National Association of State EMS Officials (NASEMSO)
National Public Safety Telecommunications Council (NPSTC)

COVID-19 Policy Guidance Checklist for EMS Agencies
Version: 4/13/2020

INTRODUCTION:

This checklist represents an ongoing analysis of COVID-19 preparation actions by the Joint Working Group on EMS Communications and Technology which is sponsored by NASEMSO[1] and NPSTC[2]. It is designed to provide guidance to EMS agencies as they plan their response to the COVID-19 pandemic.

This document is organized in 14 sections that contain COVID-19 readiness checklists for both operational and administrative issues.

1. Staffing Considerations
2. Alternate Service Delivery Considerations
3. Processing EMS Calls for Service
4. Dispatch of EMS Resources
5. On Scene Patient Care & Medical Direction
6. Patient Transport
7. Inter-Agency Communication
8. Intra-Agency & External Communications
9. Employee Health and Safety
10. COVID Exposure Considerations
11. PPE & Supply Chain Management
12. Infection Control - Vehicles & Equipment
13. Administration – Reporting & Documentation
14. Employee and Family Support

The appendix contains links to official information, policies from other agencies, and manufacturer cleaning recommendations. Checklist items were gathered from multiple EMS agencies who are dealing with the effects of the pandemic. We know that every EMS agency is unique, and portions of this guidance may not be applicable to your agency.

The checklist is based on information available as of the publish date. Wherever possible, links have been provided to sites that contain official information. It is recommended that you check for updated versions of this document[3] and continue to follow the official guidance of your local health authorities. It is not the intent of this document to recommend any specific course of action for your agency, but rather to identify issues that may need to be addressed. This is a summary of the Joint Working Group discussions and is therefore not an official position of either NASEMSO or NPSTC.

Finally, please help distribute this information to all EMS agencies and the emergency communications centers in your area.

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[1] National Association of State EMS Officials, website: www.NASEMSO.org
[2] National Public Safety Telecommunications Council, website: www.NPSTC.org
[3] www.NPSTC.org

SECTION 1: STAFFING CONSIDERATIONS	
EMS agencies must assess the impact to operations caused by loss of personnel.	
RECOMMENDATION	DISCUSSION
1.1 EMS agencies must assess staffing and begin planning for loss of employees due to quarantine or isolation requirements. Agency policies regarding employee quarantine following an exposure may be influenced if there is "*community spread*" occurring in the jurisdiction.	EMS agencies will likely adopt the CDC guidance which calls for an exposed employee to self-quarantine for 14 days. If symptoms develop during that time, additional time thresholds are triggered. *(See Section 10: COVID Exposure)* Other EMS agencies and hospitals are allowing asymptomatic employees to continue working after an exposure until such time as they develop symptoms. This is based on the *belief* that COVID contagion is directly related to the presence of symptoms which produce coughing and viral spread and the *belief* that employees who experience a low tier exposure will not develop an infection. A shift in an agency's management of exposure may be required to balance employee and community safety with the need for sustained response to emergency calls. In a community spread environment, agency employees may be unknowingly exposed while off duty, potentially negating the effectiveness of agency quarantine (unless a direct exposure event occurred). This issue continues to evolve, and the CDC has produced recent guidance indicating that persons may be contagious up to 48 hours before symptoms develop.
1.2 EMS agencies should develop a tracking mechanism that monitors the number of employees absent with projected return to work dates.	An agency may find that a multiple EMS personnel are cycling into, and out of, quarantine and isolation status. It is important to understand the projected availability of personnel to calculate a master staffing plan.

1.3 EMS agencies should project different levels of personnel shortage to understand the potential impact on operations.	Determine how the agency would cope with a loss of 10%, 20% and 30% of the workforce and the impact on using overtime for a sustained period to support operations. The agency should also assess the impact of losses in other key areas, including EMS billing, logistics and supply, and the communications center, where smaller percentages of loss might result in significant impacts. Available agency staffing is a key input when discussing Alternate Service Delivery options *(see Section 2)*
1.4 Assess impact of sustained crisis performance on employees.	EMS agencies must consider how their agency and staff are impacted by continual performance at a crisis level over a period of many weeks. Agencies should develop strategies to ensure that staff have appropriate rest, nutrition, and hydration, along with mental health support. (*see Section 14*)

SECTION 2: ALTERNATE SERVICE DELIVERY CONSIDERATIONS

EMS agencies must assess options to continue providing essential service when faced with increasing call volumes and fewer available employees. The current approach to EMS, in which each call to 911 typically results in the response of some unit, may not scale to support a surge of emergency calls over an extended period of time.

