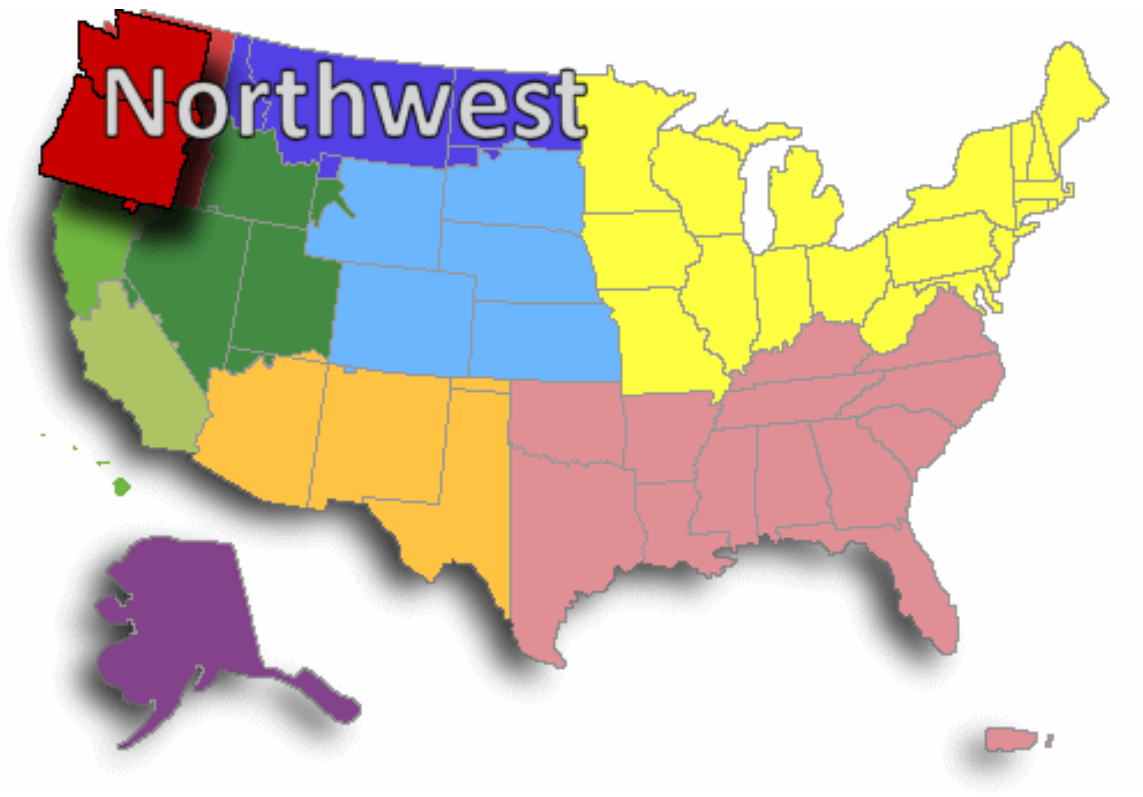# Wildland Fire Response Plan
COVID-19 Pandemic

Northwest Geographic Area

Updated: May 2, 2020

Northwest Geographic Area

This Plan is Maintained by the Pacific Northwest Coordinating Group

1 PREFACE

This Wildland Fire Response Plan (WFRP) has been developed to provide guidance and considerations for maintaining continuity of wildland fire response in the presence of the COVID-19 pandemic for the 2020 fire year in the Northwest Geographic Area. The plan is intended to be a single point of reference for those tasked with management of wildland fires. The plan presents thoughts on planning needs and considerations, possible actions, and immediate needs to help wildland fire management agencies and organizations sustain, to the extent possible, the highest degree of resource availability while providing for the safety and protection of all wildland fire response personnel at all organizational levels in all areas across the country.

The WFRP is constructed for applicability at all levels. However, some of the information presented here may not have the same utility for all participating agencies and organizations. For example, many practices and protocols listed here for consideration may only be acceptable for use by federal agencies and not by state and local governments. In other cases, more specific practices and protocols may be developed and implemented at local levels.

> **NOTE**: protocols, policies, direction, other guidance set forth by your agency or leadership, are your overarching standards and overshadow this WFRP, and should be strictly adhered to.

This WFRP is designed with two main sections:

"Strategic" and **"Tactical"**

Strategic information is intended for all levels of wildland fire response – from national level, regional level, local level, to module level – there is applicable information for everyone in the Strategy portion of the document. Strategic information is found throughout the document but occurs primarily in the main body of the document on pages 7-24.

Tactical information is intended for local area fire managers, Incident Management Organizations, and the "boots on the ground" in the format of Best Management Practices (BMPs). The BMPs are found in Appendix B of the Document. The BMPs have been designed to be concise, to the point, easily understandable, and printable as stand-alone documents for use by the respective resource; very similar to an Engine Captain focusing their attention to the pertinent ICS-204 Division Assignment from an Incident Action Plan (IAP). Appendix A – *All Fire Personnel Best Practices* – is a companion to Appendix B and should be reviewed and referenced concurrently with Appendix B.

Readers are encouraged to review the entire document and to use the Contents page to assist with identifying information most applicable to their needs.

2
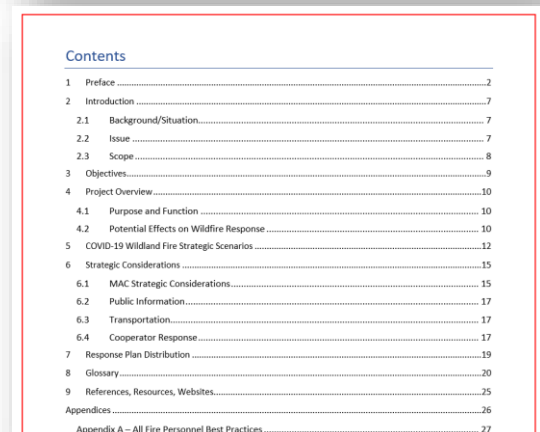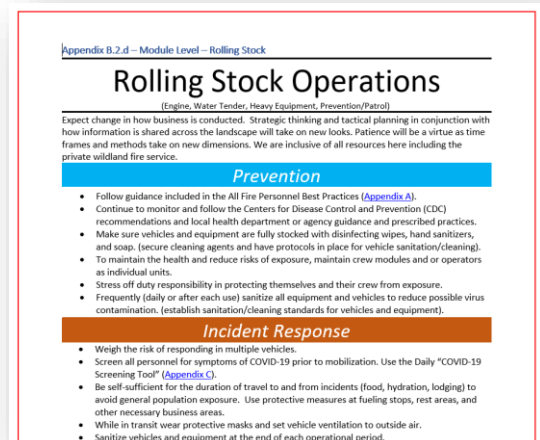
BMPs may not offer the detail that some personnel would like. This detail can be supplemented by locally prepared information (see NOTE at the end of this Preface). It must be remembered that the COVID-19 pandemic is an evolving situation that has never been encountered before in wildland fire management. All the answers are not known at the current time and new information and experience will continue to emerge throughout the fire season.

This WFRP was developed by Area Command Team 1 (Joe Stutler) in coordination with as many of the appropriate agencies, organizations, and individuals in the Northwest Geographic Area as possible. The team worked directly with the Geographic Area's Coordinating Group Chair, all participating agencies and organizations, dispatch/coordination centers, and various local units. This comprehensive coordination enabled clear communication with all involved participants and fostered improved awareness and understanding of the purpose and intent of the WFRP. It also reduced possible duplication of effort, ensured a coordinated effort and synchronization with other efforts in the Northwest Geographic Area (GA), and promoted support and endorsement at all levels.

NOTE: This plan is intended to provide a higher-level framework of considerations and not specific operational procedures. It is not written in terms of "how to" but instead provides considerations of "what," "why," and "where" with a focus on the "mob to demob" time period. As more information becomes known and lessons learned from real experiences are identified, the plan should be supplemented with the addition of this knowledge. This continued addition of practical information along with development of more specific operational procedures by agencies and local level units is strongly encouraged. The Best Management Practices provided in the Appendices are intended to offer information to help reduce the likelihood of COVID-19 spread during wildland fire suppression operations and not meant to supersede Cooperative Fire Management Agreements or other established agreements. But, in order for them to be effective, they will need to be strictly followed. Because of potential changes from past experiences and practices, local personnel are strongly encouraged to practice, repeat, and understand the information provided in each BMP.

To view Wildland Fire Response Plans from other geographic areas, please visit the NIFC website at: https://www.nifc.gov/fireInfo/covid-19.htm

Record of Changes

The uncertainty associated with the COVID-19 pandemic and the ongoing development of standard protocols and practices, and other changes to existing standards for wildland-fire response necessitates that this Wildland Fire Response Plan be a living document and subject to updates as new or more current information emerges. The following **Record of Changes** represents the process to log the dates, source of change, details of the modification, and the date that the modification was added/updated in the plan. This will be the single point source for documentation of WFRP version updates. The first version of this document was published on April 20, 2020, and all-subsequent version changes are documented in the table below.

Date	Source	Change	Date Added to WRFP
4/20/2020	**ACT1**	**ACT1 (Stutler) delivered the completed Northwest Area WFRP to the PNWCG Chair**	**04/20/2020**
05/02/2020	CPB	**ACT1 conducted a final review and update based on newly released information, miscellaneous grammar, spelling, etc., inaccuracies, and improvements learned from other WFRP development.** Updates include: ✓ updated Preface. ✓ Added wildfire smoke information to sections 2.2, 4.2. ✓ Updated sections 6, 8, and 9. ✓ Updated Appendix A. ✓ Replaced Appendix C with the MPHAT COVID-19 Screening Tool. ✓ Added Appendix F – Wildfire Smoke and COVID-19. ✓ Minor formatting and misc. improvements.	05/02/2020

Contents

2 INTRODUCTION

2.1 Background/Situation

Coronaviruses are a large family of viruses that cause illnesses ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS). Coronaviruses comprise an entire branch of the virus family tree that includes the disease-causing pathogens behind SARS, MERS and several variants of the common cold that infects humans. A new variant of this family has arisen over the last few months and has spread around the world. SARS-CoV-2 is the name of the virus that is spreading; COVID-19 is the disease it causes.

Information regarding current risk and threat of COVID-19 is updated continuously on the Centers for Disease Control and Prevention's (CDC) website.

2.2 Issue

Like other coronaviruses, the SARS-CoV-2 virus infiltrates the airways of its hosts. At worst, these pathogens cause severe forms of viral pneumonia, which in some cases leads to death. The vast majority of COVID-19 cases—about 80 percent—appear to be mild, causing a spate of cold-like symptoms like coughing, shortness of breath, and fever. Many people are suspected to carry the virus without presenting any symptoms. COVID-19's spread rate suggests the virus is more contagious than any of its predecessors, as well as most strains of the distantly related influenza virus.

According to the World Health Organization (WHO), individuals with underlying medical issues including respiratory and heart conditions, as well as smokers, are among those at highest risk. Despite some reports to the contrary, children can be infected, but appear less vulnerable.

The virus is capable of moving directly from person to person through droplets produced by coughs or sneezes that travel through the air to settle directly on skin or frequently touched surfaces, like doorknobs or cell phones. After a person is exposed, symptoms can take weeks to appear, if they do at all. Those who carry the virus without showing signs of illness can still spread the disease.

Projections have been made for significant numbers of individuals in America to become infected with COVID-19. The World Health Organization has declared the widely dispersed geographic spread of COVID-19 a pandemic. The President has declared a national emergency; additionally, all 50 States, the District of Columbia, and all territories have declared states of emergency as well. Current mitigation measures have resulted in business closures, reductions in commercial travel, grocery supply shortages, and restrictions on all types of gatherings with even moderately small numbers of individuals.

Wildland fire response has been ongoing and increasing in activity. Advance planning is a necessary part of ongoing efforts to prepare for the potential impacts of this pandemic. It will be necessary to ensure that as fire activity increases and demands for firefighters and equipment expand, all steps have been taken to ensure the ability to sustain an effective wildfire response while ensuring the maximum safety of all personnel.

In addition, any exacerbating effects that wildfire smoke may have on COVID-19 are not well known at this time. Although not directly researched or tested, the exposure to wildfire smoke appears to

7

potentially lead to increased susceptibility to COVID-19, may worsen severity of the infection, and may pose more risks to those who are recovering from serious COVID-19 infection. These concerns are based on research into the respiratory effects of acute and long-term air pollution and specifically respiratory effects of biomass burning smoke and subsequent infection with influenza and other viruses (see Appendix F).

2.3 Scope

The National Area Command Teams (ACT) and one Geographic Area Incident Management Team (IMT) were tasked by the National Multi-Agency Coordinating Group (NMAC) to coordinate with Federal, State, County, and Tribal officials to identify all issues related to the COVID-19 pandemic and wildland fire response in the United States. Their mission entailed direct work with all GAs in the US, Geographic Area Coordinating Groups (GACG's), Geographic Area Coordination Centers (GACC's), the National Multi-Agency Coordinating Group (NMAC), and the National Interagency Fire Center (NIFC) External Affairs Staff to develop WFRPs for each of the ten Geographic Areas. The teams did not independently prepare the plans but worked in concert with the GAs and all member agencies and organizations to ensure coordinated plan development. Considerable input came from sources within the GA and this plan would not have been possible without that coordinated effort and comprehensive involvement.

These plans specifically reference and provide considerations on maintaining continuity of wildland fire response; sustaining, to the extent possible, the highest degree of resource availability; and ensuring safety and protection of all wildland fire response personnel at all levels in all areas across the country.

