



US&R Operations in the COVID-19 Environment

This document is meant to provide guidance to the System regarding field operations in the COVID-19 environment. Recommendation for US&R Operations with significant contributions from Dr. Anthony Macintyre, FEMA's Chief Medical Officer (and long-tenured member of our Virginia Task Force One).

The FEMA Administrator has established priorities for the Agency during the COVID 19 outbreak. These include:

- Safety of the workforce
- Preservation of ability to carry out designated missions.

It is imperative that US&R capabilities are maintained in a state of readiness, with the ability to deploy and operate in a collapsed structure environment, anywhere in the country.

Background

In late December 2019, China announced the identification of a new virus causing respiratory illness in the city of Wuhan. Since that time, most nations in the world have identified cases of infection. The US, which began testing for the virus in earnest about 10 days ago, has also identified cases domestically across the nation.

Many of the details regarding the SARS-CoV2 virus still remain unknown but we are learning more every day. The common principles of infection control still apply. Also, it is important to note that public health guidance has been evolving rapidly. Two important examples relevant to the US&R workforce include:

- Exposure to an individual with COVID 19: Originally, CDC had issued guidance requiring mandatory furlough and quarantine for individuals who have been exposed to a COVID 19 case. This impacted healthcare and first responder communities. More recently, guidance has evolved to recommend a more cogent risk evaluation of the exposure with more structured response including, in some situations, permitting the individual to still work with symptom monitoring. See <https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-risk-assessment-hcp.html> under "Additional Considerations".
- Respiratory protection: Corona viruses are known to be transmissible through droplet spread. It is unknown how much risk is posed through airborne and contact spread with this virus. The CDC originally recommended N-95 respiratory protection in hospitals when working with COVID 19 patients. This was out of an "abundance of caution." Prior SARS CoV1 guidance from 2003 had recommended surgical masks unless involved in invasive procedures such as intubation or provision of nebulized medication. Due to re-examination of the available data, CDC has provided this similar option for SARS CoV2 in resource constrained environments. See <https://www.cdc.gov/coronavirus/2019-ncov/infection-control/control-recommendations.html>



It is important to note that US&R field operations offer one benefit that is not often available at home duty stations. In the field, US&R resources have significant control over their berthing environment with the utilization of tents. Though individuals are sleeping in proximity, the team can control the cleaning of this environment more so than a hotel environment (see below).

Please note that as this situation evolves, some of the guidance contained herein may change.

Proposed actions

The below list is not intended to be exhaustive nor is it intended to be mandatory. Each Task Force is encouraged to establish a committee NOW to review the below and validate which of the below actions will be addressed for that Task Force. Recommended disciplines to include on that committee are Program Management, Medical, Hazmat, Operations, Logistics, and Safety but may include others as appropriate. The below are all considerations that can be qualified as “risk management” and most are merely amplification of regularly indicated procedures.

NOTE: There may be physical risks posed by this virus to *some* individual Task Force members. These can be quantified and mitigated with attention to small details. The other significant risk to Task Force operations could be public health-initiated actions. Many of the details provided below are designed to avoid situations in which an individual or larger component of the team become subject to such actions in the field (i.e. not your home jurisdiction implementing a public health action).

- **Mobilization**

- Medical check in: The US&R system, since its inception, has emphasized a robust medical check in process. More so than ever, the medical check-in should be emphasized on all deploying TF members. Items to consider in evaluating an individual for deployment include temperature (suggested cut off greater than 100.3)¹, and symptoms (e.g. cough).
- Ensure that any personal prescriptions for members include at least a 30-day supply (potential for 14-day deployment plus potential 14-day quarantine).
- Deployment of members subjected to recent public health actions: Given the spread of disease, it is entirely possible members of the Task Force have been or are currently under some sort of public health restriction. For example, it would be worth querying during mobilization whether individuals have been subject to any recent quarantine orders. An individual risk assessment can be made on anyone who has been and should *not* necessarily be considered automatic exclusionary criteria from deployment if the action has been lifted.
- Remote medical intelligence gathering: Medical Managers have on their operational checklist an action related to initiating medical intelligence gathering relevant to the intended destination during mobilization. Information on COVID-19 prevalence in



the anticipated AOR can be gathered through different resources including the CDC website, the State or local public health websites, and through open media. In addition, documentation of any public health actions in the AOR would be important with some analysis of how that could impact Task Force operations.