RECOMMENDATION	DISCUSSION
2.1 EMS agencies may request mutual aid assistance from the State, in the form of an ambulance strike team or other type of asset.	The federal government has an ambulance support system available from the national stockpile, which includes vehicles and personnel. Some states also have EMS mutual aid systems. Note that most mutual aid EMS resources do not arrive with communications equipment capable of connecting to the local agency and may not have a full complement of patient care equipment, supplies, or drugs.
2.2 EMS Agencies should assess the viability of various Alternate Service Delivery (ASD) options. *EMS agencies have been implementing different strategies to manage an expected increase in 911 calls.*	1. **Transfer low acuity 911 calls** to another call center staffed with medical personnel who can further assess a patient and provide "stay at home" care advice. The center may be staffed with EMS agency personnel, personnel from the health department or a mix of other groups. Determine what hours the service will be available and how calls are processed if the service is not available 24 hours a day. Consider publishing access numbers that the general public can directly dial to relieve pressure on the 911 system.
	2. **Refer low acuity 911 callers** to appropriate insurance company telemedicine and nurse hotline systems. Almost all insurance companies provide telehealth and nurse hotlines. Referring the 911 caller back to their insurance company (or transferring the 911 call to the nurse hotline) may result in a faster referral for the patient to their primary care physician. Determine how callers without insurance are managed.

	3. **Implement alternate response units**, not staffed by EMS personnel, which may respond to assess low acuity patients. These units may be staffed with allied health care personnel or community volunteers. Assess how the agency might add additional types of response vehicles and what personnel could be assigned to each unit. This includes a review of vehicle inventory, use of rental vehicles, qualifications for assigned personnel, types of calls suitable for these additional responders, patient care and communications equipment needed.
	4. **Reduce the staffing level** on certain first responder units. Depending on the configuration of the EMS system, it may be possible to reduce the number of personnel assigned on fire suppression and/or EMS units.
	5. **Change the type of unit** sent to specific EMS calls. Depending on the configuration of the EMS system it may be possible to change which types of units are initially assigned. For example, instead of sending a medic unit, send an engine company alone to investigate and then request the medic unit if it is needed.
	6. **Reduce the number of units** that are automatically sent to specific types of EMS calls. Depending on the configuration of the EMS system and how many tiers of response exist, it may be possible to reduce the overall number of units dispatched. For example, instead of sending an engine company and a medic unit, send only the medic unit.
	7. **Using non-medical personnel to drive the EMS vehicle**. This option leverages MCI strategies used by other agencies, who allow other personnel to serve as the EMS vehicle operator, including other government employees. This solution may be especially relevant in rural areas.

2.3 EMS agencies should examine other options for patient transport.	1. **Using non-EMS vehicles for patient transportation** This option may leverage other community resources that are already equipped for patient transport, including handicapped and limited mobility vehicles used by 3rd party entities or by local transit services who could respond to low acuity calls.
	2. **Taxi/Uber/Lyft Response.** This option leverages the use of commercial transportation services to pick up the patient and deliver them to an appropriate receiving facility (which may include a non-hospital destination).
2.4 EMS agencies should examine ways to aggregate patients at staging areas for evaluation and treatment.	1. **911 callers may be advised to bring the patient to a staging area** staffed with medical personnel (either run by the EMS agency or another entity) This may be especially important if the EMS agency runs out of resources and cannot provide a response.

SECTION 3: PROCESSING EMS CALLS FOR SERVICE	
Demand for EMS may exceed available resources.	
RECOMMENDATION	DISCUSSION
3.1 Update the Communications Center call questioning sequence to gather information from all callers regarding the presence of COVID symptoms.	The CDC has provided guidance for EMS Communications Centers: https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-for-ems.html

The Emergency Communications Center should immediately update the call questioning sequence for callers seeking any public safety service, including EMS, Fire and Law Enforcement. To the extent possible, the caller should be queried to determine if the patient (or anyone present) has symptoms consistent with COVID19. These questions should be asked on every EMS response, including trauma emergencies. The patient may be having chest pains and the caller may also be suffering from flu like symptoms.
NOTE: Communications Centers have reported that some patients are reluctant to admit that they have symptoms and may not be forthcoming during the 911 call questioning. |
| 3.2 Assess call prioritization and unit assignment protocols to balance the need for an appropriate response to each incident while also preserving unit availability. | Will existing response patterns (for all types of calls) need to change as EMS unit resource is constrained? *See Alternate Service Delivery recommendations in Section 2.*
Determine in advance what increases in EMS call volume trigger reconfiguration of unit response parameters. The agency may develop several levels of "reduced response" based on increasing call volumes.
Determine if different levels of unit response can be preprogrammed into the agency's Computer Aided Dispatch (CAD) system to reduce reliance on human assessment/manual dispatch decision making. |

3.3 Develop guidance on the EMS agency and Communications Center's role if emergency calls exceed available resources	EMS agencies should identify how to monitor their call volume, define trigger events that automatically activate reduced response protocols, and build out their incident command structure to manage EMS resources. Specific guidance should be provided on who is authorized to activate response reduction policies; and how field personnel are notified of the change.

SECTION 4: DISPATCH OF EMS RESOURCES

Existing response policies may not scale to meet demand.