Information in this plan is designed to provide considerations that help guide all wildland fire agencies and organizations in maintaining continuity in all aspects of wildland fire response at all levels (national, geographic, and local). Specifically important are areas of initial attack, extended attack, and large fire response, as well as coordination and support functions (dispatch, cache, etc.). This plan outlines potential scenarios that may be encountered at all levels involved directly or indirectly in wildland ire response, provides general strategies useful at national levels, general strategies and implementation considerations pertinent to geographic area/regional/state levels, and recommended best practices highly relevant at local levels and various functional areas of wildland fire response activities during this pandemic.

This WFRP for the COVID-19 Pandemic for the **Northwest Geographic Area** is a living document and will be managed (continually reviewed and updated as appropriate) by the **Pacific Northwest Coordinating Group**.

3 OBJECTIVES

This WFRP for the COVID-19 Pandemic for the Northwest **A**rea was prepared with the following objectives:

- Identify issues that relate to the COVID-19 pandemic and wildland fire response. Liaise and identify these issues through coordination with federal, state, county, and tribal health officials.
- Develop Wildland Fire Response Plans that address wildland fire response strategies, considerations for implementation actions, and responsibilities of all involved participants from the point of mobilization to demobilization.   This information is presented in a format useful for national level management groups, geographic area/regional/State level management groups, and local level operational units and functional staffs involved in response implementation. Specific response capabilities addressed in this plan include:
  - o Maintaining continuity in response capability for:
    - initial attack,
    - extended attack/complex fire management,
    - dispatch, support, and coordination.
  - o Identification and documentation of procedures to mitigate impacts due to potential exposure to COVID-19 during an incident.
  - o Identify, define, and document protocols on how to manage potential COVID-19 exposure incidents for initial and extended attack incidents.
  - o Identify, define, and document protocols for Incident Management Teams to mitigate COVID-19 exposure concerns and provide to IMTs and all units.
  - o Identify, define, and document protocols for wildland fire response to areas with known exposure to COVID-19.
- Develop Wildland Fire Response Plans without contradicting any currently developed protocols by any Agency.
- Ensure that the Wildland Fire Response Plans are developed to promote interagency coordinated response to wildland fire management regarding COVID-19.

4 PROJECT OVERVIEW

4.1 Purpose and Function

Three Area Command Teams and one Incident Management Team were mobilized with responsibility to develop COVID-19 WFRPs for specific GAs. The respective assignments per team were:

- **ACT 1 Stutler**: Rocky Mountain, Northwest, Alaska
- **ACT 2 Sexton**: Southern Area, Great Basin, Northern Rockies
- **ACT 3 Jalbert**: Southwest, Southern/Northern California
- **Eastern Area T2 IMT Goldman**: Type 2 IMT worked under ACT 2 to develop a COVID-19 Wildland Fire Response Plan for the Eastern Area.

The four teams developed Wildland Fire Response Plans with the goal of coordinating with as many agencies, organizations, and individuals in each GA as practical.   They worked directly with each Geographic Area's Coordinating Group Chair, various dispatch/coordination centers, and various local units. They also worked under direction and supervision of the NMAC, through a Team Coordinator (Joe Reinarz) and maintained frequent contact and communication through multiple daily briefings to the NMAC.

All plans were developed using a standardized template and process for national standardization; but development included attention and inclusion of all specific concerns for the GA covered by the plan.

The teams' coordination with the GA during plan development enabled clear communication to all involved participants and vastly improved awareness and understanding of the purpose and intent of the WFRP. It also reduced some, but not all, potential duplication of effort, ensured a coordinated effort, and ensured support and endorsement at all levels

All four teams worked in this role as a support function, had no control responsibilities, and to the fullest extent possible, did not transfer additional work to any participating Geographic Area organizations.

4.2 Potential Effects on Wildland Fire Response

The rapid spread rate of COVID-19 indicates how highly contagious it is. Exposure of uninfected individuals to infected individuals triggers a near exponential spread and proliferation of the disease.

Wildland fire incident management activities create an ideal environment for the transmission of infectious diseases: high-density living and working conditions, lack of access to and use of soap and sanitizers, and a transient workforce. These and other environmental and occupational factors (e.g., smoke, heat, plants, insects, fungus, fatigue, and physically demanding work) can increase the likelihood of disease transmission. Often, fire camp situations cause rapid increases in the number of symptomatic fire personnel and suspected cases, resulting in an infectious disease outbreak on an incident. An outbreak is the occurrence of more cases than would normally be expected in a specific place or among a group of people over a given time period.

Working conditions frequently involve smoky conditions and effects that wildfire smoke may have on COVID-19 spread are not well known at this time. This could also potentially increase the occurrence of COVID-19 cases or seriousness and raises additional concerns. The wildland fire response system is

10

unique regarding its structure, capability, and function compared to the first responder system throughout the country. Wildland fire response is initiated at the local level with a finite number of firefighting resources. Should these resources be unable to take care of all needs, additional resources are ordered from neighboring units and ultimately, additional resources can be mobilized from anywhere in the country. What makes this system unique is that no base or location has enough backup resources to cover responsibilities during high fire activity periods. In the event of substantial personnel absences, even for a scenario of a small to moderate percentage of individuals becoming unavailable due to exposure to COVID-19, additional resources from other units and areas will be necessary. In the event of a high disease spread scenario with a high rate of infection, the associated loss of individuals from service could, in even a moderately active fire season, severely tax the ability to maintain an adequate wildland fire response.

These Plans were prepared to define strategies to assess risks, develop recommendations for implementation actions, and identify immediate, mid-term, and long-term needs to ensure that continuity of wildland fire response capability can be maintained across the country. Exposure prevention, exposure mitigation, equipment and facility maintenance and care along with strategies for ensuring resource availability are addressed.

5 COVID-19 WILDLAND FIRE STRATEGIC SCENARIOS

Wildland fire response information and considerations are not presented in a prescriptive format. Since some information is more applicable from a management standpoint and useful by decision makers, strategic considerations for national and geographic area/regional/state considerations are presented in the main body of the plan. Other information more useful and applicable to local level implementers and functional groups who may be on the first line of exposure to the disease is presented in Appendices A and B as best management practices and is suitable for direct adoption and implementation.

Throughout the course of the upcoming fire season, there are potential scenarios that may be encountered by all levels involved directly or indirectly in wildland fire response. These are shown in Figure 1. Information shown for these scenarios is applicable at all response levels and all organizational levels. This information illustrates strategic response considerations and actions employable at national, geographic area/regional/state, and local levels.

Figure 1 shows five possible scenarios that could be encountered during wildfire response in the COVID-19 pandemic. The first is the pre-exposure scenario where operations are functioning. Exposure in this chart and this plan is used in the context of being subjected to contact with the coronavirus responsible for COVID-19. Key strategic elements include prevention and containment. Prevention refers to limiting of exposure to individuals while containment means to prevent the spread of this infectious disease beyond an individual or a small group that may have been infected to a broader group. The second scenario involves exposure with strategic elements of prevention, containment, and quarantine. Quarantine separates and restricts the movement of people who were exposed to COVID-19 to see if they become sick.

The third scenario is one in which fire response personnel have become infected. Strategic elements include prevention, containment, treatment, management, and isolation. Isolation involves separating positive infected people from those who are not infected. The fourth scenario includes recovery with strategic elements of prevention, containment, treatment, and management. The final scenario involves preparation for return to service following recovery from the disease.

COVID-19 Progression and Impacts to Maintaining Wildland Fire Response Capability
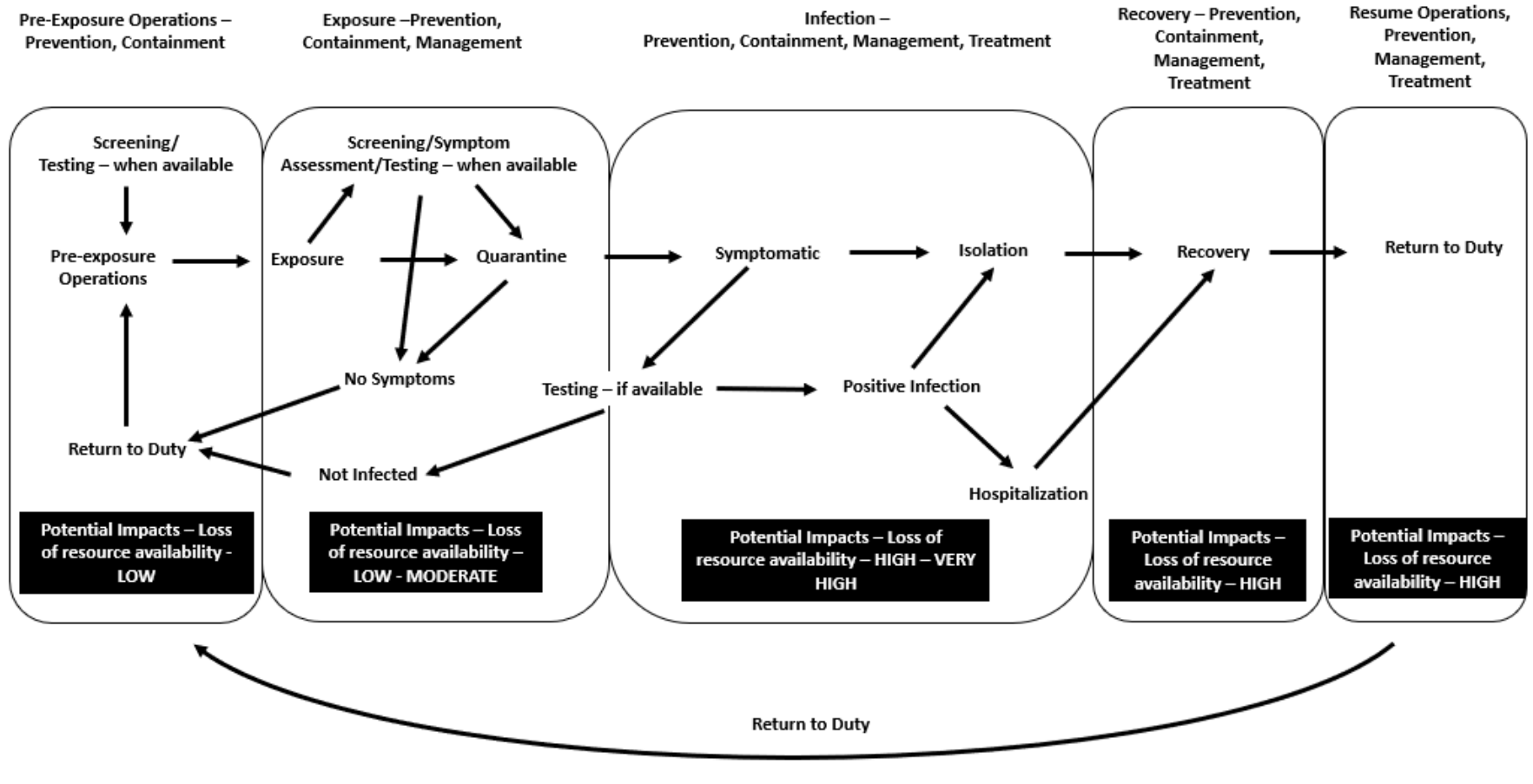
Figure 1: COVID-19 Wildland fire response operations, scenarios that may be encountered, and strategic planning elements for each.

Following Figure 1 is a table that provides more detailed information regarding strategic issues, immediate needs, prevention/containment actions, and management/treatment actions. This table is by no means the complete authority on strategic responses to this disease but contains considerations useful at management levels. More specific information on these topics that is relevant to local level implementers and functional groups is provided in the All Fire Personnel Best Practices Section in Appendix A.

Table 1. Recommended management level issue points for COVID-19 wildfire response including basic strategies, immediate needs, avoidance/containment action considerations, and management/treatment action considerations.

Strategies	Immediate Needs	Prevention/Containment	Management/Treatment

• Develop long-term planning to mitigate and respond to COVID-19 spread to prevent the loss of wildland fire response capability, exposure of wildland fire resources to the disease, and potential contamination of initial attack resources by exposed individuals
• Ensure that all personnel are cared for in the safest possible manner and subjected to prevention, containment, management, and treatment as needed. Incorporate social distancing standards into day-to-day operations.
• Maintain functioning wildland fire response operations from bases with regular crews.
	• Definition of new protocols/standards for personal hygiene and clothes laundry.
	• Definition of processes for equipment disinfection.
	• Acquisition of necessary equipment and/or support to disinfect equipment.
	• Obtain additional hand washing stations as needed.
	• Contingency planning if not covered by existing COOPs,
	  o Designation of 1st, 2nd and 3rd alternate bases
	  o Designation of 1st, 2nd, and 3rd alternate staffing units.
	• Obtain level B or Splash protective suits for use in disinfecting equipment as needed.
	• Determination of availability and acquisition of disease testing kits.
	• Determination of proper responsibility for testing exposed personnel.
	• Determination of process and appropriate products to use for disinfection of equipment with special reference to hand tools, vehicles, aircraft, computers, radios, pumps and chain saws, etc.
	• Determination of protocols for isolation and removal from active duty and locations.
		• Close operating base to the public and all non-essential personnel.
		• Provide recommended social distancing guidelines.
		• Practice personal hygiene.
		• Screen all personnel when entering base area, before starting work – check temperature, check for overall feeling, check for coughing, and other symptoms.
		• Configure and set up testing capability for firefighters at local unit or local health facilities, when it becomes available.
		• Prioritize firefighters for testing and vaccine (if one is developed).
		• Enhance personal hygiene.
		• Isolate firefighters as much as possible.
		• Disinfect equipment on a regular basis.
		• Launder PPE on a regular basis.
		• Develop a plan for prioritizing fires for response, especially if COVID-19 spread is high and fire season activity is high.
		• Plan for shifts in wildfire response strategy, ranging from highly prioritized IA to reducing overall firefighter exposure by prioritizing responses.
			• Determination of protocols for sending exposed individual home or to medical facilities.
			• Determination of quarantine protocols in conjunction with local, county, and state officials.
			• Determine quarantine oversight responsibility.
			• Determination of protocols to determine when individuals are available to return to active duty.

