To: Fire Management Board and Non-Federal Wildland Fire Partners
From: COVID-19 Wildland Fire Medical and Public Health Advisory Team (MPHAT)
Date: 04/23/2020

Subject: Interim Guidance for Prevention and Management of COVID-19 During Wildland Fire Operations

Purpose: Wildland fire personnel should consider these public health practices and management guidelines as an anchor point from which further, site-specific organizational, or unit-specific fire management practices and guidelines can be expanded. This guidance is intended to identify potential infection and to limit/prevent Coronavirus Disease (COVID-19) spread within the wildland fire community, and may be used at home, duty stations, while in travel, and on incidents.

Public health direction is continually evolving. The Fire Management Board (FMB) and Medical and Public Health Advisory Team (MPHAT) will continue to update guidance for the fire community in line with Centers for Disease Control (CDC) direction and as more information becomes available.

Rationale: The wildland fire community’s greatest resource is our personnel, and ensuring our personnel are healthy is the first step in meeting the wildland fire mission.

The best way to prevent COVID-19 is to avoid being exposed to the SARS-CoV-2 virus causing COVID-19. Due to the nature of the wildland fire work environment, not every recommendation listed below will be feasible and some may need to be modified depending on the uniqueness of one’s workplace or fire environment. It is important to emphasize that identifying and preventing the spread of COVID-19 will be critical as all agencies strive to keep their workforce healthy throughout the fire season.

Recommendations: The following recommendations are based on the April 2020 guidance released by the Centers for Disease Control and Prevention (CDC). These recommendations may be modified as more research is conducted and information learned about identifying, preventing, and treating COVID-19.

Social/Physical Distancing – Limiting face-to-face contact (keeping 6 feet or more distance) with others is the best way to reduce the spread of COVID-19.¹

- Do not gather in groups; limit face-to-face meetings and maintain a social distance of six feet during necessary meetings. Do not shake hands, hug, or engage in other physical contact. If possible, rely on remote units and virtual technology for incident management team staffing, meetings and other communication. This includes incorporating virtual technology and communications (such as radio briefings and meetings) as much as possible.
- Minimize the size and number of personnel at Incident Command Posts. Set up fire camps that allow for social distancing. Use smaller spike camps to insulate crews and
modules from each other and other outside personnel and resources. Consider the use of radio briefings and multiple-day Incident Action Plans.

Crews and modules should use a “Module as One” approach to insulate as one unit and reduce exposure to the public and other crews. Close proximity, when necessary, is not an issue if everyone within the unit is healthy.

- By insulating as a unit, crews and modules can limit outside exposure to SARS-CoV-2 and may be able to safely complete operational tasks in closer proximity or ride in vehicles without face coverings when working within their “Module as One”. Personnel must keep in mind, exposing yourself could mean also exposing your module and your family. Insulate and protect yourselves. Practice social distancing to a minimum of six feet from individuals outside of your module.

- If possible, when on-boarding crewmembers keep new members separate for two weeks before adding them to the “Module as One”. When the “Module as One” has been established, minimize interaction with the public and outside community.

- If separation of new crewmembers is difficult, maximize telework and virtual training opportunities. Use cloth face coverings when social distancing is difficult to maintain indoors or outdoors during the 2-week separation period. Utilize the Wildland Fire COVID-19 Screening Interim Standard Operating Procedures developed by MPHAT to screen for symptoms daily. Conduct training and meetings outside where at least 6 feet of spacing between all personnel can be maintained.

- Create separate spaces in offices and shared housing where possible. Stagger work hours to create more open spaces in tight and close quarters.

- Crews and modules should limit close contact with other resources at their home unit or on incidents to insulate their “Module as One.” When coming into close contact or riding in vehicles with outside resources or personnel, all resources should wear cloth face coverings. While the practice of handshaking, hugging, or any physical contact is a deeply rooted etiquette within the United States, this practice should be avoided to reduce further potential for disease transmission.

- Minimize contact with the general public. This is to protect every crew member, their family, and the community we serve. Identify select individuals on a crew or module that will interact with the public, ensuring this person relies on social distancing, wears a cloth face covering, and practices hand hygiene during or after every interaction. This is especially important if the crew is working in or traveling through an area with high community transmission.

- When social distancing is not possible, a cloth face covering is recommended (see recommendations below).

**Cleaning and Disinfection** – Frequently clean and disinfect potentially contaminated surfaces that are in common areas and may be frequently touched throughout the work shift. Units should invest in cleaning supplies and ensure there is an adequate supply at their stations/barracks.
• Clean and disinfect shared areas and high touch surfaces in workplaces, vehicles, and shared housing. This should become part of each unit’s operational duties with dedicated time set aside daily. Checklists can be used to ensure these potentially contaminated surfaces are consistently cleaned and disinfected on regular intervals.
  o To clean the area, it is recommended that all visibly dirty surfaces be cleaned with soap and water (or similar detergent) prior to disinfectant. After cleaning the surface, disinfect the surface using an EPA-registered household disinfectant or a bleach/water solution (5 tablespoons bleach (1/3 cup) per gallon of water or 4 teaspoons bleach per quart of water).