- Health monitoring of Task Force Members: The Medical Team has primary responsibility in monitoring the health of Task Force members throughout all phases of the deployment. Though the focus is typically in the field, monitoring should be established early with the ability to regularly check on members, for instance, while in staging awaiting transportation.
- Enforcement of regular hygiene measures: Safety and Medical should reinforce throughout the deployment regular hygiene measures such as regular hand washing and avoiding the shaking of hands. This messaging should begin during mobilization.
- Canines: Many system members may be aware of a test that was conducted on a single dog in Hong Kong. In this instance, the pet of a COVID-19 patient tested weakly positive for presence of the virus in its upper respiratory passage. The CDC emphasizes that there is no evidence that animals such as canines can spread the disease and there have been no reports of animals exhibiting symptoms from the disease. However, they do provide common sense guidance about interacting with your pet for those on home isolation. These actions should be reviewed and considered by Canine handlers (see <https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-prevent-spread.html>). As an example, canines can often be a source of moral support amongst the team and the general public. Avoiding multiple different individuals from contact with the animals might be warranted.
- **Transportation**
 - Ground transportation: In the majority of deployments, ground transportation has been the primary means of Task Force travel to destination. Attention can be given to convoy plans such that if an individual fall ill with concerning symptoms, they might be isolated in a smaller vehicle travelling with the group until there can be further formal medical evaluation. Any ill patient with respiratory symptoms should be offered a surgical mask (See below under when someone becomes ill). Another consideration could be to limit rest stops at larger facilities serving large members of the public.
 - Flights: In some CONUS situations or all OCONUS situations, there could be the potential for flying of Task Force members to their destination. The Task Force should examine options for contract air to ensure dedicated aircraft for movement of Task Force members limiting air travel exposure to the general public. The availability of aircraft is anticipated to be higher than usual given the general slump in the aviation industry and a focus would be on passage through noncommercial areas of the airport.
- **Arrival in Area of Operations (AOR)**



- Medical Intelligence gathering: More detailed medical intelligence can be gathered by the Medical Team when in the AOR. The Medical Officer on the IST supports this activity as well. Data that should be confirmed early includes:
 - Status of healthcare system (impacts from both natural hazard impact and disease impact)
 - State and local public health points of contact
 - Prevalence of disease in community as understood by local public health
 - Current public health actions being enforced by local public health (e.g. limitations on mass gatherings)
 - Referral ability (ability to have a Task Force member evaluated for infectious symptoms such as testing for COVID-19 or other common infectious pathogens). This might involve different procedures than regular medical evaluation for injured/ill Task Force members.
- Interactions with general public and other responders: Task Force members will have the requirement to interact with other members of the response community and the public. Though the CDC states PPE is not required for these general public interactions, attention should be paid when possible to maintaining some limited distance from individuals (6 feet), avoiding hand shaking, and frequent handwashing. When possible and practical, meetings could be held in outdoor settings.
- **Base of Operations (BoO) Management**
 - BoO site selection: BoO site selection is often conducted with the ability to secure the site as a primary concern. In this instance, securing the site is relevant from both a security standpoint and an infection control standpoint. Limiting visitors to the BoO could be a good practice.
 - Hotels: As a general rule, Task Forces should avoid the use of hotels. It is impossible to quantify the risk posed by general hoteling in an area of outbreak and it may be unavoidable in some circumstances. Simple measures can be taken to prevent spread of disease from the general public such as:
 - Maintain social distancing from other patrons (e.g. 6 feet)
 - Avoid touching frequently touched surfaces in common areas.
 - Practicing regular hand washing
 - BoO hygiene: A focus on BoO hygiene is good practice not only for COVID-19 but many other pathogens that pose a risk in the field:
 - All entry / exit through the BoO will occur through a single point of entry / “Decon Corridor”. This area will stage used equipment, bags (to include personnel changing uniforms if personnel were operational). This will establish a “clean & dirty” delineation for the BoO to include boot washing for all personnel. This concept is discussed in Module IV of the FEMA US&R Logistics Team Training course on the Computer Based Training (CBT) – Learning Management System (LMS) System.