6 STRATEGIC CONSIDERATIONS

Specific recommended management considerations for fire managers at the national, geographic area, and sub-geographic area are provided in this section. This information is also applicable to agency units and local levels although some of it will not have the same utility for all participating agencies and organizations.

6.1 Strategic Considerations

Fire Personnel Readiness
Consider:
- ✓ Managing qualifications and training by delaying, virtualizing, expanding focus to COVID-19, and adding flexibility/waivers.
- ✓ Expanding prevention activities by expanding public information campaigns and closures and pursuing virtual opportunities.
- ✓ Pre-identifying potential control locations for aggressive response.
- ✓ Expanding the use of emerging technology: leveraging remote operations, briefings, sensing, and surveillance.
- ✓ Rapidly contracting and focusing on specific needs: explore opportunities for greater use of MRE's, medical equipment, PPE, remote sensing.
- ✓ Increasing and maintaining response capacity:
  - o Maximize use of permanent resources.
  - o Provide employee support for emotional well-being.
- ✓ Enhancing situational awareness - building systems for situational awareness of firefighter exposure and infections.
- ✓ Practicing social/physical distancing.
- ✓ Practicing personal hygiene.
- ✓ Maintaining continual PPE laundry on a regular basis.
- ✓ Monitoring personnel for symptoms.
- ✓ Testing personnel when tests become available and in accordance with Appendix C.
- ✓ Strictly adhering to BMPs listed in Appendix B and practicing their use before fire activity increases.

Modifying Strategies, Tactics, and Logistics.
Consider:
- ✓ Strategy and Tactics
  - o Adapting existing wildfire response plans to include all additional response options provided for in land and resource management plans.
  - o Pursuing opportunities for monitoring of low-risk fires.
  - o Making full use of the range of available tactics and preparing for more discriminate use of resources, especially for fires that occur in high-risk areas.
  - o Exploring opportunities for managed fire, more indirect attack, and designation of management action points using natural barriers.
  - o Planning for the potential for increased smoke loads to communities and plan and implement early warning/communication for likely events.
  - o Utilizing suppression strategies that will minimize assigned personnel and reduce incident duration.
  - o Implementing swift initial response to minimize possibility of large fire occurrence while not exercising higher risk tactics to keep fires small.

- Within agency protocols and to the degree possible, augmenting fire response resources with non-fire staff to help sustain fire response capability.
- Pursuing opportunities for application of aviation and mechanized assets to reduce assigned personnel.
- Using a prioritization process to assure the effective use of resources
  - Prioritizing initial attack and focusing use of aviation assets.
  - Extended attack/complex fire management.
  - Expanding large fire prioritization processes
    - Defining and utilize a large fire triage process.
    - Emphasizing containment strategies and evaluating magnitude and duration of mop up to aid in minimizing assignment and potential exposure time.
- Expanding use of Decision Support Centers in all GACCs.
- Utilizing Predictive Services and professional judgment to balance assigned resources and incident duration.
- Expanding the use of experienced smoke personnel and/or Air Resource Advisors (ARA) to assess where wildfire smoke may go and impacts of smoke on firefighters and communities with COVID-19.
- Evaluating wildfire smoke level projections and trajectories during development of tactical operations.

- Preparing and implementing virtual incident management appropriate for the situation by IMTs - GAs consider conducting simulated virtual IMT incident management prior to most active fire season periods
  - Identify and obtain necessary technology.
  - Designate IMT sections/personnel that can complete work virtually and what minimum requirements are for managing incidents safely.
- Limiting large fire response to when life is imminently threatened.
- Altering catering/shower/washing station.
- Expanding medical support.
- Using modular isolation in camps.
- Two-way isolation: closing camps with security, no leaving camp to travel into communities.
- ✓ Having personnel carry extra PPE.
- ✓ Using more vehicles during crew transports if possible, to support the Module as One concept.
- ✓ Following recommended guidelines for disinfecting fire equipment on a regular basis.
- ✓ Following agency-specific policies and protocols regarding use of shared housing.

Drawdown Projections and Contingency Opportunities:
Consider:
- ✓ Determining opportunities to obtain international assistance and if so:
  - Identifying sources of additional resources.
  - Identifying potential amounts of resources needed at escalating preparedness levels.
  - Pursuing use of and consultation with Australian fire managers involved in the 2019-2020 Australian fire season to draw on recent experience in working with limited and declining resource numbers.
  - Pre-planning any international agreements, waivers, funding, and other administrative requirements and have them complete by the start of active fire seasons.
- ✓ Recommending that local units prepare contingency plans for resource drawdown during fire seasons.

- o Evaluating how existing staffing and management will be affected by a 10, 30, or 50% reduction in strength of force of wildland firefighting and management resources.
- o Identifying options available for maintaining continuity in resource levels during drawdown periods.
- o If resource numbers decrease due to COVID-19, considering base closing and/or consolidation.
- ✓ NMAC and GMAC consider possible adjustments in resource drawdown as fire season progresses.

Leveraging Best Available Information Management and Technology:
Consider:
- ✓ Communication**:**
  - o Expanding the use of technology and local networks for remote/virtual community meetings and updates.
  - o Expanding and focus communications by developing COVID-19 communications tool kit and strategies for two-way virtual communications with communities.
- ✓ Technology**:**
  - o Preparing for more remote operations, briefings, sensing, and surveillance.
  - o Identifying technology needs, costs, and proactively implement actions.
  - o Pursuing increased use of UAS (seek waivers where necessary; seek increased agency support).
  - o Expediting contracting of UAS equipment.
  - o Identifying and using the best technology to reach affected communities.

6.2   Public Information

Consider national and geographic direction on Information releases regarding COVID-19 specific issues to wildland fire incidents managed by IMTs (type 1-3). All releases must be consistent and follow the Delegation of Authority the team is working under. Local unit Public Affairs offices will maintain close contact with regional, national and Department Office directives and be able to guide Public Information Officers (PIO) on what can/cannot be released.

Many rural communities are not well served by information dissemination via internet and social media in general. Agencies have traditionally relied on in-person community meetings and staffed information boards to allow personal dialogue in these impacted communities. This plan foresees that in almost every case, these tools will be unavailable to PIOs in areas impacted by COVID-19. Communities should be identified and be briefed in advance of fire season to manage expectations and explore alternatives.

The PIO BMP in Appendix B provides new and existing information dissemination methods to maximize social distancing. Host units should evaluate and update contact lists and e-trap lines in advance and provide to team PIOs within in-briefing packages. In addition, that BMP provides more detailed information regarding the best practices for the Information function.

6.3   Transportation

Appendix E identifies the various modes of transportation available to transport resources to an on-going incident from within the geographic area or nationally, while considering the potential impacts of COVID-19 exposure and infection associated with each mode. While in travel status, refer to the Travel BMP. See Appendix E.

6.4   Cooperator Response

- ✓ Determine opportunities for the use of military resources

17

- o   Identify how military resources can be used and augment existing firefighting resources
- o   Identify accelerated training capabilities to advance readiness earlier in fire season
- ✓ Consider all opportunities for staffing MAC functions remotely
- ✓ Consider ways to reduce the span of control in multiple large fire situations
- ✓ Consider MAC level management of work-rest for national resources in short supply
- ✓ Work with cooperators, partners, and stakeholders to review existing Agreements and associated Operating Plans to identify any areas where preseason agreements and decisions are affected given the current COVID-19 changed conditions. Ensure any identified limitations are well known and communicated to all levels of fire personnel including field level responders

7   RESPONSE PLAN DISTRIBUTION

This plan will be handed off to the Northwest Geographic Coordinating Group, to be further distributed to:

- Coordination Centers
- Dispatch Offices
- Agency Administrators
- Fire Staff
- Incident Management Teams
- All levels of firefighting resources

8 GLOSSARY

Active monitoring: Refers to when the state or local public health authority assumes responsibility for establishing regular communication with potentially exposed people to assess for the presence of fever, cough, or difficulty breathing. For people with high-risk exposures, CDC recommends this communication occur at least once each day. The mode of communication can be determined by the state or local public health authority and may include telephone calls or any electronic or internet-based means of communication.

Afebrile: Not feverish.

Asymptomatic: not showing any signs of having the disease.

Close contact: being within approximately 6 feet (2 meters) of an individual for a prolonged period or, having direct contact with infectious secretions from an individual (e.g., being coughed upon).

Cluster: an aggregation of disease cases grouped in place and time that are suspected to be greater than the number expected, even though the expected number may not be known.

Conditional release: a set of legally enforceable conditions under which a person may be released from more stringent public health movement restrictions, such as quarantine in a secure facility. These conditions may include public health supervision through in-person visits by a health official or designee, telephone, or any electronic or internet-based means of communication as determined by the CDC Director or state or local health authority. A conditional release order may also place limits on travel or require restriction of a person's movement outside their home.

Confirmed COVID-19 infection: positive determination of COVID-19 infection from a laboratory test. Also referred to as a Positive COVID-19 infection.

Congregate settings: crowded public places where close contact with others may occur, such as shopping centers, movie theaters, stadiums.

Containment: A public health strategy in which officials aim to prevent the spread of an infectious disease beyond a small group of people to the broader community. Containment actions include restricting travel from affected regions, identifying infected people and tracking down everyone they live with or have spent time with (contact tracing), and asking those who have been exposed to the virus to stay at home for a period of time.

Controlled travel: exclusion from long-distance commercial conveyances (e.g., aircraft, ship, train, bus). For people subject to active monitoring, any long-distance travel should be coordinated with public health authorities to ensure uninterrupted monitoring. Air travel is not allowed by commercial flight but may occur via approved non-commercial air transport. CDC may use public health orders or federal public health travel restrictions to enforce controlled travel. CDC also has the authority to issue travel permits to define the conditions of interstate travel within the United States for people under certain public health orders or if other conditions are met.

COVID-19: The name of the disease caused by the novel coronavirus, SARS-CoV-2. "CO" stands for "corona," "VI" for "virus," and "D" for "disease. Formerly, this disease was referred to as "2019 novel coronavirus" or "2019-nCoV."

COVID-19 PPE: General cleaning for prevention of spread PPE consists of latex or rubber gloves, face mask, eye protection (goggles/face shield). For personnel displaying symptoms, back off, isolate, and call trained EMS personnel for assistance (fire department/ambulance service).

Coronavirus: A family of viruses that cause illness ranging from the common cold to more severe diseases, such as Middle East Respiratory Syndrome (MERS-CoV) and Severe Acute Respiratory Syndrome (SARS-CoV). The novel coronavirus recently discovered has been named SARS-CoV-2 and it causes COVID-19. Source: WHO

Drive through testing: Individuals remain in their vehicles, and medical staff in protective gear come to administer the swab test and the swabs are sent to a laboratory for testing.

e-ISUITE: a software program used to manage incident resources. The e-ISuite system is a web browser (e.g. Internet Explorer) enabled application for use at the Incident Command Post (ICP) and in agency offices to manage emergency incidents and planned events. No software licenses are required to use e-ISuite. A web browser is all each user will need to run the application. The e-ISuite Enterprise System is hosted on the USFS Fire and Aviation Management National Enterprise Support System (NESS) General Support System (GSS) at the National Information Technology Center (NITC), Kansas City, MO and will support all incidents at an enterprise level.

Endemic: the constant presence and/or usual prevalence of a disease or infectious agent in a population within a geographic area.

Epidemic: An increase, often sudden, in the number of cases of a disease above what is normally expected in that population in that area. Source: CDC

Essential activities: Tasks essential to health and safety, such as obtaining food, medicine, or seeing a doctor. The CDC provides further guidance on the following:
- Shopping for food and other household essentials
- Accepting deliveries and takeout orders
- Banking
- Getting gasoline
- Going to the doctor or getting medicine
- Essential businesses are defined differently within different states, refer to local guidelines for more information

Exposure: Contact with someone infected with the coronavirus responsible for COVID-19.

FirstNet: The First Responder Network Authority (also referred to as FirstNet) is the independent authority within the National Telecommunications and Information Administration (NTIA), established by Congress in 2012 to develop, build and operate a nationwide, broadband network dedicated to public safety. The purpose of FirstNet is to have an interoperable public safety network so first responders don't have to compete for bandwidth, including cellular bandwidth, with non-public safety users. In 2017, through a public-private partnership, AT&T was awarded a 25-year contract to deploy and operate the FirstNet network including use of 20 MHz of federally owned spectrum. Since 2017, Verizon has launched a private core of their own dedicated network for public safety and first responders, not directly connected with the NTIA FirstNet Authority or the federally owned spectrum. For more information refer to https://firstnet.gov/.

Flattening the curve: Slowing a virus' spread to reduce the peak number of cases and related demands on hospitals and infrastructure (Source: CDC).