RECOMMENDATION	DISCUSSION
4.1 Update communications center policies so that responses to caller questions on COVID are relayed to responding units and are shared with other agencies as appropriate.	Policy guidance is required to ensure that caller interrogation information is entered into the agency's dispatch system and communicated to responding personnel in a clear manner. EMS personnel should be notified on every call if COVID screening was not completed, or if the screening indicated the need for PPE or that PPE does not appear indicated. This information should also be immediately shared with all responders, including law enforcement agencies and other first responder personnel.
4.2 Add hazard warning indicators to target addresses.	Determine how the Communications Center can flag specific locations in the agency's computers that will alert responding personnel that extra precautions may be required for responses to nursing homes, assisted living facilities and other congregant living homes.
4.3 Review existing automatic aid and mutual aid arrangements and assess viability of receiving and providing EMS resources.	Traditional automatic aid and mutual aid protocols may be insufficient to support an EMS agency, since other EMS agencies who typically lend aid may be unwilling or unable to do so. Assess the impact if those agencies are unable to respond.
4.4 Assign a 24 hour liaison in the Emergency Communications Center to provide decision making support for unusual cases.	As the situation escalates, having a liaison inside the communications center may allow for improved situational awareness and decision making.

SECTION 5: ON SCENE PATIENT CARE & MEDICAL CONTROL	
Clinical Guidance is changing and there are still many unknowns regarding patient care.	
RECOMMENDATION	DISCUSSION
5.1 Review the CDC document: Guidance for EMS Personnel	CDC recommendations for EMS response and clinical care are at this link: https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-for-ems.htm
5.2 Monitor official channels of information, including the CDC and state and local health department web sites for updates to clinical guidance.	Sign up to receive updates from the CDC COVID-19 website. https://www.cdc.gov/coronavirus/2019-ncov/hcp/index.html Local and State Health Departments may provide additional information and status reports.
5.3 Collaborate with the EMS system medical director regarding patient care strategies.	Local medical control should review and approve any changes to patient care, including decisions regarding non-use of nebulizer treatments, changes in airway management, etc.
5.4 Assess options for increased online medical control support.	If your agency receives online medical control assistance from physicians working in a hospital emergency department, assess options for continued access in the event they are unable to come to the radio due to ED saturation.
5.5 Provide guidance on how EMS personnel may safely approach the scene and engage with the patient.	How many arriving EMS personnel should make "first contact" with the patient and what actions should they take to minimize exposure, (e.g., ask patient to step outside, ask visitors and family remembers to step into another room, ask visitors and family members screening questions). **NOTE**: Some agencies have reported that 911 callers are not advising that they have symptoms when asked. Arriving EMS personnel should always conduct their own questioning.
5.6 Provide guidance on which type of PPE is indicated for each patient category and provide guidance on when PPE should be put on.	The type of PPE needed should be informed by the initial information relayed by the Communications Center. First arriving personnel should further assess the scene and modify the PPE

	to that necessary for this patient. Should personnel wear full PPE while enroute to the call or only after arrival?
5.7 Assess options for use of telemedicine and community paramedicine strategies, including expanded use of existing systems or implementation of new systems.	Telemedicine may provide options for video consultation between patients and the Communications Center, between patients and health care providers, between EMS units and base station physicians and other entities that may help manage the incident.
5.8 Assess ability to provide additional EMS field supervisor coverage to be responsive to units needing guidance or permission to deviate from policy.	As new response policies are developed, field personnel may need increased access to supervisory personnel to resolve problems.

SECTION 6: PATIENT TRANSPORT	
Patient destination decisions will likely be more dynamic	
Emergency Departments may be overwhelmed and will implement their own procedures for receiving EMS units	
RECOMMENDATION	DISCUSSION
6.1 Provide guidance on isolating the patient compartment air from the crew compartment air	Review CDC guidance on enhanced ventilation in the EMS vehicle crew compartment or take steps to seal the cab off from the patient care area.
6.2 Restrict passengers in the EMS unit during transport, including family members unless specific exceptions are authorized.	Reduce potential for exposure by restricting family remembers (and other persons) from riding with EMS to the hospital. Identify exceptions to this policy where absolutely necessary. Hospital Emergency Departments may prohibit family members from entering the ED with the patient.
6.3 Identify steps to streamline EMS to Hospital radio communications.	Assess EMS to Emergency Department radio communications in order to streamline patient reports or eliminate radio contact for stable patients. A consistent countywide approach is preferable to enacting modified procedures on a hospital by hospital basis.
6.4 Collect information from each receiving facility on how EMS patients will be processed and what restrictions may be in place	Emergency Departments are likely to enact new policies on how they will receive EMS patients. Some hospitals require that the patient remain in the EMS vehicle until EMS personnel provide an in-person report and a destination bed is readied.
6.5 Advocate for the countywide EMS authority to maintain close communication with all facilities (at least daily) in order to share updated information with all EMS agencies	Determine how Hospital ED information will be collected and shared, to prevent multiple EMS agencies from each contacting every hospital. A liaison should be identified who will remain in contact with hospital emergency departments and collect this information. (*see Section 7*)
6.6 Assess current and emerging options for EMS transport, including urgent care centers, clinics, facilities converted for patient care, field hospitals, etc.	Assess existing destination facilities and determine if they are still appropriate for certain patient categories. Assess additional destination options that may be warranted based on hospital capacity and call volume increases.
6.7 Assess changes needed in the EMS Hospital System Status Program	If the region uses a software solution to monitor Emergency Department availability, determine what changes may be necessary