• It is critical when using disinfectants that all personnel are trained and faithfully follow the instructions on the label to ensure safe and effective use of the product. When necessary, management should also ensure workers wear, train on the use of, and provide appropriate PPE specific to cleaning and disinfecting assignments.

• In shared working and living spaces, do not share dishes, drinking glasses, cups, eating utensils, towels, or bedding without appropriately cleaning and sanitizing them. Wash these items thoroughly after use with soap and water.

• Minimize equipment (radios, hand tools) sharing within your crew and with outside resources. If equipment must be shared, ensure resources properly disinfect the equipment and perform hand hygiene before and after use (if possible).

Maintaining a Healthy Workforce – All fire personnel are susceptible to contracting COVID-19. Because of this, the health and well-being of all personnel must be a priority throughout the fire season.

• All resources should have a heightened sense of awareness on the most up-to-date signs and symptoms associated with the illness. All resources should monitor their own health and encourage all crewmembers to do the same. All crew members should continue to monitor CDC guidance for regular updates.

• To reduce cumulative fatigue that may be present - especially later in the fire season, rest, proper hydration and nutrition should be prioritized for each operational period. If personnel feel unusually fatigued or have any signs or symptoms of COVID-19, they should follow the guidelines developed by MPHAT prior to returning to their normal duties.

• Conduct COVID-19 symptom screening, which includes a temperature check, to identify individuals with potential COVID-19 infection at duty stations or on incidents. Refer to the Wildland Fire COVID-19 Screening Interim Standard Operating Procedures developed by MPHAT.

• Rigorous sanitary and personal hygiene practices are important for reducing the transmission of infectious diseases. All personnel must cover their coughs and sneezes. Proper hand hygiene must be performed by all personnel. Fire personnel must wash their hands or use hand sanitizer after touching potentially contaminated surfaces, removing face coverings or PPE, after using the restroom, and before eating or putting anything in
Mitigate smoke exposure for firefighters when tactics can be adjusted and operational objectives can be met. Evaluate smoke impacts for spike camps and ICPs. It is reasonable to assume that smoke exposure could exacerbate the effects of COVID-19.

While fire personnel are often some of the most healthy and fit workers, it is critical all personnel evaluate their overall health and consider risks that may impact their susceptibility of experiencing more severe symptoms if they contract COVID-19. In particular, older adults (aged 65 years and older) and people of any age who have underlying medical conditions (asthma, severe obesity, chronic lung disease, diabetes, serious heart conditions, chronic kidney disease, immunocompromised, liver disease) might be at higher risk for severe illness from COVID-19. These individuals should take extra precautions to protect themselves from exposure to the virus and should be assigned to duties that reduce their risk of contracting the illness (e.g. limiting interactions with other people, virtual and telework assignments).

Preventing the spread of COVID-19 - Help prevent the spread of COVID-19 if someone is sick or has potential exposure to an individual with confirmed or suspected COVID-19.

While at a duty station or home unit, sick or potentially sick personnel should stay home; if personnel fall ill on an incident, he/she must report that to their supervisor and appropriate next steps will be taken if they are sick. Symptoms including: fever, cough, shortness of breath or difficulty breathing, chills, repeated shaking with chills, muscle pain, headache, sore throat, or new loss of taste or smell are common to COVID-19 infection. Most people who have mild illness are able to recover at home. If someone may have been exposed to COVID-19, contact a local healthcare provider immediately. Do not leave the home or visit public spaces, except to get medical care.

Separate a sick individual from others in the home or at work. In shared housing, management should pre-identify where a sick individual can self-isolate. Ideally, this person would have his/her own bedroom and bathroom. Management should also develop a plan for how to care for a sick co-worker and to make sure a sick individual has essential supplies.

Individuals who are sick should wear a face mask or cloth face covering over their nose and mouth if they must be around other people. The sick should also try to stay at least 6 feet away from others which will help protect the people around a sick individual.

Seek immediate medical attention if someone develops emergency warning signs for COVID-19: trouble breathing, persistent pain or pressure in the chest, new confusion or inability to arouse, or bluish lips or face. The Centers for Disease Control and Prevention (CDC) symptom checker can assist in decision making.

Consistent with CDC guidance, sick individuals can discontinue home isolation under the following conditions:
If they will not have a test to determine if they are still contagious, individuals can leave home after these three things have happened:

- No fever for at least 72 hours (that is three full days of no fever without the use of medicine that reduces fevers), AND other symptoms have improved, AND at least 7 days have passed since symptoms first appeared

If they will be tested to determine if they are still contagious, individuals can leave home after these three things have happened:

- They no longer have a fever (without the use medicine that reduces fevers), AND other symptoms have improved, AND they have received two negative tests in a row, 24 hours apart. Doctors will follow CDC guidelines.

