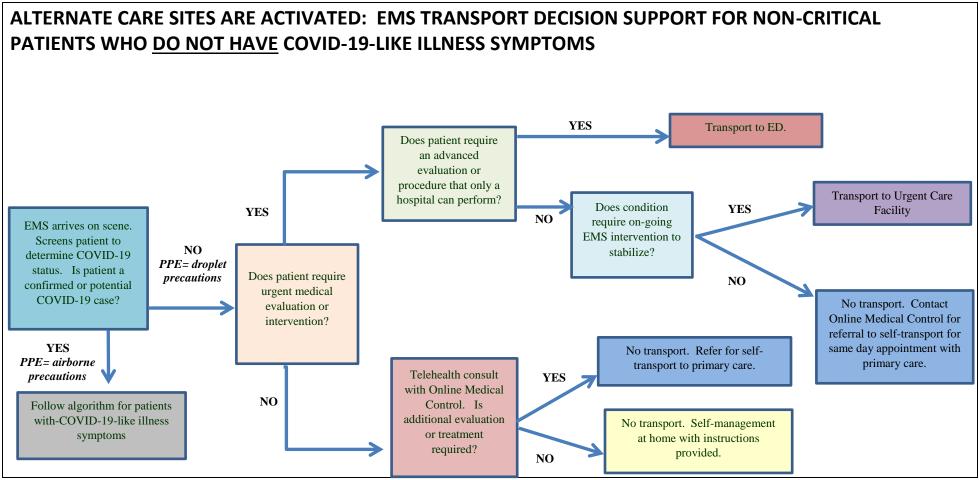
April 16, 2020

*This document contains weblinks to non-Federal websites and webpages. Linking to a non-Federal website does not constitute an endorsement by the U.S. government, or any of its employees, of the information and/or products presented on that site.

Document Developed by the Healthcare Resilience Task Force Emergency Medical Services (EMS) Prehospital Team

EMS/Prehospital Team

Sample Illinois COVID-19 Alternative Destination Algorithm (Non-COVID-19 Illness)



Illinois (2020).

23

April 16, 2020

*This document contains weblinks to non-Federal websites and webpages. Linking to a non-Federal website does not constitute an endorsement by the U.S. government, or any of its employees, of the information and/or products presented on that site.

Document Developed by the Healthcare Resilience Task Force

Emergency Medical Services (EMS) Prehospital Team

EMS/Prehospital Team

Sample Texas COVID-10 Self-Monitoring Instructions

Metropolitan Area EMS Authority (MedStar) (2020).

COVID-19 Potential Illness

If you are sick with COVID-19 or think you might have it, follow the steps below to help protect other people in your home and community.

Instructions after your EMS call*:

- **Stay home**. People who are mildly ill with COVID-19 are able to recover at home. Do not leave, except to get medical care. Do not visit public areas.
- Stay in touch with your doctor. Call before you get medical care. Be sure to get care if you feel worse or you think it is an emergency.
- **Avoid public transportation**. Avoid using public transportation, ride-sharing, or taxis.

If you develop **emergency warning signs** for COVID-19 get medical attention or call 911.

Emergency warning signs include:

- Difficulty breathing or shortness of breath
- Persistent pain or pressure in the chest

- New confusion or inability to arouse
- Bluish lips or face

This list is not all-inclusive. Please consult your medical provider or call 911 for any symptoms that are severe or concerning.

24

April 16, 2020

*This document contains weblinks to non-Federal websites and webpages. Linking to a non-Federal website does not constitute an endorsement by the U.S. government, or any of its employees, of the information and/or products presented on that site.