	to provide enhanced situational awareness including other indicators of ED saturation.
6.8 Provide guidance to the Communications Center and EMS personnel on newly authorized transport destinations.	EMS agencies should insist on clear guidance from an appropriate authority before implementing alternate destination solutions. These may include a portable field hospital, a convention center or hotel converted for patient treatment, urgent care centers, and community health clinics Clear instructions must be provided to the Communications Center and EMS personnel on the name and location of the facility, the ID assigned to the facility for tracking in CAD and use in patient care reports, hours the facility is open, what types of patients the facility will receive, and the facilities communications capability.
6.9 Anticipate increasing delays in EMS offload of patients to ED care and identify options.	If receiving facilities become saturated, EMS off load times may increase to an unacceptable level that impacts emergency response. EMS agencies should identify contingency plans for these events. Options may include: 1. Rapid implementation of a diversion protocol to prevent more EMS units from transporting to that facility. 2. Offloading EMS patients to temporary portable stretchers provided by EMS, allowing units to return to service. 3. Offloading patients and handing off patient care of multiple patients to a single EMS crew, allowing other EMS units to use spare stretchers and return to service. 4. Field Supervisor approval (based on agency guidelines) for the EMS unit to leave the saturated facility and transport to another facility (Note that this option has risk management implications under federal law and EMS agencies should determine the extent of their flexibility in a declared disaster situation). These protocols should be developed collaboratively with all EMS agencies in the county or region and have medical director approval.

6.10 Closely monitor the elapsed time that units are out of service at hospitals as well as overall unit availability.	Real time monitoring by the Communications Center of EMS unit availability, including the number of units at ED's and their elapsed time awaiting offload are critical capacity indicators that agencies should monitor. Agencies should determine how this data is monitored, who is notified, and what actions are taken.

SECTION 7: INTER-AGENCY COMMUNICATION AND COORDINATION	
Enhanced coordination and strong relationships are important.	
RECOMMENDATION	DISCUSSION
7.1 Assign an EMS Agency Representative	Each EMS agency should designate one or more persons to function as official representatives who are authorized to interact with other agencies. Each EMS agency should identify additional personnel who can function in this capacity if the designated person is not able to continue in that role.
7.2 Establish an Agency Liaison with the local Health Department.	The EMS system (e.g. county EMS authority or a designated EMS agency) should establish a close working relationship with the local health department and ensure that EMS is represented during meetings and briefings. EMS agency participation brings forward important information on what is happening in the field and EMS needs to be involved in the development of action plans and policies.
7.3 Establish an Agency Liaison with all receiving hospitals.	The EMS system (e.g. county EMS authority or designated EMS agency) should establish close communication with all hospitals to understand the evolving way in which EMS patients will be received and processed. This coordination should occur at least once a day.
7.4 Establish an Agency liaison with all local EMS agencies.	The EMS system (e.g. county EMS authority or designated EMS agency) should facilitate communication with all EMS agencies to collaborate on system operation. Daily conference calls should bring together both EMS and interfacility transport providers to share information.
7.5 Establish an Agency Liaison with local first responder agencies	The EMS system (e.g. county EMS authority or a designated EMS agency) should facilitate communications between EMS and all other first responder agencies, including fire departments, law enforcement agencies and other groups for the purpose of information exchange.

7.6 Establish an Agency Liaison with the Emergency Communications Center.	The EMS agency should assess the need to place a liaison officer in the Emergency Communications Center to assist with the implementation of new policies and procedures impacting call processing and unit response.

SECTION 8: INTRA-AGENCY & EXTERNAL COMMUNICATION AND COORDINATION

Each EMS agency should establish near continuous information exchange between management and the workforce. Equally important is the need for upward communications from the workforce to senior management. Response to this crisis will require the creation of new policies and updates to existing protocols. EMS agencies should expect that official guidance may change daily (or even more frequently) as the situation develops locally. Strategies are needed to provide timely verbal and written communications.

RECOMMENDATION	DISCUSSION
8.1 Establish regular communications channels with all employees (operations and support staff) to provide information and to receive feedback and concerns.	Provide an easy to use, two-way, communications path so that official information flows to employees (both on and off duty) and that employees can send information "up the chain" alerting management of issues and concerns.
8.2 Identify how updates and policy changes are communicated to all agency personnel.	Policy and procedure changes should be in writing and personnel should have ready access to them. Individual policies may change significantly from day to day and personnel need to be able to quickly identify which document is current.
8.3 Provide appropriate status updates to the families of EMS personnel	Keeping families informed of the current situation will help reduce some of their anxiety.
8.4 Coordinate public messaging with other entities to ensure consistent information is presented.	It is important that public messages from government officials are consistent. Some communities use a Joint Information Center approach to manage this.
8.5 Provide updated public messaging to agency PIO's	Keep the community informed with accurate and timely information about the EMS service. Remind the public that EMS is available to respond to serious medical emergencies and reinforce alternate solutions that are available. Some communities are seeing a 30% reduction in the number of acute stroke emergency calls, over fear that the Emergency Room is crowded and shouldn't be used.

