Guidance on USAR Operations in the Covid-19 Environment

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Purpose

This document is meant to provide guidance regarding USAR operations in the COVID-19 environment. USAR is a tool utilized for a quick response to conduct life-saving actions during collapsed structure events typically seen in the urban setting. This environment is facing a new challenge with the introduction of the novel coronavirus, and therefore USAR Teams may need to consider changing standard operational procedures during this global pandemic.

The INSARAG Secretariat has established priorities for the COVID 19 outbreak. These include:

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

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 have identified cases of infection.

Many of the details regarding this virus 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. This public health guidance and associated restrictions can vary significantly from country to country and include travel restrictions. It is important for each USAR team to not only be aware of their own country's public health actions at the national and regional levels but also to evaluate any collapsed structure incident and that country's public health actions.

It is important to note that USAR field operations offer one benefit that is not often available at home duty stations. In the field, many USAR resources have significant control over their berthing environment with the utilization of tents. Though individuals are sleeping in close 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 will change.

Proposed actions

The decision-making process on whether to deploy a USAR Team will now need to consider disease burden in that country, what public health restrictions are in place, and

what re-entry requirements might exist for the deployed team returning home. Contingency planning might include the potential need for potential USAR team member quarantine and whether it will be done in the affected country or after return to home. Travel requirements for the latter would need to be considered.

The below list is not intended to be exhaustive nor is it intended to be mandatory. Each USAR Team is encouraged to establish a committee to review the below and validate which of the below actions will be addressed for that USAR Team. Recommended disciplines to include on this 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 practiced procedures.

NOTE: There may be physical risks posed by this virus to *some* individual USAR Team members. These can be quantified and mitigated with attention to small details. The other significant risk to USAR Team 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 USAR system, since its inception, has emphasized a robust medical check in process. More so now than ever, the medical check-in should be emphasized on all deploying USAR Team members. Items to consider in evaluating an individual for deployment include temperature (suggested cut off greater than 100.3)[1], and/or 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 USAR Team members subjected to recent public health actions: Given the spread of disease, it is entirely possible members of the USAR Team 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 this person should *not* necessarily be considered automatic exclusionary criteria from deployment, if the action has been lifted.
- Remote medical intelligence gathering: During mobilization, Medical Managers are expected to initiate medical intelligence gathering relevant to the intended destination. Information on COVID-19 prevalence in the anticipated affected country can be gathered through different resources including the CDC website, OCHA, WHO, and through open media. In addition, documentation of any public health actions in the affected country

[1] USAR Teams may wish to utilize a lower screening number such as 99.8, and refer anyone exceeding that to a Medical Manager for further discussion and evaluation.

are important with some analysis of how that could impact USAR Team operations.

- Health monitoring of USAR Team Members: The USAR Medical element has primary responsibility in monitoring the health of USAR Team 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 elements should reinforce throughout the deployment 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 United States Center for Disease Control and Prevention (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

- Flights: For an international deployment, either chartered commercial or military platforms are typically used for flying of USAR Team members to their destination. 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.
- In-Country Ground transportation: Attention can be given to convoy plans such that if an individual becomes ill with concerning symptoms, they might be isolated in a smaller vehicle travelling with the group until there can be a formal medical evaluation done. Any ill patient with respiratory symptoms will don 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.

Arrival in the Affected Country

- Medical Intelligence gathering: More detailed medical intelligence will be available once in the affected country; OCHA-UNDAC system inputs to this reporting. Data that should be confirmed early includes:
  - Status of healthcare system (impacts from both natural hazard impact and disease impact)
  - Ministry 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. patient disposition, and handling of remains).
        - Referral ability (ability to have a USAR Team 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 USAR Team members.
    - Interactions with general public and other responders: USAR Team members will have the requirement to interact with other members of the response community and the public. Though some health websites state that 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 by considering its proximity to both UC sites and the USAR Teams assigned area of operations; limiting infection exposure to general public should be added to these considerations.
    - USAR Teams should consider whether hired drivers, translators, and other visitors (including from other USAR teams) will be allowed access to the BoO.
- Hotels: As a general rule, USAR Teams 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.
    - And you guessed it, 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 BoO entry or exit will occur through a single point of entry, referred to as a “Decon Corridor”. This area will be well-designated and be used by USAR Team members to store used equipment, clothing bags for personal changing of uniforms when personnel are operational. The intent is to clearly define a “clean & dirty” delineation for the BoO, to include boot washing for all personnel.
    - Decon stations at the BoO entry should include a mandatory step for hand cleaning.
    - Consider isolation distances when (if) multiple USAR Teams are co-located to minimize any exposures.