General purpose face mask: A loose-fitting, device that creates a physical barrier between the mouth and nose of the wearer and potential contaminants in the immediate environment. Face masks do not seal tightly to the wearer's face, do not require fit testing, but do not provide the wearer with a reliable level of protection from inhaling smaller airborne particles (not suitable for close contact with a known or suspected COVID-19 infection).

Home isolation: Persons with COVID-19 who have symptoms or laboratory-confirmed COVID-19 who have been directed to stay at home until they are recovered.(Source: https://www.cdc.gov/coronavirus/2019-ncov/hcp/disposition-in-home-patients.html)

Incident Within an Incident (IWI): any accident, injury, or medical emergency during an incident directly affecting Incident Management Team personnel and assigned resources. An IWI may also be a situation involving civilians not associated with the incident but occur in or near the wildland fire or all-hazard event that responding or assigned agency personnel assist with. Protocols for IWI should be predetermined and understood by all incident managers.

Incubation period: The length of time between when an infection begins and when there are apparent signs of the disease. Most indications give the coronavirus an incubation period of 2-14 days with symptoms most commonly showing at about 5 days after infection (World Health Organization).

Isolation: Separating sick people with a contagious disease from those who are not sick. Source: CDC.

Mitigation: Slowing the spread - taking measures to cause the rate of increase of the number of cases to be slowed to low levels.

"Module as One": the consideration of a module of firefighters as a single individual for purposes of potential COVID-19 exposure and transmission. Modules may range from 2-10 individual firefighters. A "Module as One" rides together in the same vehicle and consequently cannot practice social distancing during vehicle transport. A "Module as One" works together in relatively close proximity while conducting fire assignment duties. Fire managers, IMTs and fireline supervisors should consider all module members exposed if one of the module members has been exposed. During a mobilization (i.e., departure from until return to home unit) a module must remain intact (i.e., no replacements to or from the module).

N95 respirator (face mask): 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 properly fitted, the filtration capabilities of N95 respirators exceed those of face masks. At this time, the Centers for Disease Control and Prevention (CDC) does not recommend that the general public wear N95 respirators to protect themselves from respiratory diseases, including coronavirus (COVID-19). Those are critical supplies that must continue to be reserved for health care workers and other medical first responders, as recommended by current CDC guidance. N95s may be used for other workers to provide protection from other hazards if deemed necessary. Note all workers who wear respirators to protect themselves from workplace hazards must comply with the OSHA respirator standard.

Outbreak: carries the same definition of epidemic but is often used for a more limited geographic area.

PACE: primary, alternate, contingency and emergency plan.

Pandemic: An epidemic that has spread over several countries/continents, usually affecting a large number of people. Source: CDC

Physical distancing: also called social distancing - measures taken to keep physical space between one or more individuals outside of homes, businesses, and other buildings with a goal to stop or slow the spread of a contagious disease. Measures can include:

- not gathering in groups and staying out of crowded places and avoiding mass gatherings.
- working from home.
- closing offices and schools.
- canceling events.
- avoiding public transportation.
- keeping at least 6 feet (2 meters) between individuals.

Positive COVID-19 infection: positive determination of COVID-19 infection from a laboratory test. Also referred to as a Confirmed COVID-19 infection.

Positive screening: Defined in this plan as a person with indications of illness based on Wildland Fire COVID-19 Screening procedures (Appendix C).

Public health orders: legally enforceable directives issued under the authority of a relevant federal, state, or local entity that, when applied to a person or group, may place restrictions on the activities undertaken by that person or group, potentially including movement restrictions or a requirement for monitoring by a public health authority, for the purposes of protecting the public's health. Federal, state, or local public health orders may be issued to enforce isolation, quarantine or conditional release. COVID-19 meets the definition for "severe acute respiratory syndromes" as set forth in Executive Order 13295, as amended by Executive Order 13375 and 13674, and, therefore, is a federally quarantinable communicable disease.

Quarantine: in contrast to isolation, quarantine applies to people who have been exposed and may become infected but are not yet infected. In these cases, the people exposed (or potentially exposed) are separated and have restricted movement imposed. Source: CDC

SARS-CoV-2: The name of the novel coronavirus that causes COVID-19 disease. Source: World Health Organization WHO

Self-monitoring: people monitoring themselves for fever by taking their temperatures twice a day and remain alert for cough or difficulty breathing. If they feel feverish or develop measured fever, cough, or difficulty breathing during the self-monitoring period, they should self-isolate, limit contact with others, and seek advice by telephone from a healthcare provider or their local health department to determine whether medical evaluation is needed.

Self-observation: refers to people remaining alert for subjective fever, cough, or difficulty breathing. If they feel feverish or develop cough or difficulty breathing during the self-observation period, they should take their temperature, self-isolate, limit contact with others, and seek advice by telephone from a healthcare provider or their local health department to determine whether medical evaluation is needed.

Self-quarantine: Staying home and away from other people as much as possible after exposure through voluntary separation.

Shelter in place: All residents must remain at their place of residence, except to conduct essential activities, essential businesses, and essential government functions.

Social distancing: also called physical distancing - measures taken to keep physical space between one or more individuals outside of homes, businesses, and other buildings with a goal to stop or slow the spread of a contagious disease. Measures can include:

- not gathering in groups and staying out of crowded places and avoiding mass gatherings.
- working from home.
- closing offices and schools.
- canceling events.
- avoiding public transportation.
- Staying at least 6 feet (2 meters) from other people.

Spike Camp: a secondary or temporary camp away from the main camp, that can be indoors or outdoors.

Suppression: Where the rate of increase in the number of cases has been slowed to low levels and is maintained for a period of time, potentially up to 18 months.

Symptom: A sign or indication that someone has a disease.

Symptomatic: Showing signs of the disease like fever, cough, and shortness of breath.

UAS: an unmanned aircraft system; consists of an unmanned aircraft, its mission payloads, launch and recovery equipment, ground control station, and control and data links**.**

Vaccine: a biological preparation that provides active acquired immunity to a particular disease.

9   REFERENCES, RESOURCES, WEBSITES

During the emergence of the COVID-19 pandemic, the sharing of related information was prolific; and since that time, information of all types has continued to emerge and will continue to emerge far after completion of the first version of this WFRP. An abundance of reference material with useful information was available during the development of the WFRPs, and new information and reference materials are continually being produced and shared.

Numerous references, resources, and official websites have been the principal sources of information used in the development of this and other GA plans. Due to the substantial amount of material that was reviewed, the information has been electronically stored in an online repository within the FireNet system rather than citing all materials in this WFRP and lengthening this document needlessly.

The online WFRP COVID-19 repository within FireNet consists of a master list of all references, resources, and websites – all cataloged and organized by subject matter in an Excel workbook. The workbook has several color-coded tabs, and each of those tabs are specific to a topic of information: *Aviation; Cache; Dispatch; Fire Response; Information; Liaisons; Logistics; Medical Response; Plans; Quarantine; Transportation; Virtual Ops;* and *Other.*

The first two yellow tabs in the workbook, *"By Document Name"* and *"Web_References,"* are the indexed list of all documents or website references contained in the repository, organized alphabetically.

It is recommended that users of the cataloged repository review the information in the **READ_ME** tab of the workbook. This will assist users in efficiently locating the information of most interest.

This repository, located within FireNet, is public-facing and will be retained for as long as wildland fire response is impacted by the COVID-19 pandemic.

To visit the WFRP *"COVID-19 References_Resources_Websites"* repository within FireNet please click the link below; depending on your browser, you may have to copy/paste the entire URL into your browser address bar:

COVID-19 References_Resources_Websites

Or, copy and paste the following URL into your browser address bar:
https://firenet365.sharepoint.com/:x:/s/2020_COVID-19_GeographicArea_WRP168/EfygkzSDAHJOmTGw7eh2wxkB-_VTb-4H0PD7TkjVX20fLA?e=481kAa

APPENDICES

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Appendix A – All Fire Personnel Best Practices

General Information

➢ Follow the most current direction from the Centers for Disease Control and Prevention and local health authority, which currently includes the following: some personnel (e.g., emergency first responders) fill essential (critical) infrastructure roles within communities. Based on the needs of individual jurisdictions, and at the discretion of state or local health authorities, these personnel may be permitted to continue work following potential exposure to COVID-19 (either travel-associated or from close contact to a confirmed case), provided they remain asymptomatic. Personnel who are permitted to work following an exposure should self-monitor under the supervision of their employer's occupational health program including taking their temperature before each work shift to ensure they remain afebrile. On days these individuals are scheduled to work, the employer's occupational health program could consider measuring temperature and assessing symptoms prior to their starting work.

➢ Ryan White HIV/AIDS Treatment Extensions Act (2009) has been expanded to include COVID-19. The Act (Part G) provides emergency response employees (EREs) with notification (normally a violation of the Health Insurance Portability and Accountability Act (HIPAA) regulations) when they are at risk of exposure to potentially life-threatening infectious diseases through contact with victims during emergencies. This information allows EREs the opportunity to seek timely medical care and to make informed decisions about addressing potential health issues arising from their exposures. Health/medical personnel may be unaware of this provision and reluctant to provide information due to HIPAA regulations.

➢ We now know from recent studies that a significant portion of individuals with coronavirus lack symptoms ("asymptomatic") and that even those who eventually develop symptoms ("pre-symptomatic") can transmit the virus to others before showing symptoms. CDC recommends wearing cloth face coverings in public settings where other social distancing measures are difficult to maintain (e.g., grocery stores and pharmacies), especially in areas of significant community-based transmission.

Best Practices

➢ Social/Physical distancing
  - Avoid physical contact with co-workers and the public; maintain a 6' spacing.
  - Consider appropriate mitigation measures or PPE (plastic shields, face masks) for personnel that have greater potential for close contact with incoming responders.
  - Assign vehicles to firefighters and avoid cross-over of employees and belongings.
  - Discourage shared use of phones, radios, office supplies and pens, or other work tools and equipment.
  - Conduct group meetings virtually with available video- and tele-conferencing and file sharing applications or limit groups to numbers in compliance with local and/or statewide health authority direction.
  - Limit access to facilities for all non-fire personnel.
  - Require personnel to keep a log of close contacts and submit to supervisors daily. Close contact is defined as being within approximately 6 feet of an individual for a prolonged period or having direct contact with potentially infections secretions from an individual (e.g., being coughed or sneezed on.)

- Wear a face mask, bandana, or other suitable cloth covering when social distancing is compromised (e.g., in vehicles, briefings, etc.).

➢ Face coverings
- As of April 3, 2020, CDC has updated its recommendation on the use of cloth [face coverings](#) to help slow the spread of COVID-19.
- Voluntary use of cloth face coverings is now recommended for use in public settings where other social distancing measures are difficult to maintain, especially in areas of significant community-based transmission.
- Face coverings should be maintained in a sanitary manner (i.e., laundered without damage or change to shape) and should not be distracting or offensive to others.
- Face coverings should fit snugly but comfortably against the side of the face; be secured with ties or ear loops, include multiple layers of fabric; allow for breathing without restriction; and be able to be laundered and machine dried without damage or change to shape.

➢ Personal hygiene
- Wash hands frequently for at least 20 seconds, with soap, after coughing or sneezing, when hands are visibly dirty, or after touching common surfaces (doorknobs, desktops, etc.).
- Provide handwashing stations near frequently entered facilities.
- Use hand sanitizer when getting in and out of vehicles and after fueling.
- Consider the number of dedicated wash stations and/or portable restrooms needed to support, each bullet above.
- Do not touch eyes, nose, or mouth with gloved or unwashed hands.
- Cover nose and mouth (e.g., use crook of the elbow) when coughing or sneezing. If using a tissue, immediately dispose of tissue and wash or sanitize hands.

➢ PPE laundry – regular basis
- Ensure clothing/PPE is kept clean and replaced when suspected contamination occurs.
- On assignment, change PPE as often as practical (dependent on availability, laundry service, etc.).
- Wipe down all non-laundered apparel (shoes, wristwatches, jewelry, etc.), with disinfectant.

➢ Workplace/equipment cleaning procedures
- Develop routine daily cleaning procedures for places of work and rest, vehicles, and other equipment. Consult CDC guidance for everyday [cleaning/disinfection](#).
- Use disinfectants on the list of [EPA approved cleaning supplies for COVID-19 prevention.](#)
- Follow label instructions and use PPE (e.g., gloves, eye protection) appropriate for the disinfectant being used.
- Designate a trained employee to oversee daily cleaning procedures.
- Ventilate vehicles during and after transport.
- Disinfect all "high-touch" surfaces in rooms and on equipment. In vehicles, these may include keys, door handles, steering wheel, gear shifter, radio and temperature controls, seatbelts, window controls, seats, and dashboard.
- If surfaces are noticeably dirty, clean soiled surfaces with detergent or soap and water before disinfecting them.
- Follow CDC and local protocols to mitigate contact with bodily fluids, including the cleaning or disposal of PPE and equipment.

- Use disposable paper towels with appropriate cleaning solutions, or wipes, for cleaning; towels/wipes – not sprays – are recommended to avoid aerosolizing germs on contact.
- Thoroughly wet surfaces with cleaning solution and air dry; do not actively dry surfaces.
- Wash hands thoroughly after cleaning equipment, surfaces, etc.