SECTION 9: EMPLOYEE HEALTH & SAFETY

The EMS agency should implement mandatory health screenings of all employees in order to detect early onset of symptoms and prevent further virus spread in the workplace.

RECOMMENDATION	DISCUSSION
9.1 Identify current symptoms that are consistent with COVID-19 (check CDC guidance frequently)	New symptoms have been identified, including sudden loss of smell, that might need to be included in your surveillance plan.
9.2 Emphasize the importance of home health monitoring by all employees in all departments and a requirement that they not report to work if they have symptoms	Public safety employees may be exposed while off duty and in the home settings. Encourage employees to have a low threshold for notifying their agency if they don't feel well.
9.3 Establish employee health screenings at start and end of shift, including <u>temperature reading and symptom assessment tool.</u>	<mark>Follow CDC guidance (new as of 4/9/2020)</mark> https://www.cdc.gov/coronavirus/2019-ncov/community/critical-workers/implementing-safety-practices.html 1. Each employee should have their temperature checked upon arrival at the workplace and before entering the facility. Each employee should have their temperature checked at the end of their shift (or every 12 hours while on duty). .
	2. A health screening questionnaire should also be used to determine if the employee (or anyone in their household) has any priority symptoms.
	3. Each employee should complete entries in a tracking log that document the date, time, employee ID, and yes or no answers to questions regarding symptoms King County EMS has an example tracking form (see Appendix)
9.4 Designate how sick calls should be reported (to whom, what information is provided, what information is logged for follow-up).	Revised personnel policies are needed to ensure that employees calling in sick are assessed for COVID-19 symptoms as well as employees who become ill while on duty. Who within

	the agency is notified of these calls? Revised procedures are needed to dictate when an ill employee may return to work.
9.5 The health monitoring policy should be implemented for all personnel working in the Emergency Communications Center	Health monitoring in the Emergency Communications Center is very important, given the close working conditions and the mission critical services provided. All personnel who are allowed into the building should be screened, including janitorial and maintenance personnel.
9.6 Restrict unnecessary personnel interaction through conference call meetings vs. in person meetings, prevent personnel from visiting the communications center, etc.	Social distancing procedures should apply to on-duty field and administrative personnel to the full extent possible.
9.7 Restrict unnecessary interaction by halting all student riders and visitors to EMS stations	Reduce potential exposure pathways by stopping contact with all non-essential personnel.
9.8 Instruct all personnel on social distancing while at work and during response to calls.	Social distancing at the scene of EMS calls may include actions to separate the patient from the family or others at the scene (e.g. have the patient step outside if possible)

SECTION 10: COVID-19 EXPOSURE – EMPLOYEE CONSIDERATIONS

The EMS agency should develop, publish and train all personnel on their COVID exposure protocol. This policy should be based on current CDC guidance and include the following elements:
https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-risk-assesment-hcp.html

RECOMMENDATION	DISCUSSION
10.1 Provide policy guidance on what constitutes a COVID 19 exposure including a differentiation of the type of exposure.	There are different levels of exposure and each carries a different risk (e.g. casual, non-sustained contact with someone who may have COVID-19 versus extended contact with a seriously ill COVID-19 patient). The CDC defines different types of exposures: https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-risk-assesment-hcp.html New CDC guidance as of 4/9/2020 notes that exposure to the patient 2 days prior to development of symptoms also constitutes an exposure https://www.cdc.gov/coronavirus/2019-ncov/community/critical-workers/implementing-safety-practices.html
10.2 Provide policy guidance on how to report and document an exposure event.	Identify the level of risk by obtaining full information on the exposure event. Exposure incidents must be reported immediately. Determine how this flow of information should occur. The Communications Center needs to know if a unit is out of service, a field supervisor needs to be aware to oversee the documentation of the exposure and management personnel (including Human Resources) need to be involved for follow up activities and to complete additional mandatory reporting.
10.3 Define immediate actions to be taken by personnel who have an exposure incident.	Identify actions to be taken by the involved EMS crew and by others in the organization. For example, place the EMS unit out of service, isolate involved crew members, make notifications and meet documentation requirements.