- Decon stations at BoO entry should include a mandatory step for hand cleaning.
- Consider isolation distances when (if) task forces / US&R Mission Ready Packages (MRP) are co-located to minimize any exposures from the areas the resources deployed from.
 - Minimize co-location and cross pollination of task force personnel to the extent possible.
- Ensure regularly scheduled solid waste collection / disposal for the Base Camp locations.
- Regular placement of hand sanitizer or hand washing stations throughout the BoO with a focus on areas designated for eating and field latrines.
- Regular cleaning of frequently touched surfaces (regular Clorox wipes acceptable).
- Limit access to BoO to task force personnel only.
- Food: The Task Force should eliminate their exposure to food contamination from outside sources and limit their task force personnel to the consumption of Meals Ready to Eat (MREs) only. The practice of placing unwanted parts of the MRE in a common area for other task force members to pick through should be discouraged to prevent additional contamination within the task force.
- Isolation capabilities: Pre-designation of an isolation capability in the BoO, can be established for a Task Force member who gets ill. This has been easily accomplished by TFs on prior deployments and does not have to be elaborate. As an example, Western Shelter vestibules can be set up easily to provide an isolated sleeping area for an individual. Consideration to deploy with additional tents for additional isolation of exposed/ill personnel. They would not necessarily be required to stay in that area 24/7 but should limit exposure to other TF members. Depending on their condition, they may require more formal evaluation (see below).
- Canines: Canines should be kenneled during their rest periods and not sleep with handlers.
- **Operations**
 - PPE: There is no PPE requirement when interfacing with the general public – even in an area with COVID-19 activity. Instead, some of the commonsense steps listed above should be emphasized and anybody who is visibly ill with cough should be avoided (at least 6 feet separation or two meters). If Task Force members find themselves in the situation of caring for an individual who is sick with cough and fever, either in the rubble or other field settings, the following are considerations:
 - Respiratory protection available to each Taskforce member exceeds the highest level of protection recommended by CDC: The current recommendation for the healthcare system setting is N-95 respiratory protection with a caveat. In resource-limited settings, healthcare providers can use a surgical mask to care for the patient, upgrading to a N-95 for invasive



procedures such as intubation or nebulization administration. The half-face respirator that each Taskforce member has received fit testing for, along with HEPA cartridges exceeds the N-95 respirator requirement and can be utilized for care of patients.

- Eye protection: The same eye protection that is utilized for operations in the rubble can be utilized for care of patients.
- Gloves: A single layer of nitrile gloves is adequate for care of these patients. Task Forces should possess adequate quantities of these already. Care should be taken in doffing of gloves when patient care has been completed.
- Contact precautions: In the healthcare setting, gowns are indicated to prevent soiling of clothes. There is no clear direction for this in the US&R environment. For regular care of patients in the rubble, predictably, the wearing of surgical gowns is not practical. Rescuers, if they have a concern, could consider doffing turnouts at the end of the rescue cycle for cleaning (which is encouraged for regular rescues anyway). In other field environments, when caring for an individual with the appropriate symptoms, TF members could consider use of healthcare gowns.

- TF member monitoring:

- Regular monitoring of Task Force member health is already part of the Medical Team mission. Consideration could be given to including temperature checks as well on a regular basis throughout the deployment though any elevation in an individual's temperature should be evaluated against the broader context of that individual's symptoms.

- What to do if someone gets sick:

- It may sound simple but first verify they have symptoms consistent with COVID-19. There are many reasons for an individual to be ill and missing the proper diagnosis out of fear for this disease would be inappropriate.
- Make sure that the individual is appropriately isolated (see above)
- Make sure the individual wears a regular surgical mask (as droplet protection, N 95 not warranted and can increase respiratory distress) when not in isolation areas and limits touching of surfaces of items that others may touch.
- Ensure the individual is medically stable and does not require immediate treatment or evacuation to definitive care.
- If the individual is stable, the Task Force has two options:
 - Refer for formal evaluation and definitive testing if appropriate
 - If not appropriate or the healthcare system will not test, isolate the individual in the BoO until a method for transportation home can be established (note this might require avoidance of commercial travel depending on the parameters surrounding the case).

- **Demobilization**



- Regular Task Force procedures should be followed for conclusion of health monitoring at conclusion of the mission.
- It could be helpful to consider some sort of reporting mechanism if a deployed member tests positive for COVID-19 in the 2 weeks following deployment. Having that information could inform actions regarding other deployed Task Force members.
- If indicated, the topic of COVID-19 could be included in any stress debriefing procedures.