➢ Travel/transportation
- Minimize contact with non-fire personnel and time in public areas while travelling.
- When using public transportation such as commercial aviation, use proper PPE to minimize exposure.
- Follow guidelines for cleaning/disinfecting surfaces when staying in motels/hotels.
- Stay in your hotel room to the extent possible and wipe down high touch areas.
- Consider eating in your hotel room, utilizing take out or delivery. Maintain social distancing when eating while on the road.
- Follow guidelines for cleaning/disinfecting vehicles.
- Disinfect nozzles and keypads before fueling vehicles.
- Consider use of rental RVs that can also be used for office space.
- Have a three-day supply of water and MREs for each person if driving.
- Maintain a manifest if travelling with others.
- Expect fewer restroom facilities as you travel to an incident. Some states have closed visitor centers while others remain open. Many food service businesses are now drive thru only. Most vehicle service stations are open.
- When using public facilities, be reminded that there is nothing to indicate the health of those there before you.

➢ Work under the "Module as One" concept
- Minimize exposure by not mixing personnel, (e.g., same personnel assigned together for the entire season, on same schedule, to same vehicle, on same assignments, in same cam).
- Use the Module as One concept when assigning vehicles to firefighters and during transit to and from incidents.

➢ Other steps to reduce personal risk
- Eat smaller, more frequent meals that include fruits and vegetables to maintain blood sugar and support the immune system.
- Consume appropriate calories to support activity levels and regular body function.
- Stay hydrated; drink water at regular intervals throughout the day.
- Avoid stimulants near bedtime.
- Provide a sleep environment that promotes sleep quality (i.e., comfort, cool temperatures, and low noise).

➢ Symptom monitoring/COVID-19 screening
- **Emergency warning signs** for COVID-19 include trouble breathing, persistent pain or pressure in the chest, confusion, and/or bluish lips or face. If these or other symptoms that are severe or concerning present, **get medical attention immediately**. If possible, put on a cloth face covering before medical help is administered.
- General symptoms include fever (100.4° F or greater), cough, and/or shortness of breath, but may also include fatigue, chills, aches, sore throat, loss of taste and/or smell, or otherwise unexplained gastrointestinal issues.

- Monitor the temperature of all personnel and watch for symptoms (fever is the most commonly presented). Ensure touchless infrared thermometers are available for use.
- As a follow-up to showing symptoms, assess qualitative exposure to wildfire smoke, duration and relative (H/M/L) smoke level. Continue follow-up for cases resulting in hospitalization.
- Implement the *Wildland Fire COVID-19 Screening Tool* (Appendix C) when entering on duty at the home unit or arrival at the incident.
- If screening yields a positive result (positive screening), those Individuals should be removed from work and tested as soon as possible. If testing shows positive, those individuals should be released from the assignment until they met the return to work criteria as described by CDC. Refer to following sections on Testing and Positive Infection for further details.
- Individuals who test negative were probably not infected at the time the sample was collected and can return to work, although a negative test result does not rule out getting sick at a later date.
- If an individual who is part of an established module screens positive, the entire module should be tested as soon as possible. The same process for removal or return to work applies for the module for negative or positive results.
- Prior to release and return to home, positive screenings should be isolated in a separate location. This may require separate, dedicated and staffed areas/facilities to ensure that individuals with potential COVID-19 infection do not comingle with other fire personnel.
- Next steps, including testing, should be coordinated with unit leadership, the medical unit and/or local health authority.
- Use appropriate PPE and social distancing protocols when entering the environment or in the presence of symptomatic personnel or positive screenings.
- The NFES 1660 – *Individual Infectious Barrier Kit* or NFES 1675 – *Multi-Person Infectious Disease Barrier Kit* (as needed) should be used by workers engaged in screening, workers helping to manage sick and/or asymptomatic personnel with recent COVID-19 interaction, and workers helping to sanitize infected areas, or any areas suspected of infection. Training and/or education for workers on donning, doffing, and disposal of such PPE is recommended.
- Develop a contact plan that includes a medical evaluation (e.g., COVID-19 testing) for symptomatic/positive-screening off-duty personnel.
- Provide any quarantined individual with a home thermometer, check in daily by phone to monitor symptoms, help with any logistical needs such as groceries, and give encouragement.
- Monitor employees for symptoms for a 14-day period following a suspected COVID-19 contact or exposure. Follow up with suspected exposure source. Have individuals tested and, if negative, allow personnel that had close contact to return to duty.

➢ Testing
- Use approved and recommended testing procedures and guidelines.
- If testing is available, ensure personnel are tested as soon as symptoms appear.

➢ Positive infection (test result)
- Isolate and evacuate to a pre-determined site or hospitalize (as conditions warrant).
- Require appropriate PPE for all interaction with infected individuals. Except in the case of specially trained medical/decontamination personnel, employee contact with known infection should be limited to only absolutely necessary instances.
- Transport of infected individuals should be via qualified EMS personnel or fire personnel in full PPE recommended for protection from COVID-19 by federal, state, and local health authorities.
- Notify immediate supervisor of the situation.

29

- Review contact log and follow-up appropriately (i.e., contact tracing).
- Review wildfire smoke exposure leading up to symptoms.
- Follow local agency and cooperator guidelines for notification procedures.
- Consider using a text alert system to notify personnel who have had possible contact with an infected person.
- Decontaminate equipment, including vehicles, used by infected individuals. Recognize that proper PPE use for COVID-19 decontamination requires training by an experienced instructor.
- Options for contaminated facilities include (1) time: close affected facility for 7 days to allow any virus to attenuate naturally, (2) use of a qualified contractor to clean facility, (3) use of a pre-identified, specially trained team of local agency personnel to decontaminate facility.

➢ Recovery
- Follow CDC, local health authority, or attending physician guidelines for recovery.
- Maintain regular phone contact with recovering individuals.
- Return to service following recovery, but do not assume a recovered individual is immune to the virus.
- Returning-to-service employees will continue to follow all guidelines.

➢ Contingency planning
- Determine and monitor the availability of COVID-19 testing kits.
- Determine and communicate state and local guidelines for testing personnel.
- Determine and acquire a supply of approved products for use in decontamination/sanitation of equipment. CDC

Appendix B – Best Management Practices - Outline

1. Coordinating Group
    a. Mobilization Operations (GACC/ Dispatch)
    b. Cache Operations
    c. Local Government, Contractor, International, Military Support
2. Module Level
    a. All Fixed-Wing Operation (SMKJ, Air Attack, LP, AT)
    b. All Rotor-Wing Operation (Helicopter)
    c. Airbase/Helibase Operation (SMKJ Base, Air Attack Base, Reload Base)
    d. Rolling Stock Operations (Engine, WT, Heavy Equip, Prev/Patrol)
    e. Crew Operations (IHC, T1, T2IA, T2, Fire Module)
3. Initial Attack
4. Extended Attack/Complex Incident
    a. Operations Function
    b. Logistics Function
        1. Ground Support
        2. Supply
        3. Security
        4. Medical
        5. Communications
        6. Food
        7. Facilities
    c. Plans Function
    d. Finance Function
    e. Incident Information Function
    f. Safety Function
    g. Liaison Function
    h. Incident Commander
5. Management Practices
    a. Agency Administrator
    b. Fire Management Officer

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Mobilization Operations

(GACC/Dispatch)

Pre-planning and preparation are very important for identifying and responding to infectious diseases during wildfire response activities. The Center Managers need to consider how best to decrease the spread of illness and lower the impact of an outbreak during a wildfire response. Identify infectious disease outbreak plans as part of the COOP and clearly identify and communicate objectives. As the COVID-19 Pandemic continues, GACC, Dispatch Center Managers, and support personnel will be challenged to remain healthy and viable to continue the fire suppression mission.

Prevention

- Follow guidance included in the All Fire Personnel Best Practices (Appendix A).
- Know where to find local information on COVID-19 and local trends of COVID-19 cases.
- Know and understand the signs and symptoms of COVID-19 and what to do if any staff becomes symptomatic at the worksite.

Incident Response

- Encourage staff to telework (VoIP for example) if possible, particularly individuals at increased risk.
- Utilize virtual conferencing such as Zoom, texting, or radio.
- Stress the importance of frequently disinfecting commonly touched things, doorknobs, light switches, telephone receivers, etc.
- Have a pool of backup dispatchers/support personnel in case an employee or a family member gets sick and they have to stay home. This may be hard to do.
- Utilize a pre-mobilization checklist.
- Provide COVID-19 exposure prevention guidance to resources being mobilized.
- Mobilize only required resources in smaller numbers (Squads in place of 20 person crews).
- Plan transportation guidance for mobilizing resources to and from an incident.
- Consider mobilizing an Interagency Resource Representative that is trained and experienced in exposure response and transportation requirements.

Exposure Response

- Follow the most current direction from the Centers for Disease Control and Prevention and local health authorities. https://www.cdc.gov/coronavirus
- Implement team or local unit exposure response plan.

Updated: 4/17/20 BH

Back to Appendix B Outline

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Cache Operations

This document is intended as a tool for extended attack/complex wildland fire response for the cache system when preparing to support incidents during the ongoing COVID-19 pandemic. The following guidelines were developed based on the best advice in March 2020. As the situation develops and more information becomes available, these guidelines should be updated.

Prevention

- Follow guidance included in the All Fire Personnel Best Practices (Appendix A).
- Follow CDC recommendations on personal hygiene and self-care. Perform daily "COVID-19 Screening Tool" (Appendix C).
- Develop daily pre-entry screening.
- Work virtually as practical.
- Utilize CDC guidance for cleaning within the facility and equipment each day.
  https://www.cdc.gov/coronavirus/2019-ncov/infection-control/control-recommendations.html
- Plan to have ample COVID-19 PPE on hand to use for an extended period. Refer to CDC link for recommendations.
- Develop an incident within an incident (IWI) plan for exposure possibility.
- Arrange for decontamination of returned goods separate from the main cache.
- Develop a flow chart for surface decontamination time frames and establish categories of goods and decontamination procedures
- Consider the viability of scheduling overlapping or non-traditional shifts to keep incident support going but reducing the number of personnel on-shift at the same time.
- Consider ordering heavily for anticipated activity early. Some items already in the pipeline include MRE's, NFES 1660, NFES 1675 individual and multi-person Biological Hazard Protection Kits, etc.

Incident Response

- Incorporate Cache Risk Assessment group recommendations as they are developed.
- Develop method (hiring process) for replacement of affected personnel.
- Consider all returned cache items as being exposed to COVID-19. Prepare for enhanced decontamination standards and PPE. This may include alternative facilities to accommodate additional space needs.
- Adjust minimum stocking/reorder trigger points to accommodate for backorder and longer lead times for delivery of critical items.
- Review Infectious Disease Guidance for Wildland Fire Incidents, NWCG Emergency Medical Committee. It contains further references and advice.
- Be aware that an SME group under the NWCG Emergency Medical Committee is working on further, specific guidelines on wildland fire and cache system practices.
- For outside deliveries, consider a supply and delivery protocol to reduce handling and face-to-face interaction.
- Ensure drivers and materials handlers implement CDC recommended sanitizing practices for vehicles and equipment.
- Define additional sanitary areas that may be needed to accommodate personnel cleanliness.
- Determine capabilities of stocking non-traditional items.
- Determine what state and local restrictions/closures may have on delivery items.

Exposure Response

- Follow the most current direction from the Centers for Disease Control and Prevention and local health authorities. https://www.cdc.gov/coronavirus
- Implement team or local unit exposure response plan and practice regularly.
- Develop incident support contingency plan if supporting cache facility must be temporarily closed and quarantined for confirmed COVID-19 cases.
- Implement incident within an incident plan (IWI) for known exposure and track to conclusion.

Updated: (4/10/2020)

Back to Appendix B Outline

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Cooperator Response

(Local Government/Contractor/International Support/Military Support)

COVID-19 adds a significant layer of complexity that directly impacts all cooperators' ability to respond to wildfires. Impacts include, but are not limited to travel restrictions between states, canceled gatherings for training and strategic planning meetings, fewer personnel available to respond due to illness or quarantine, lack of fuels management activities due to burn bans and shelter in place orders, and other factors. These factors require fire managers and programs at all levels to consider innovative ways to protect the public from wildland fires while also protecting their firefighters from being exposed to, or inadvertently spreading COVID-19. Suggested best practices for more tactical aspects of wildfire response are available in the other appendices. While by no means comprehensive, this document is intended to be used as a tool to support wildland fire response during the ongoing COVID-19 Pandemic. As the situation evolves and more information becomes available, these guidelines should be periodically updated.

A unique feature of the Northwest Geographic Area is the presence of the private wildland fire service (made up of contract fire suppression companies). This service provides a variety of wildland fire resources that can be utilized during all phases of fire suppression activities. In the Northwest, these resources are significant in numbers e.g. 248 20-person crews. Wildland firefighters and company representatives from the private wildland fire service must be informed of the best management practices in Appendix A and appropriate portions of Appendix B.

Prevention

Best practices to prevent exposure for personnel:
- Follow guidance included in the All Fire Personnel Best Practices (Appendix A).
- Using CDC and state health authorities guidelines, develop and utilize COVID-19 avoidance procedures for staff and resources.
- Consider utilizing "COVID-19 Screening Tool" (Appendix C) or other CDC daily self-checks.
- Reduce exposure by conducting as much work (briefings/meetings/gatherings) as technology allows virtually or remotely.

Incident Response

Best practices planning for and during a wildfire response:
- Minimization of COVID-19 exposure risk to fire personnel and the public should be a priority during fire management decision making:
  - Consider wildfire smoke impacts to firefighters and the public in the context of COVID-19.
  - Consider a full spectrum of strategic response options ranging from allowing remote fires to burn based on values to be protected and higher priority wildland fires to rapid suppression during IA to limit fire sizes and numbers.
  - Consider increased use of aircraft and heavy equipment to keep fires small and minimize numbers of responding personnel.
  - Make efforts to ensure that all cooperators and contractors understand the respective jurisdictional agency's COVID-19 wildfire response protocols.