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10.4 Define employee health monitoring requirements for personnel who have been exposed (e.g. temperature and symptom tracker sheet) and recommended or required actions if symptoms develop.	Personnel who have been exposed may be placed on leave to complete a 14-day quarantine, may be placed on leave pending completion of a COVID-19 test, or may be allowed to continue working as long as they are symptomatic. In all cases, impacted employees should monitor for development of a fever or other symptoms. Guidance should be provided to employees on actions they should take if a fever or symptoms develop, covering both on duty and off duty occurrences. NOTE: CDC Guidance was changed on March 7th to allow asymptomatic personnel to continue working if staffing options were exhausted. https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-risk-assesment-hcp.html
10.5 Define the difference between *quarantine* and *isolation* and provide instructions on how the employee should manage both determinations.	Personnel should understand the difference between Quarantine and Isolation. *Quarantine* occurs when the employee has been exposed but it is uncertain if they are going to develop symptoms. *Isolation* occurs when an employee has signs and symptoms suggestive of COVID-19. Isolation requires a higher degree of physical separation and management.
10.6 Identify what assistance is available if employees cannot safely be quarantined and/or isolated at home.	EMS personnel may not be able to satisfy quarantine and isolation requirements based on their home situation, including the presence of persons at high risk (pregnant, elderly, compromised immune system, etc.) EMS agencies may provide housing for employees who are under quarantine in order to protect employee family members. Separate facilities, including hotel rooms, may be provided for those under isolation.
10.7 Define employee pay and benefit status when placed on leave.	Employees should be notified of applicable rules governing time off, including how time away from work will be (or will not be) compensated. An occupational exposure may result in administrative paid leave while another employee may need to take vacation time in order not to come to work to protect family members.

10.8 Determine what COVID-19 testing is available for first responders and how do they qualify (e.g. only for symptomatic workers?)	The availability of COVID-19 testing varies in each jurisdiction and local health departments usually determine eligibility for testing. In some areas, the only personnel who can be tested are those who are symptomatic while in other areas, first responders can be tested based on an exposure or based on the critical function that they perform. Determine how EMS personnel are eligible for testing and advocate for priority testing following an exposure to reduce the number of personnel who are in quarantine.
10.9 Define when testing is required.	Based on local testing policy, EMS policy guidance is needed to determine if the circumstances of an exposure meet the threshold for testing. Employees should be aware of how this process works and what steps are taken to monitor employees who are not eligible for testing.
10.10 Develop guidance for EMS personnel to be tested based on test site rules	Develop a process for EMS personnel to be tested, including (1) who determines eligibility (2) who schedules the test, (3) how the employee is notified to report for testing, (4) how results are given to the employee and reported back to the agency, and (5) what happens post testing with regard to clearance for work.
10.11 Define the actions necessary if an employee is moved from quarantine status to isolation status.	Identify what circumstances trigger a change in status, moving an employee from quarantine to isolation. This may include a positive test result or the development of fever and other symptoms. Determine who in the agency is notified.
10.12 Define when an employee may return to work.	The CDC provides guidance in this area, which is subject to change. https://www.cdc.gov/coronavirus/2019-ncov/if-you-are-sick/steps-when-sick.html#warning-signs Guidance in place as of this report: 1. 72 hours of no fever (3 full days of no fever without the use of any fever reducing medication like Tylenol) 2. All symptoms have improved (e.g., cough and shortness of breath) 3. At least 7 days has elapsed since the symptoms appeared.

	If employees are tested, the CDC recommends 2 negative COVID-19 tests at least 24 hours apart.
10.13 Assign an agency liaison to work with employees in isolation or quarantine status.	Assign a designated person (or team or persons) who are available to quarantine/isolation employees as an official agency point of contact for any issues.
10.14 Establish a process to manage identification and notification to other potentially exposed persons	Define a process to identify other employees, visitors or patients who may have been in close contact with the involved employee. Determine who in the agency is responsible for conducting this research. Include an interview with the involved employee to help identify other individuals. Updated CDC guidance as of 4/9/20 notes that an exposure if also any close contact within 48 hours of onset of symptoms. Define a process to notify other persons who were potentially exposed, including what follow up actions should be provided (e.g. testing, recommended referral to health department or private physician).
10.15 Establish safeguards to protect the identity of employees in quarantine, isolation and those who have tested positive.	Determine steps the agency can take to safeguard the identity of individuals who are in quarantine or isolation status. Employees may be able to determine the identity of missing workers, especially in smaller agencies.
10.16 EMS agencies should provide the exposed employee with copies of the relevant policies	Personnel need to understand the agency requirements governing their leave and return to work status.
10.17 Establish recurring reminders for EMS personnel on exposure reporting	Most EMS agencies revise their procedures for exposure reporting to include new requirements relating to COVID-19 (and apart from other types of exposures like needle sticks). Personnel may need reminders and training bulletins on the revised process.
10.18 Assess adequacy of infection exposure feedback received from hospitals involving potential risk to EMS personnel	It is important that existing infection control monitoring processes be enhanced to ensure that EMS transport agencies and first responder agencies are notified in a timely manner by the hospital when a COVID-19 positive test result occurs.