Document Developed by the Healthcare Resilience Task Force Emergency Medical Services (EMS) Prehospital Team

Actions You Should Take*:

- **Stay away from others**: As much as possible, you should stay in a specific "sick room" and away from other people in your home. Use a separate bathroom, if available.
- Call ahead: If you have a medical appointment, call your doctor's office or emergency department, and tell them you have or may have COVID-19. This will help the office protect themselves and other patients.
- **Cover**: Cover your mouth and nose with a tissue when you cough or sneeze.
- **Dispose**: Throw used tissues in a lined trash can.
- Wash hands: Immediately wash your hands with soap and water for at least 20 seconds. If soap and water are not available, clean your hands with an alcohol-based hand sanitizer that contains at least 60% alcohol.
- **Do not share**: Do not share dishes, drinking glasses, cups, eating utensils, towels, or bedding with other people in your home.
- Wash thoroughly after use: After using these items, wash them thoroughly with soap and water or put in the dishwasher.

• If needed, seek additional help by contacting your doctor or medical facility, or in an emergency, call 911.

25

April 16, 2020

*This document contains weblinks to non-Federal websites and webpages. Linking to a non-Federal website does not constitute an endorsement by the U.S. government, or any of its employees, of the information and/or products presented on that site.

Document Developed by the Healthcare Resilience Task Force Emergency Medical Services (EMS) Prehospital Team

EMS/Prehospital Team

Resources

General

- <u>Rapid Expert Consultation on Crisis Standards of Care for the COVID-19 Pandemic.</u> (NASEM)*
- <u>Crisis Standards of Care: A Systems Framework for Catastrophic Disaster Response</u> (Vol. 6: Prehospital Care Emergency Medical Services) (Institute of Medicine)*
- <u>Crisis Standards of Care and COVID-19: What EMS Needs to Know</u> (U.S. Department of Transportation)
- Framework for Expanding EMS System Capacity During Medical Surge (Centers for Disease Control and Prevention)
- <u>EMS Pandemic Influenza Guidelines for Statewide Adoption</u> (U.S. Department of Transportation)
- <u>Technical Resources, Assistance Center, and Information Exchange (TRACIE): Crisis</u> <u>Standards of Care</u> (U.S. Department of Health and Human Services)

Call-Taking and Dispatch

- Interim Guidance for Emergency Medical Services (EMS) Systems and 911 Public Safety Answering Points (PSAPs) for COVID-19 in the United States (Centers for Disease Control and Prevention)
- <u>Phone Advice Line Tools: Guidelines for Children (2-17 years) or Adults (over 18 years)</u> with Possible COVID-19 (Centers for Disease Control and Prevention)
- <u>Preparing for Pandemic Influenza: Recommendations for Protocol Development for 9-1-</u> <u>1 Personnel and PSAPs</u> (U.S. Department of Transportation)

Continuum of Care, Indicators and Triggers

• Crisis Standards of Care: A Toolkit for Indicators and Triggers (Institute of Medicine)*

Legal Issues

• <u>Emergency Medical Services and Medical Surge: Essential Legal Issues</u> (Oak Ridge Associated Universities)*

26

April 16, 2020

*This document contains weblinks to non-Federal websites and webpages. Linking to a non-Federal website does not constitute an endorsement by the U.S. government, or any of its employees, of the information and/or products presented on that site.

Document Developed by the Healthcare Resilience Task Force Emergency Medical Services (EMS) Prehospital Team

Response & Operations

• <u>Strategies to Optimize the Supply of PPE and Equipment</u> (Centers for Disease Control and Prevention)

Sample Protocols

<u>COVID-19 Resources</u> (National Association of State EMS Officials)*

Treatment & Transport

- <u>Coronavirus Waivers & Flexibilities</u> (Centers for Medicare & Medicaid Services)
- <u>COVID-19: 10 Steps to Help Patients While Staying Safe</u> (Resuscitation Academy)*

27

April 16, 2020

*This document contains weblinks to non-Federal websites and webpages. Linking to a non-Federal website does not constitute an endorsement by the U.S. government, or any of its employees, of the information and/or products presented on that site.

Document Developed by the Healthcare Resilience Task Force Emergency Medical Services (EMS) Prehospital Team