35

- State and federal agencies should consider sharing and/or streamlining procedures and protocols for ordering cooperating agency aircraft when aggressive response is warranted.
- Consider activating the NW MAC Group earlier due to resource shortage created by COVID-19 conditions and evaluate MAC support being performed through virtual/ remote means.
- The NW MAC group should consider COVID-19 conditions in determining Preparedness/Planning Levels and incident prioritization process.
- States should consider earlier activation of National Guard resources, including aircraft due to fire activity and resource shortages.
- Unique challenges with COVID-19 management may be associated to fires burning on the international border with Canada. Agencies with jurisdiction along that border should review response plans and agreements to establish specific direction.
- If commuting back and forth from home bases is essential, cooperators should continue to maintain COVID-19 mitigation measures.

Exposure Response

Best practices in the event of a presumptive exposure:
- Follow the most current direction from the Centers for Disease Control and Prevention and local health authorities. https://www.cdc.gov/coronavirus
- Implement team or local unit exposure response plan.

Updated: (4/17/2020)

Back to Appendix B Outline

All Fixed-Wing Aviation

This section is best practices for all agencies involved in aerial fire suppression.

Prevention

- Follow guidance included in the All Fire Personnel Best Practices (Appendix A).
- Utilize virtual briefings when able to minimize person to person contact and groups (e.g. Utilize a regional daily aviation briefing call for all initial attack aviation resources and bases).
- During periods of standby and extended standby, allow flight crews to isolate themselves in quarters and respond directly to aircraft with minimal person-to-person contact with public and base personnel.
- Program managers and contractors are encouraged to create schedules to minimize aircrew rotations including eliminating 7-day coverage and having flight crews take the same days off. Establish aircrew modules and restrict exposure to individuals outside your module.
- Airbase, flight crews, and/or contractors may implement a daily log or checklist for aircrew health status.
- Restrict access to each aircraft to essential personnel only.
- Ensure aircrews have access to correct cleaning supplies. Use of shared equipment should be minimized and cleaned before and after utilization.
- Consider multiple locations for aircraft placement to spread out resources and minimize large group gatherings of incident and aircrew personnel.
- IMTs and fire managers should consider reducing staffing numbers when approved and applicable such as: a) Request waiver for management of 4 SEATs via one SEMG or ATBM; b) Expect to utilize and provide pre-approvals for extension of personnel to 21 days.
- Evaluate allowing vendors to stage at their home base with an approved delayed response time.
- Pre and Post flight the pilot/flight crew and maintenance should follow FAA/CDC/GSA/OEM guidance to decontaminate the aircraft interior including handles, interior seating, seat harnesses and the cockpit.
- All personnel follow "COVID-19 Screening Tool" (Appendix C) or a personal health wellness checklist prior to incident response.
- Consider twice-daily temperature checks until testing is available.
- Wear cloth face mask when social distancing cannot be met or when public setting cannot be avoided.
- Ensure aircrews have adequate stand by facilities.

Incident Response

- Aircraft Dispatch Forms to be delivered to all resources electronically instead of person-to-person. Utilize virtual briefings and debriefings when applicable.
- Allow flight crews, dispatch centers, and base personnel to assess locations for adequate lodging and meals prior to changing locations of aircrews to recover overnight.
- Utilize NW COVID dashboards for risk based and incident response decisions.
- Flight crews may recover overnight to the same location to minimize exposure. Return aircrews to assigned base at end of shift daily.
- Minimize transporting non-essential personnel.

- Clean each aircraft between flights in accordance with FAA/CDC/GSA/OEM guidance and direction.
- Ensure communications and network capabilities are adequate for increased need. Leverage FirstNet offerings. Contact local providers in advance to ensure availability.
- Identify facility and aircraft parking in advance of receiving. Consider utilizing multiple bases even if other bases are farther from the incident to mitigate large crowds.

Exposure Response

- Due to the dynamic situation of the COVID-19 pandemic, airbase operations at times may not meet policy requirements. In these cases, prior to the deviation, it will be reported to supervisors who in conjunction with aviation managers will analyze the risk and determine if the operation should continue.
- Airbases may be unstaffed or closed due to COVID-19 activity.
- Isolate aircraft and personnel away from active operations and other personnel.
- If aircraft flight crew or a passenger show symptoms of COVID-19, place aircraft out of service until properly decontaminated per FAA/CDC/GSA/OEM guidance as applicable.
- Implement team or local unit exposure response plan. Consider having a local BPA for decontamination services. Contact maintenance inspector after proper decontamination of the aircraft. Contact the contracting officer/agency for further guidance.
- Follow the most current direction from the Centers for Disease Control and Prevention and local health authorities. https://www.cdc.gov/coronavirus

Updated: (4/10/2020)

Back to Appendix B Outline

Rotor-Wing Operations

This section is best practices for all agencies involved in aerial fire suppression.

Prevention

- Follow guidance included in the All Fire Personnel Best Practices (Appendix A).
- Utilize virtual briefings when able to minimize person to person contact and groups (e.g. utilize a regional daily aviation briefing call for all initial attack aviation resources and bases).
- During periods of standby and extended standby, allow flight crews to isolate themselves in quarters and respond directly to aircraft with minimal person-to-person contact with public and base personnel.
- Program managers and contractors are encouraged to create schedules to minimize aircrew rotations including eliminating 7-day coverage and having flight crews take the same days off. Establish aircrew modules and restrict exposure to individuals outside your module.
- Airbase, flight crews, and/or contractors may implement a daily log or checklist for aircrew health status.
- Restrict access to each aircraft to essential personnel.
- Consider multiple locations for aircraft placement in an effort to spread out resources and minimize large group gatherings of incident and aircrew personnel.
- IMTs and fire managers should consider reducing staffing numbers when approved and applicable such as:
- Request 2 for 1 helicopter management (restricted/limited) helicopters.
- Expect to utilize and provide pre-approvals for extension of personnel to 21 days.
- Evaluate allowing vendors to stage at their home base with an approved delayed response time.
- Pre and post flight, pilot/flight crew and maintenance should follow FAA/CDC/GSA/OEM guidance to decontaminate the aircraft interior including handles, interior seating, seat harnesses and the cockpit.
- All personnel follow "COVID-19 Screening Tool" (Appendix C) or personal health wellness checklist prior to incident response.
- Ensure aircrews have adequate stand by facilities.

Incident Response

- Aircraft Dispatch Forms to be delivered to all resources electronically instead of person-to-person.
- Allow flight crews, dispatch centers, and base personnel to assess locations for adequate lodging and meals prior to changing locations of aircrews to recover overnight.
- Flight crews may recover overnight to the same location to minimize exposure.
- Minimize transporting non-essential personnel.
- Clean each aircraft between flights in accordance with FAA direction.
- Pilot and mechanic should decontaminate interior and exterior of the aircraft between missions per GSA/OEM guidance.

Exposure Response

- Due to the dynamic situation of the COVID-19 pandemic, air-base operations at times may not meet policy requirements. In these cases, prior to the deviation, it will be reported to supervisors who in conjunction with aviation managers will analyze the risk and determine if the operation should continue.
- Airbases may be unstaffed or closed due to COVID-19 activity.
- Isolate aircraft and personnel away from active operations and other personnel.
- If aircraft flight crew or a passenger show symptoms of COVID-19, place aircraft out of service until properly decontaminated per FAA/CDC/GSA/OEM guidance as applicable.
- Implement team or local unit exposure response plan. Consider having a local BPA for decontamination services. Contact maintenance inspector after properly decontamination of the aircraft. Contact the contracting officer/agency for further guidance.
- Follow the most current direction from the Centers for Disease Control and Prevention and local health authorities. https://www.cdc.gov/coronavirus

Updated: (4/10/2020)

Back to Appendix B Outline

All Airbase/Helibase Operations

This section is best practices for all airbase/helibase involved in aerial fire suppression.

Prevention

- Follow guidance included in the All Fire Personnel Best Practices (Appendix A).
- Utilize virtual briefings when able to minimize person to person contact and groups (e.g. Utilize a regional daily aviation briefing call for all initial attack aviation resources and bases).
- Staff base with minimal personnel for appropriate time frames during standby periods allowing base personnel to work and respond from quarters.
- Airbase, flight crews, and/or contractors may implement a daily log or checklist for aircrew health status.
- Restrict access to each aircraft to essential personnel.
- Use of shared equipment should be minimized and cleaned before and after utilization.
- Consider multiple locations for aircraft placement in an effort to spread out resources and minimize large group gatherings of incident and aircrew personnel.
- IMTs and fire managers should consider reducing staffing numbers when approved and applicable such as:
  - Requesting 2 for 1 helicopter management (restricted / limited) helicopters.
  - Request waiver for management of 4 SEATs via one SEMG or ATBM.
  - Expect to utilize and provide pre-approvals for extension of personnel to 21 days.
- Evaluate allowing vendors to stage at their home base with an approved delayed response time.
- Follow FAA/CDC/GSA/OEM disinfection guidance after each flight or after maintenance work.
- Pre and Post flight the pilot/flight crew and maintenance should follow FAA/CDC/GSA/OEM guidance to decontaminate the aircraft interior including handles, interior seating, seat harnesses and the cockpit.
- All personnel follow "COVID-19 Screening Tool" (Appendix C) or a personal health wellness checklist prior to incident response.
- Ensure aircrews have adequate stand by facilities.

Incident Response

- Aircraft Dispatch Forms to be delivered to all resources electronically instead of person-to-person.
- Allow flight crews, dispatch centers, and base personnel to assess locations for adequate lodging and meals prior to changing locations of aircrews to recover overnight.
- Utilize NW COVID dashboards for risk based and incident response decisions.
- Minimize transporting non-essential personnel.
- Clean each aircraft between flights in accordance with FAA/CDC/GSA/OEM guidance and direction.
- Ensure communications and network capabilities are adequate for increased need. Leverage FirstNet offerings. Contact local providers in advance to ensure availability.
  - Identify facility and aircraft parking in advance of receiving. Consider utilizing multiple bases even if other bases are farther from the incident to mitigate large crowds.
  - Flight crews may recover overnight to the same location to minimize exposure.
  - Base personnel and flight crews should become familiar with FBO's COVID-19 Plan.

Exposure Response

- Due to the dynamic situation of COVID-19 pandemic, air-base operations at times may not meet policy requirements. In these cases, prior to the deviation, it will be reported to supervisors who in conjunction with aviation managers will analyze the risk and determine if the operation should continue.
- Airbases may be unstaffed or closed due to COVID-19 activity.
- If aircraft flight crew or a passenger show symptoms of COVID-19, place aircraft out of service until properly decontaminated per GSA/OEM guidance.
- Return aircraft to contract availability by the appropriate maintenance inspector.
- Consider having a BPA for decontamination services.
- Follow the most current direction from the Centers for Disease Control and Prevention and local health authorities. https://www.cdc.gov/coronavirus
- Implement team or local unit exposure response plan.

Updated: (4/10/2020)

Back to Appendix B Outline

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Rolling Stock Operations

(Engine, Water Tender, Heavy Equipment, Prevention/Patrol)

Expect change in how business is conducted. Strategic thinking and tactical planning in conjunction with how information is shared across the landscape will take on new looks. Patience will be a virtue as time frames and methods take on new dimensions. We are inclusive of all resources here including the private wildland fire service.

Prevention

- Follow guidance included in the All Fire Personnel Best Practices (Appendix A).
- Continue to monitor and follow the Centers for Disease Control and Prevention (CDC) recommendations and local health department or agency guidance and prescribed practices.
- Make sure vehicles and equipment are fully stocked with disinfecting wipes, hand sanitizers, and soap. (secure cleaning agents and have protocols in place for vehicle sanitation/cleaning).
- To maintain the health and reduce risks of exposure, maintain crew modules and or operators as individual units.
- Stress off duty responsibility in protecting themselves and their crew from exposure.
- Frequently (daily or after each use) sanitize all equipment and vehicles to reduce possible virus contamination. (establish sanitation/cleaning standards for vehicles and equipment).

Incident Response

- Weigh the risk of responding in multiple vehicles.
- Screen all personnel for symptoms of COVID-19 prior to mobilization. Use the Daily "COVID-19 Screening Tool" (Appendix C).
- Be self-sufficient for the duration of travel to and from incidents (food, hydration, lodging) to avoid general population exposure. Use protective measures at fueling stops, rest areas, and other necessary business areas.
- While in transit wear protective masks and set vehicle ventilation to outside air.
- Sanitize vehicles and equipment at the end of each operational period.
- During tactical operations maintain separation from other resources as much as possible. Avoid sharing tools, water, radios, etc.
- Rely on electronic communication in place of face to face with overhead and adjacent resources; establish positive communication with heavy equipment operators and overhead that maintains personal distancing.

Exposure Response

- Follow the most current direction from the Centers for Disease Control and Prevention and local health authorities. https://www.cdc.gov/coronavirus
- Implement team or local unit exposure response plan.

Back to Appendix B Outline   **Updated:** (4/10/2020)

Crew Operations

(IHC, T1, T2IA, T2, WFM, I.A.)

The need to maintain the health and safety of crew modules during any type of illness episode is critical to maintaining a viable incident response. The COVID-19 disease has exponentially increased this challenge. The following Best Management Practices provide some guidance to avoid exposure and contain possible infection. Some are practical common-sense measures, and some will challenge the usual crew cohesion activities.