SECTION 11: PERSONAL PROTECTIVE EQUIPMENT (PPE) & EMS SUPPLY CHAIN MANAGEMENT	
RECOMMENDATION	DISCUSSION
11.1 Reassess PPE policies and modify them to balance available equipment against the associated risk	Assess current (and ongoing) state of PPE availability and monitor CDC guidance. There are differences between the CDC recommendations and those of the World Health Organization regarding the need for airborne precautions vs. droplet precautions. EMS agencies should consult with their medical director and create revised policies on PPE usage based on call type and patient type.
11.2 Provide refresher training for all personnel on proper use of PPE and on implementation of any revised PPE policy.	Many infections among healthcare personnel have been linked to non-compliance with PPE policy or incorrect use of PPE. EMS personnel should receive focused training on both the PPE policy and on the proper way to put on (don) and take off (doff) PPE.
11.3 Provide guidance on reuse of PPE.	Identify what portions of PPE can be reused and under what circumstances.
11.4 Develop guidance for EMS personnel on what to do if PPE supplies are not available.	Identify secondary methods of protection and under what conditions they can be used, including who in the agency is authorized to implement this contingency procedure.
11.5 Assess proper disposal of PPE supplies and equipment by EMS personnel.	Identify how EMS personnel will dispose of PPE supplies following their use, including situations that do not involve patient transport to the hospital.
11.6 Establish recurring reminders for EMS personnel on proper hygiene and PPE usage	Early in the crisis, EMS personnel may need daily or weekly reminders about the proper use of PPE until such time as these new procedures become commonplace for them.

11.7 Assess current inventory of patient care and PPE supplies and estimate how many days are available under existing and accelerating conditions	Develop a system to conduct real time tracking of PPE supplies and estimate how many days of service that inventory will provide (based on estimated consumption of PPE per patient encounter). The CDC has a PPE Burn Rate Calculator on their website: https://www.cdc.gov/coronavirus/2019-nCoV/hcp/index.html
11.8 Identify other methods for obtaining supplies and PPE, including donations.	Seek out other sources of PPE, including construction companies, painting contractors, animal hospitals, etc. If seeking donations from the public, develop a process and assign staff to manage that program. Determine what types of supplies you will accept (e.g. unopened supplies in their original packaging).
11.9 Ensure that your county EMS authority is aware of the status of, and projected need for, PPE supplies.	Continually advocate for the amount of PPE supplies that your agency needs and explain the calculations that you used. PPE may be allocated from state and national stockpiles for local redistribution.
11.10 Assess current inventory of disposal patient care supplies and medications; estimate how many days are available under existing and accelerating conditions	EMS agencies must ensure the adequacy of disposable medical supplies and pharmaceuticals, whose availability may be impacted by supply chain disruptions.

SECTION 12: INFECTION CONTROL – EMS VEHICLES & EQUIPMENT DECONTAMINATION	
Updated guidance is needed for personnel, vehicles and equipment	
RECOMMENDATION	DISCUSSION
12.1 Update agency guidance on decontamination and cleaning requirements for **EMS units** including **patient care equipment** and supplies in the vehicle.	The CDC provides guidance in this area: https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-for-ems.html Many agencies are removing all supplies from the EMS vehicle patient compartment, allowing it to be more easily cleaned and to prevent contamination of supply cabinets.
12.2 Identify decontamination options that may be available at each Emergency Department.	Identify areas where EMS vehicles can be decontaminated and cleaned, including identification of suitable locations at hospital Emergency Departments.
12.3 Assess backup options based on inability to procure cleaning supplies.	Identify alternate sources for procurement or identify a process to create appropriate cleaning solutions for use by personnel. Provide written policy guidance for personnel regarding their use.
12.4 Develop guidance for cleaning **EMS stations**, EMS offices, and the **Emergency Communications Center**.	EMS agencies must develop enhanced cleaning strategies for all facilities. The CDC provides guidance on this topic: https://www.cdc.gov/coronavirus/2019-ncov/prepare/disinfecting-building-facility.html?deliveryName=USCDC_2067-DM24835
12.5 Develop guidance for disinfection and cleaning of **communications equipment**, including radio devices and portable tablets and laptops.	Information has been consolidated for most public safety portable radios and for most handheld electronic devices. Personnel should clean all agency issued and personal devices after each call. https://bit.ly/radiosmartphonedisinfection

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SECTION 13: ADMINISTRATIVE ISSUES

RECOMMENDATION	DISCUSSION
13.1 Assess adequacy of existing EMS metrics and call data.	Assess current statistical reports that track agency data (e.g. calls for service by day of week, time of day, by response type) to ensure that sufficient information is available to inform decision making. Evaluate what type of information is available today on EMS system performance and what additional information may be needed for adequate monitoring (e.g., a new report that tracks EMS offload times)
13.2 Implement revised tracking and documentation of all expenses associated with COVID-19 planning and response for possible reimbursement from the federal government.	Federal funding may flow to the local level to help public safety agencies recoup costs for response to this disaster. Each agency should start keeping sufficiently detailed records to document all expenses relating to the pandemic response.
13.3 Carefully assess the benefit of introducing new technology to support the agency's management of COVID-19.	Implementation of new technology solutions requires careful assessment of impact (or disruption to current operations), time needed to fully test the product, write procedures, and do training. Existing technology solutions may be leveraged to provide enhanced support for EMS operations and patient care. The use of secure video chat may be beneficial in select circumstances for internal staff coordination and for EMS-Medical Control consultation for patients who are eligible for "stay at home" care.
13.4 Determine what elements of EMS operations can be managed via home telework	Investigate how telework may function in your agency, including various administrative and support functions (e.g., EMS billing) as well as operational areas.