        - Minimize co-location and cross-population of USAR Team personnel to the extent possible.
    - Ensure that regularly scheduled solid waste collection disposal for the BoO is arranged.
    - No eating is allowed in a tent used as sleeping quarters.
    - Placement of hand sanitizer or hand washing stations throughout the BoO, with a focus on areas designated for eating and field latrines, as well as at entrances to any tent.
    - Regular cleaning of frequently touched surfaces (regular Clorox wipes acceptable).
- Food: The USAR Team should eliminate their exposure to food contamination from outside sources, and limit their USAR Team personnel to the consumption of field ration packs only.
- Isolation capabilities: Pre-designation of an isolation area in the BoO, will be identified and used for a USAR Team member who becomes ill. This has been easily accomplished by USAR Teams on prior deployments, and does not have to be elaborate.

  Consideration should be given to deploy with additional tents for additional isolation of exposed/ill personnel, as needed. USAR Team management should conduct contingency planning to be able to speedily determine when its team is no longer operational due to illness or exposure.

  Individuals would not necessarily be required to stay isolated 24/7, and will follow the direction of the Medical Team Manager on what is appropriate. Depending on their condition, they may require more formal evaluation (see below), or medical evacuation.
- Canines: Canines should be kenneled during their rest periods, as well as for sleeping.

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 constantly, and be included in the Daily Safety Message. If USAR Team 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 should be considered:
    - The current WHO recommendation for the healthcare system setting is surgical mask with N-95 respiratory protection for invasive respiratory procedures. The half-face respirator and HEPA cartridges assigned to each USAR Team member exceed the both the N-95 respirator and surgical mask requirement, and can be utilized for care of patients, IF

the cartridges are replaced after patient contact, and the mask is deconned.[2]
    - Eye protection: The same eye protection that is utilized for tactical 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, and USAR Teams have adequate quantities of these. Care should be taken in removing or replacing gloves when patient care has started, continued, and/or completed.
    - Contact precautions: In the healthcare setting, gowns are indicated to prevent soiling of clothes. There is no clear direction for this in the USAR environment. For regular care of patients in the rubble, predictably, the wearing of surgical gowns is not practical. Rescuers, if they have a concern, will remove turnouts at the end of the rescue cycle for cleaning. In other field environments, when caring for an individual with recognized signs and symptoms, USAR Team members could consider the use of gowns.
- USAR Team member monitoring:
    - Regular monitoring of USAR Team member health (at the start and end of each Operations Period) is a part of the Medical Team mission. Consideration could be given to including temperature checks as well on a regular basis throughout the deployment. 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 the Medical element of the USAR Team will first verify the exhibited symptoms are 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). The N 95 not warranted and can increase respiratory distress. When not in isolation areas, be certain the individual limits touching of surfaces that others may touch.
- Ensure the individual is otherwise medically stable, and does not require immediate treatment or evacuation to a definitive care facility.
- If the individual is stable, the USAR Team has two options:
    - The Medical Manager will determine if a referral for formal evaluation and definitive testing is needed.

[2] A consideration for donning the respirator: if the individual is caring for someone in direct proximity that they believe to be infected, they should consider changing gloves before removing the respirator then washing their hands after removing the replacement gloves.

- 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.

Demobilization

- It could be helpful to consider some sort of reporting mechanism if a deployed member tests positive for COVID-19 in the -two weeks following deployment. Having that information could inform actions regarding other deployed USAR Team members, or other USAR Teams that may have been working in the same operational area.
- If indicated, the topic of COVID-19 could be included in any stress debriefing procedures.

Further questions regarding this correspondence should be sent to the INSARAG Secretariat using insarag@un.org.