Prevention

- Follow guidance included in the All Fire Personnel Best Practices (Appendix A).
- Continue to monitor and follow the Centers for Disease Control and Prevention (CDC) recommendations and local health department or agency guidance and prescribed practices.
- To maintain the health and reduce risks of exposure, maintain crew modules as an individual unit. Avoid backfilling or temporarily assign nonstandard personnel to the crew.
- Control access of non-crew personnel to facilities, vehicles and equipment.
- Reduce the number of people in vehicles (4 people in 6 passenger vehicles) to create separation. Consider wearing protective masks.
- Frequently (daily or after each use) sanitize all equipment and vehicles to reduce possible virus contamination.

Incident Response

- Screen all crew members for symptoms of COVID-19 prior to mobilization utilizing "COVID-19 Screening Tool" (Appendix C).
- Be self-sufficient for the duration of travel to and from incidents (food, hydration, lodging) to avoid general population exposure. Use protective measures at fueling stops, rest areas, and other necessary business areas.
- At incident, maintain appropriate personal distance; minimize personnel involved in check-in and at briefings. Utilize separation from other resources in sleeping areas, food service, supply, staging and other areas of typical congregation.
- During tactical operations maintain separation from other resources as much as possible. Maintain personal spacing within the crew. Avoid sharing tools, water, radios, etc. Rely on electronic communication in place of face to face with overhead and adjacent resources.
- Be cognizant of maintaining personal hygiene throughout the operational period. Allow time for washing and sanitation.
- Expect change in how business is conducted, and tactical plans and communications will be implemented. Time frames and methods will be different. Exercise patience and maintain vigilance of the health of crew members.

Exposure Response

- Follow the most current direction from the Centers for Disease Control and Prevention and local health authorities. https://www.cdc.gov/coronavirus
- Implement team or local unit exposure response plan.

Back to Appendix B Outline   **Updated:** (4/10/2020)

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Initial Attack Operations

This document is intended to be used as a tool for initial attack wildland fire response in the Northwest Area during the ongoing COVID-19 Pandemic. The following guidelines were developed based on the advice of health and safety authorities in March of 2020.

Prevention

- Follow guidance included in the All Fire Personnel Best Practices (Appendix A).
- Screen all personnel for symptoms of COVID-19 prior to mobilization. Utilize the Daily "COVID-19 Screening Tool" (Appendix C).
- Establish COVID-19 operating standards with mutual aid response resources.
- Make sure vehicles are fully stocked with disinfecting wipes, hand sanitizers and soap.
- Don't share PPE, flight helmets, radios, gloves, etc.
- While in transit wear protective masks and set vehicle ventilation to outside air.
- Maintain the same team (module) "Module as one" concept throughout the season.
- Continue to monitor and follow the Centers for Disease Control and Prevention (CDC) recommendations, local health department or agency guidance and prescribed practices.
- Stress off duty responsibility in protecting themselves and their crew from exposure.
- Include COVID-19 mitigation in briefings and safety messages.

Incident Response

- Weigh the risk of responding in multiple vehicles.
- IA briefing needs to maintain social distancing and be limited to key overhead personnel.
- Decentralize staging areas.
- Maintain high level of crew self-sufficiency (water, food, equipment etc.).
- Private Wildland Fire Services may be more readily available than agency resources.
- Consider use of heavy equipment/aircraft that may reduce the number of personnel needed.
- Sanitize vehicles and equipment at end of shift each day. (Have established protocols for cleaning and sanitizing).
- Limit mop-up and smoke exposure, emphasis on use of technology to get unit in monitor status.

Exposure Response

- Follow the most current direction from the Centers for Disease Control and Prevention and local health authorities. https://www.cdc.gov/coronavirus
- Implement team or local unit exposure response plan.

Updated: (4/10/2020)

Operations

COVID-19 will change how incident operations are conducted and will challenge communications in tactical operations and within incident management organizations. Expect less resource availability, longer response times, and delayed logistical support. While the safety and health of fire responders have always been paramount the risk management equation is becoming much more complex.

Prevention

- Each individual needs to follow guidance in the All Fire Personnel Best Practices (Appendix A) at station, home, and in off duty activities.
- Utilize virtual methods of communication (smartphone, radio, internet) as much as possible to avoid inadvertent physical contact during incident processes.

Incident Response

- Conduct daily "COVID-19 Screening Tool" (Appendix C) prior to mobilization and throughout incident assignment.
- Be prepared to be self-sufficient for the duration of travel to and from incidents (food, hydration, lodging) and initial periods of the incident.
- Establish Command and Control communication protocols utilizing methods consistent with COVID-19 mitigation measures.
- Use incident established procedures (electronic methods or personal distancing standards) to provide intelligence, conduct planning processes, briefings and other administrative business.
- Apply available reconnaissance technology (UAS, satellite, MMA) to reduce personnel numbers and close-quarters environments such as helicopter cabins.
- Develop and prioritize tactical missions based on Values at Risk and COVID-19 risk to responders.
- Utilize the fewest resources necessary to accomplish the mission and minimize exposure to disease spread.
- Maintain separation of suppression modules on the fire line and during off-shift periods. Consider staggering resource shifts to avoid congestion points.
- Factor in time for resources to accomplish COVID-19 mitigations during operational and off-shift periods when developing plans. Adjust shift length to provide more off duty rest.

Exposure Response

- Follow the most current direction from the Centers for Disease Control and Prevention and local health authorities. https://www.cdc.gov/coronavirus
- Implement team or local unit exposure response plan.

Back to Appendix B Outline   **Updated:** (4/10/2020)

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Ground Support

This document is intended to be used as a tool for extended attack / complex wildland fire response for the Ground Support Unit during the ongoing COVID-19 Pandemic. The following guidelines were developed based on the advice of health and safety authorities in March of 2020. As the situation develops and more information becomes available, these guidelines should be periodically updated.

Prevention

Best practices to prevent exposure:
- Follow guidance included in the All Fire Personnel Best Practices (Appendix A).
- Use proper PPE when handling materials, doing inspections, making repairs, etc.
- Restrict non-Unit access to work areas.
- When possible, use electronic methods to manage workflow such as inspections, repair, etc.

Incident Response

- Follow Travel guidelines while enroute (Appendix A).
- Conduct daily the "COVID-19 Screening Tool" (Appendix C) while maintaining proper social distancing.
- Set up work areas to provide social distancing while maintaining Unit continuity.
- Anticipate ordering additional resources such as rental vehicles, drivers, etc. to maintain social distancing guidelines.
- Order enough supplies to support extra cleaning/disinfecting.
- Establish procedures to minimize driver handling of supplies and backhaul.
- Clean/disinfect vehicles after each use, including returned rental vehicles prior to reassignment. Key high touch areas to clean/disinfect include the dashboard, instrument panel, steering column, wheel, accessory panel, center console, cup holders, compartments, seats, between console and seats, between doorjambs and seats, door and door pockets, interior/exterior door handles, rearview mirror and seat belt buckles. Refer to the NERV website for further information.
- Confirm that passengers being transported are free of possible symptoms. Avoid handling passenger personal items such as line gear, luggage, etc.

Exposure Response

- Follow the most current direction from the Centers for Disease Control and Prevention and local health authorities. https://www.cdc.gov/coronavirus
- Implement team or local unit exposure response plan.

Back to Appendix B Outline   **Updated:** (4/10/2020)

Supply Unit

This document is intended to be used as a tool for extended attack / complex wildland fire response for a Supply Unit during the ongoing COVID-19 Pandemic. As the situation develops new information will become available and should be considered. Assist with the development of team protocols for personnel who have been exposed to or affected with the COVID-19 virus.

Prevention

- Follow guidance included in the All Fire Personnel Best Practices (Appendix A) social distancing, personal hygiene, workplace cleaning, symptom monitoring, etc.
- Perform "COVID-19 Screening Tool" (Appendix C).
- Develop a Supply Unit IWI COVID-19 protocol for the Unit.
- Follow CDC GUIDELINES for cleaning all work surfaces, tools, vehicles, and equipment.
- Review direction from NWCG Emergency Medical Committee that has been developed for the wildland environment https://www.nwcg.gov/emergency-medical-committees/infectious-diseases-guidelines.
- Arrange for additional unit-dedicated sanitation facilities and support.
- Consider more area for issuing and returns to maintain social distancing practices.

Incident Response

Due to unknowns surrounding contamination of goods, there is a need for even closer communication with caches on receiving and returning items and direction on measures that may need to take place before returning items to the caches.

- Plan for enhanced PPE and distancing which will require additional space.
- Practice virtual workplace as practical. Limit contact with "customers".
- Develop a virtual ordering system that, if possible, carries through from the individual making the order to the Supply Unit Leader/Ordering Manager and back to the receipt by the individual placing the order.
- Anticipate longer delivery times, whether from the Cache or local purchase.
- Establish practical expectations with the Operations Section. Request they plan further ahead so the supply chain can accommodate them.
- Establish decontamination practices/sanitizing requirements for all cache items to be returned.
- If possible, consider placing Ordering Unit in a separate location.
- Quickly employ your situation awareness on your location, known medical supplies, feeding capability and/or methods and implications on the supply unit.
- If possible, consider placing Ordering in a separate location.

Exposure Response

- Follow the most current direction from the Centers for Disease Control and Prevention and local health authorities. https://www.cdc.gov/coronavirus
- Implement team or local unit exposure response plan.

Back to Appendix B Outline   **Updated:** (4/10/2020)

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Security Manager

This document is intended to be used as a tool for extended attack / complex wildland fire response for the Security function during the ongoing COVID-19 Pandemic. As the situation develops and more information becomes available, these guidelines may be periodically updated.

Prevention

- Follow guidance included in the All Fire Personnel Best Practices (Appendix A).
- Develop a Security "Incident within an Incident" prior to assignments.
- Determine if the ICP/ Base is to be in or near a security high-risk area.
- Establish daily/shift self-checks for all Security Unit staff. See "COVID-19 Screening Tool" (Appendix C).
- If possible, establish virtual section meetings and interview methods especially where there are remote locations involved.

Incident Response

- Restrict access to all Incident facilities.
- If check-in testing protocols are to be initiated work with MEDL and FACL to establish testing areas and procedures.
- Work with Ground Support and Facilities to establish a one-way traffic pattern.
- Consider needed adjustment to staffing based on multiple camps.
- Be prepared to manage security needs for a bigger footprint at the Incident Base
- Check with facilities for security needs for isolation/quarantine areas.
- Liaison with local law enforcement.

Exposure Response

- Follow the most current direction from the Centers for Disease Control and Prevention and local health authorities. https://www.cdc.gov/coronavirus
- Implement team or local unit exposure response plan.

Back to Appendix B Outline   **Updated: 4/10/20 BH**

Medical Unit

The following guidelines are developed based on the best advice in March 2020. Teams should expect different health department protocols as they accept assignments in various states and counties. As new information becomes available about COVID-19 these guidelines should be periodically updated. Team protocols should be developed with direction by agency and federal HIPAA requirements for those who have been exposed or have COVID-19. The areas of concern are protection of personnel from COVID-19, reducing the spread of the virus, and taking care of those who have been exposed or contracted the virus. The greatest threat will be personnel who have the virus but show no symptoms.

A suggestion has been made that the GACC form COVID-19 taskforces that could support IMT's, perhaps tapping into National Guard/Reserve units.

Assist with the development of team protocols for personnel who have been exposed or afflicted with the COVID-19 virus.

Prevention

- Follow guidance included in the All Fire Personnel Best Practices (Appendix A) social distancing, personal hygiene, workplace cleaning, symptom monitoring, etc.
- Review the references above for guidance during incident response as well as prevention and self-care. Do the "COVID-19 Screening Tool" (Appendix C).
- Some Medical Unit personnel should expect to be isolated from other team personnel and located at remote sites, separated from ICP/Base.
- Have contingency plans in place; Medical Unit Leaders and medical personnel are expected to be in high demand. Explore the use of non-traditional avenues to fill some medical positions. Those with wilderness first responder training may be a resource.
- Recognize local medical response resources and facilities may not be available for incident support. Have contingency plans in place, perhaps on the PACE model.
- Control access to ICP/Base Camp. Implement medical screening prior to entry.
- Consider a virtual work environment where feasible.
- The following body of reference material is available to review for response as well as prevention:
  - o Infectious Disease Guidance for Wildland Fire Incidents, Emergency Medical Committee which steps down from CDC for best management practices in the wildland fire environment- https://www.nwcg.gov/committees/emergency-medical-committee/infectious-disease-guidance
  - o Review the 2010 Infectious Disease Guidelines for Wildland Fire Incident Management Teams – This comes out of a specific event encountered on an incident. https://www.nwcg.gov/sites/default/files/committee/docs/iems-infectious-diseases-guidelines.pdf
  - o Review the Health and Human Services EMS Infectious Disease Playbook. https://www.ems.gov/pdf/ASPR-EMS-Infectious-Disease-Playbook-June-2017.pdf.
  - o Review supplemental direction forthcoming from the NWCG Emergency Medical Committee.