13.5 Assess and strengthen the agency Continuity Of Operations Plan	Identify who will perform critical functions in the absence of the currently assigned person. Make sure the agency has identified (and readied) personnel to assume duties in other areas based on staff availability (for both EMS response and EMS operations/administration).
13.6 Assess adequacy of EMS station security.	EMS agencies should assess the need for 24/7 electronic and/or physical security of their facilities to protect their personnel and to secure supplies.
13.7 Assess contingency plans for vehicle fuel and related maintenance services.	Supply chain disruptions caused by personnel shortages may impact delivery of fuel. Special consideration must be given to supply options that do not require cash or special point of sale (POS) credentials.
13.8 Update employee contact information	Agencies should ensure that all staff have updated contact and emergency information on file.
13.9 Develop transition plan to reset to normal operations.	EMS agencies should develop a strategy for agency recovery that focuses on employee wellness, SOP review, and after-action assessment.

SECTION 14: EMPLOYEE AND FAMILY SUPPORT	
Agencies should identify strategies to support staff and families during the crisis.	
RECOMMENDATION	DISCUSSION
14.1 Notify employees and families of available support systems and services.	The global pandemic has created significant anxiety for employees and their families. Spouses and other family members may have lost their jobs due to mandatory shut down orders from government entities. Agencies should assess how to provide updated information on local support systems and services, including emergency orders from the government that stop evictions, allow late payments, and provide other support mechanisms. Publicize availability of information hotlines where families can access needed support services.
14.2 Assess the ability to provide remote mental health counselor support.	Agencies should consider providing mental health counselor access via video chat for employees and their families. This may help mitigate both work and home stressors.
14.3 Assess options to support child and dependent care	EMS agencies should anticipate reductions in social services and related businesses that will negatively impact employees. Closures of schools and daycare facilities can be anticipated, and EMS agencies should develop strategies to support staff with child and dependent care responsibilities with a view toward decreasing staff absenteeism while providing appropriate support.
14.4 Develop a plan for response to severe illness or death of an employee or family member.	EMS agencies should develop plans to support staff and families that are experiencing a severe illness, including COVID-19. This on-going support will ensure that staff that are separated from their colleagues remain informed by, and connected to, the agency effort. The agency should also anticipate how it will respond to the death of an employee, given that normal processes for this occurrence will be disrupted.

LINKS:

Federal Centers for Disease Control and Prevention (CDC)
Main Page: https://www.cdc.gov/coronavirus/2019-nCoV/index.html

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

Clinical Care Guidance
https://www.cdc.gov/coronavirus/2019-ncov/hcp/clinical-guidance-management-patients.html

Strategies to Optimize PPE
https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/index.html

Exposure Types and Associated Risks
https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-risk-assesment-hcp.html

PPE Burn Rate Calculator
https://www.cdc.gov/coronavirus/2019-nCoV/hcp/index.html

Screening of Critical Infrastructure Workers (including public safety)
https://www.cdc.gov/coronavirus/2019-ncov/community/critical-workers/implementing-safety-practices.html

King County (Seattle) MEDIC 1 Program Policies and Procedures – COVID 19
Includes overall system guidance on COVID19 and employee symptom tracking forms and videos.
https://www.emsonline.net/Announcements/Infectious-Disease-Safety-Procedures.aspx

American Heart Association
Main Page: https://cpr.heart.org/en/resources/coronavirus-covid19-resources-for-cpr-training

AHA Guidance on COVID 19
https://cpr.heart.org/-/media/cpr-files/resources/covid-19-resources-for-cpr-training/interim-guidance-march-19-2020.pdf

City of Kirkland, COVID-19 Planning Checklist (across all disciplines)

https://www.kirklandwa.gov/Assets/Emergency+Management/PDF/Kirkland+COVID-19+Topics.pdf

National Institute of Health, COVID-19 web site

https://www.nih.gov/health-information/coronavirus

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Summary of Radio and Device Cleaning Guidelines:

https://docs.google.com/spreadsheets/d/1NxaDo5RxtQqwAVnSeLaCwPN4eQSmU2uRURQZdekR7Fs/edit#gid=1621455846

Manufacturer LMR Radio Equipment Cleaning Guidelines

Harris:
https://www.harris.com/sites/default/files/l3harris-public-safety-radio-cleaning-guidelines.pdf

Motorola
https://newsroom.motorolasolutions.com/content/1107/files/CleaningAdvice.pdf

Kenwood/EF Johnson
https://d9zmjrm59k01g.cloudfront.net/a24b-84367667-FSB-0320_Recommended%20Cleaning%20Guidelines.pdf?versionId=rR2cjFEZBY4mTIImJ9MSbh1.fft6N2vj

BK/Relm
https://bktechnologies.com/service-portal//assets/images/BKSB-1058.pdf

EPA Link on COVID-19 Cleaning
https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2