Local or state public health will coordinate with the infected individual and/or the agency to perform contact tracing to trace, notify and monitor the infected person and their contacts. Contact tracing will help ensure the safe, sustainable and effective quarantine of contacts to prevent additional transmission.

The National Wildfire Coordinating Group Emergency Medical Committee is currently developing guidance and protocols for what to do (care and transport) if someone develops COVID-19 symptoms while at a wildfire incident.

The CDC issued “Interim Guidance for Implementing Safety Practices for Critical Infrastructure Workers Who May Have Had Exposure to a Person with Suspected or Confirmed COVID-19”. The guidance includes additional precautions and practices for critical workers that are asymptomatic after they had a household contact or close contact within 6 feet of an individual with confirmed or suspected COVID-19. The timeframe for having contact with an individual includes the 48 hours before the individual became symptomatic.

To ensure continuity of operations and performance of essential functions (e.g. during a wildfire incident), critical infrastructure workers may be permitted to continue work following potential exposure to COVID-19, provided they remain asymptomatic and follow the mitigations outlined below. When work is not essential, quarantine may be advisable to best protect potentially exposed workers.

Mitigations for Critical Infrastructure Workers:

- **Pre-Screen:** Measure the employee’s temperature and assess symptoms prior to them starting work. Ideally, temperature checks should happen before the individual enters the facility or interacts with others on the crew.

- **Regular Monitoring:** As long as the employee doesn’t have fever or symptoms, they should self-monitor under the supervision of the occupational health program.

- **Wear a Mask:** The employee should wear a facemask or face covering at all times while on duty for 14 days after last exposure. (When facemasks cannot be worn during arduous
work tasks, social distancing practices should be implemented. Consider assigning work tasks that can be completed individually, such as a lookout or line scouting)

- **Social/Physical Distance:** The employee should maintain 6 feet and practice social distancing as work duties permit in the workplace.

- **Disinfect and Clean:** Clean and disinfect all areas such as offices, bathrooms, common areas and shared electronic equipment routinely.

**Cloth Face Coverings and Personal Protective Equipment (PPE)** – Fire personnel must understand the differences between the types of face coverings and PPE and their appropriate use. When using face coverings or masks, it is more difficult to eat and drink; firefighters are encouraged to pay special attention to nutrition and hydration needs when wearing these.

**Cloth Face Coverings**

- When social distancing is not possible, fire personnel should wear cloth face coverings that cover their mouth and nose. The primary purpose of these cloth face coverings (also known as source control) is to reduce the spread of the virus from resources who may have the virus and are asymptomatic.

- Cloth face coverings should be frequently cleaned with soap and water. Thus, each person should have multiple face coverings so that one can be used while the others are laundered.

- Cloth face coverings are not personal protective equipment (PPE) like surgical facemasks or N95 filtering facepiece respirators, described below.

**Disposable Face or Surgical Masks (non-respirator)**

- A disposable surgical mask is a loose-fitting, disposable device that creates a physical barrier between the mouth and nose of the wearer and potential contaminants in the immediate environment. Disposable face masks or surgical mask cannot be used in place of a respirator.

- Surgical masks are not intended to be used more than once. If the mask is damaged or soiled, or if breathing through the mask becomes difficult, it should be removed, discarded safely, and replaced with a new one. To safely discard the mask, place it in a plastic bag and put it in the trash. It is important to perform hand hygiene immediately after handing the used mask.

- Per CDC Interim Infection Prevention and Control Recommendations for Patients with Suspected or Confirmed Coronavirus Disease 2019 (COVID-19) in Healthcare Settings guidance, along with other precautions, personnel with known or suspected COVID-19 should wear a disposable facemask or cloth face covering to contain secretions during interaction with other personnel or during transport.

**N95 Filtering Facepiece Respirator**

- A N95 filtering facepiece respirator is a respiratory protective device designed to achieve a very close facial fit and very efficient filtration of airborne particles. The 'N95'
designation means that when subjected to careful testing, the respirator blocks at least 95 percent of very small (0.3 micron) test particles if worn properly.

- If properly fitted, the filtration capabilities of N95 filtering facepiece respirators exceed those of face masks and face covers.

- At this time, the CDC does not recommend that the general public wear N95 filtering facepiece respirators to protect themselves from respiratory diseases, including coronavirus (COVID-19). These are critical supplies that must continue to be reserved for health care workers and other medical first responders, as recommended by current CDC guidance.

- N95 filtering facepiece respirators may be used for other workers to provide protection from other hazards if deemed necessary.

- Note all workers who wear filtering facepiece respirators to protect themselves from workplace hazards must comply with the OSHA respiratory protection standard.

Resources