Incident Response

- Prepare enhanced PPE and equipment.
- The concept of a Medical Liaison could be explored to develop close working relationships with local health authorities and facilities. Inform them of the team arrival and numbers of individuals visiting their area of responsibility. Possibly consider alternative testing and treatment locations.
- Develop a Common Operating Picture of federal, state, county and local jurisdictions with response authorities, procedures and processes. This would include CDC recommendations and guidance down to local protocols, such as testing sites.
- Be aware the NWCG Emergency Medical Committee continues to work on specific guidance in the wildland environment.
- IMT's should be prepared to establish four camp medical stations with appropriate staffing:
  o Station utilized for the typical illness/injuries associated with suppression work.
  o Station for COVID-19 triage.
  o Isolation area for those previously in contact with COVID-19.
  o Quarantine site for those with COVID-19.
- Identify alternative methods other than face to face or physical contact.
- Consult with the Medical and Public Health Advisory Team established by the Fire Management Board as needed for guidance.

Exposure Response

- Follow the most current direction from the Centers for Disease Control and Prevention and local health authorities. https://www.cdc.gov/coronavirus
- Implement team or local unit exposure response plan.
- Consider known exposure, or response to exposure, or a positive test as an incident within an incident and monitor/track it to conclusion.
- Incident ambulances should comply with local health authority requirements and carry all necessary supplies to disinfect the ambulance and PPE necessary for COVID-19 transport.

Updated: (4/17/2020)

Back to Appendix B Outline

This Plan is maintained by the Pacific Northwest Coordinating Group

Communications/IT

This document is intended to be used as a tool for extended attack / complex wildland fire response for the Communications/IT Units during the ongoing COVID-19 Pandemic. The following guidelines were developed based on the advice of health and safety authorities in March of 2020. As the situation develops and more information becomes available, these guidelines should be periodically updated.

Prevention

- Follow guidance included in the All Fire Personnel Best Practices (Appendix A).
- Unit Leaders develop plans for effective use of communications and IT equipment. Consideration should be given whether some positions or tasks can be done virtually or off-site.
- Use established standards for receiving, cleaning, and returning radio kits, repeaters, IT Equipment, etc., using Cache and manufacturer's guidelines.
- Plan setup of equipment and work areas, and consider the use of over the air programming, to increase social distancing.
- Provide protocols and procedures to unit personnel to provide guidance in personal protection.
- Ensure an appropriate and adequate quantity supply of PPE for unit personnel.

Incident Response

- Conduct daily the "COVID-19 Screening Tool" (Appendix C) while maintaining proper social distancing.
- Establish procedures to reduce close contact with fire personnel in activities such as cloning (consider providing cloning instructions), issuing batteries, and issuing and returning radios.
- Consider modes of travel when setting up equipment sites for repeaters, etc. to maintain social distancing.
- Consider the use of storage devices such as assigned/non-returned USB drives to share information.
- Consider the use of software storage sites for collecting documents.

Exposure Response

- Follow the most current direction from the Centers for Disease Control and Prevention and local health authorities. https://www.cdc.gov/coronavirus
- Implement team or local unit exposure response plan.

Back to Appendix B Outline   **Updated:** (4/10/2020)

Food Unit

Traditional use of National Mobile Food Service Units (Caterers) will be modified for the current fire year. Three options have been presented to Fire and Aviation Management. The first is a Caterer (modified) which will allow for the preparation of individually packaged meals which would be placed on a table for camp personnel and boxed for delivery to remote sites. Second is a Food Box tailored after those currently being utilized by Smokejumpers in Missoula and McCall. This will require a new contract which is being developed. Third is the use of MRE's supplemented with fresh fruit/vegetables and snacks such as those included with lunches. Traditional lunches will also be used.

Prevention

- Follow guidance included in the All Fire Personnel Best Practices (Appendix A).
- Ensure food service contractors, caterers and vendors are implementing COVID-19 practices and following Health Department standards and guidelines.

Incident Response

- Implement increased sanitation around kitchens, dining areas, and food lines.
- Discontinue use of salad bars and other self-service food delivery in camps such as beverages.
- When utilizing restaurants, ensure that they have facilities large enough to implement increased social distancing.
- Implement staggered serving times and use of alternate serving methods to meet social distancing guidelines.
- Consider squad-sized feeding areas with smaller tents and tables and chairs spaced to allow distancing.
- Maintain a minimum supply of 7 days of MRE's and water.
- Designate one person to fill cubitainers and canteens from the potable water source.
- Do not re-use cubitainers.

Exposure Response

- Follow the most current direction from the Centers for Disease Control and Prevention and local health authorities. https://www.cdc.gov/coronavirus
- Implement team or local unit exposure response plan.

Back to Appendix B Outline   **Updated: 4/17/2020**

Facilities Unit

Prevention

Best practices during mobilization/at incident and through demobilization:
- Reduce exposure by conducting as much work (briefings/meetings/gatherings) as technology allows virtually or remotely.
- Adjust planning and meeting cycles to account for virtual non-standard processes and meeting formats.
- Ensure Planning Section staff are briefed regarding COVID-19 procedures and provide opportunities for concerns to be mitigated.
- Maintain contingency plans (PACE) in the event of technology failure. Coordinated with the Logistics Section to establish and maintain incident bandwidth to support virtual functions.
- Consider the use of virtual trainers for trainees assigned to the incident.
- Conduct Check-In and Demobilization by electronic device, otherwise, limit exposure by maintaining social distancing and have decontamination protocols in place.
- Utilize electronic applications for gathering, disseminating, and storing information. Ensure all IMT functions are aware of these applications.
- Develop and communicate electronic documentation processes.
- Conduct Daily "COVID-19 Screening Tool" (Appendix C).
- Ensure COVID-19 Prevention and Screening Protocols are in the Incident Action Plan (IAP) and COVID-19 is evaluated in the ICS-215A.
- Coordinate with the Medical Unit Leader (MEDL) to assure appropriate procedures are enacted as a standard part of the Demobilization process.

Incident Response

- Additional medical units should be separated from each other and be located in a more remote area of the Incident Base Camp.
- An isolation/quarantine area should be established at the setup of camp to separate and care for the needs of any personnel exposed.
- Cleaning and sanitizing schedules need to be increased for all facilities. Proper training in procedures, as well as handling and disposal of cleaning supplies, should be done for all personnel involved. Proper PPE for specific assignments should be supplied and used.
- Consider the use of commercial cleaning/sanitizing services if available.

Exposure Response

- Follow the most current direction from the Centers for Disease Control and Prevention and local health authorities. https://www.cdc.gov/coronavirus
- Implement team or local unit exposure response plan.

Updated: 4/17/2020

Planning Section

This document is intended to be used as a tool for extended attack/complex wildland fire response for a Plans Section Staff during the ongoing COVID-19 Pandemic. The following guidelines were developed based on the advice of health and safety authorities in March of 2020. As the situation develops and more information becomes available, these guidelines should be periodically updated.

Prevention

Best practices to prevent exposure:
- Follow guidance included in the All Fire Personnel Best Practices (Appendix A), social distancing, personal hygiene, workplace cleaning, and symptom monitoring.
- Develop and implement electronic communication and file sharing processes that work in an interagency environment and allow for a Common Operating Picture within the Team between assignments. Ensure IMT accounts are valid and current.
- Identify opportunities for incident personnel to work virtually/remotely. Consider simulations testing remote activities, possibly engage IMTs, AAs, cooperators, and partners to test and evaluate remote system technologies, processes and systems to be proficient remotely.
- Conduct and facilitate IMT video/virtual meetings & briefings using available technology.
- Develop processes to ensure that IMT Plans Kits and equipment are configured and distributed appropriately for a largely virtual workforce. Leverage the use of agency and personal computers while maintaining a sufficient inventory of rental laptops to support the IMT.
- Consider IMT roster configuration changes to support virtual functions and COVID-19 related concerns.
- Adjust standard initial orders to reflect changes in staffing and processes to include Technical Specialists (THSPs) and excess negotiated roster positions. Use Geographical Area resources when possible.
- Develop processes for managing an increased IT workload associated with additional virtual/electronic processes.
- Identify resources from non-standard sources that may be available for supporting IMT assignments.
- Be prepared to be self-sufficient for several days including potential remote/spike camp location.

Incident Response

Best practices during mobilization, at incident and through demobilization:
- Reduce exposure by conducting as much work (briefings/meetings/gatherings) as technology allows virtually or remotely.
- Adjust planning and meeting cycles to account for virtual non-standard processes and meeting formats.
- Ensure Planning Section staff are briefed regarding COVID-19 procedures and provide opportunities for concerns to be mitigated.
- Maintain contingency plans (PACE) in the event of technology failure. Coordinated with the Logistics Section to establish and maintain incident bandwidth to support virtual functions.
- Consider the use of virtual trainers for trainees assigned to the incident.

- Conduct Check-In and Demobilization by electronic device, otherwise, limit exposure by maintaining social distancing and have decontamination protocols in place.
- Utilize electronic applications for gathering, disseminating, and storing information. Ensure all IMT functions are aware of these applications.
- Develop and communicate electronic documentation processes.
- Conduct Daily "COVID-19 Screening Tool" (Appendix C).
- Ensure COVID-19 Prevention and Screening Protocols are in the Incident Action Plan (IAP) and COVID-19 is evaluated in the ICS-215A.
- Coordinate with the Medical Unit Leader (MEDL) to assure appropriate procedures are enacted as a standard part of the Demobilization process.

Exposure Response

- Follow the most current direction from the Centers for Disease Control and Prevention and local health authorities. https://www.cdc.gov/coronavirus
- Implement team or local unit exposure response plan.

Back to Appendix B Outline   **Updated:** (4/17/2020)

Finance Section

This document is intended to be used as a tool for extended attack / complex wildland fire response for Finance Section Staff during the ongoing COVID-19 Pandemic, to reduce exposure to Finance Section personnel. The following guidelines were developed based on the advice of health and safety authorities in March of 2020. As the situation develops and more information becomes available, these guidelines should be periodically updated.

- Incident Management Team (IMT) Finance Sections, Incident Business Advisor (INBA) and Buying Teams will follow the guidelines for health and safety when interacting with incident personnel.
- Incident Finance Personnel will be defined as follows:
  - On-Site – At Incident Command Post (ICP) or Base Camp.
  - Remote – Commuting distance to ICP/Base Camp.
  - Virtual – Working from any location outside the commuting distance.
- Geographic Support – Support center established for Finance Section support.
- Make sure the technology is available to support the virtual and remote environments.
- The ability to enhance the e-ISuite Enterprise to efficiently be used in a remote/virtual setting.
- All incident agencies will provide legal acceptance of electronic signatures so Finance Sections can process documents with electronic imaging of signed documents.

Prevention

- Follow guidance included in the All Fire Personnel Best Practices (Appendix A).
- Command and General Staff (C&G) need to have conversations with section personnel to gain understanding and knowledge of employee concerns, risks and/or ability to mobilize and communicate this to the Incident Commander. Routinely revisit risk analysis to balance mission essential functions with risk of exposure.
- Consider establishing large Geographic Support Units to provide virtual support to multiple incidents.
- Centralized Compensation/Claims Unit Leader (COMP) working group
- Develop a protocol to handle a real Incident within an Incident (IWI) in a virtual environment.
- Develop Primary, Alternate, Contingency, and Emergency (PACE) approach should issues arise with virtual/remote environments (i.e. internet connectivity).
- Home units to establish pre-season virtual/electronic procedures with clinics/hospitals/pharmacies and designate an on-unit person (i.e. Hospital Liaison, Fire Management Officer, etc.) to coordinate with the geographical organization.

Incident Response

- Create C&G level protocol for information sharing and communicating, to maintain team cohesion.
- Develop the protocol to work remotely to the maximum extent possible. Use social distancing within section (desk/people spacing, no sharing of office supplies). Utilize electronic documents to limit potential risk of exposure.
- Consider using a combination of on-site, remote, and virtual settings to support the complexity of the incident.
- Take necessary precautions to comply with the Health Insurance Portability and Accountability Act (HIPAA) and protect Personally Identifiable Information (PII).

- Consider using technology to collect and disseminate finance documents electronically.
- Provide for modification of business practices to allow for electronic signatures and virtual exchange of information.
- Follow CDC Guidelines for hygiene and spacing of on-site personnel.
- Consider on-site staffing to include a Finance Section Chief and a Finance Liaison (i.e. a qualified finance position with broad level knowledge) as designated by the Finance Section Chief for virtual support staff and incident response needs.
- Consider establishing large Geographic Support Units to provide virtual support to multiple incidents (these could be virtual teams).
- Establish working relationships with incident personnel (such as Incident Business Advisor, Buying Team, Demob Unit Leader, Computer Technical Specialist, etc.) to ensure smooth communication of shared documents.

Exposure Response

- Follow the most current direction from the Centers for Disease Control and Prevention and local health authorities. https://www.cdc.gov/coronavirus
- Implement team or local unit exposure response plan.
- Minimizing cross-contamination of office supplies, financial documents, etc. between personnel.

Updated: (4/10/2020)

Back to Appendix B Outline

Fire Information

Following are Best Management Practices for conducting the Public Information Function on Wildland Fire Incidents given the current COVID-19 pandemic. All BMPs represent a distinct shift away from face-to-face engagement with the public and media.

The nature of the Fire Information function and its associated duties (at all complexity levels) lends itself nicely to implementation via virtual/remote means. A "skeleton" staff organization (i.e. Lead, Deputy, or Trainee) physically located at ICP or an office setting would coordinate with other on-site Command & General Staff functions and resources. Off-site support personnel can function efficiently through technology and electronic means, receiving real-time information, data, and maps from the Incident and disseminating it through a variety of methods.

Prevention

- Follow guidance included in the All Fire Personnel Best Practices (Appendix A).
- Identify opportunities for personnel to work remotely/virtually. Ensure Public Information Officers (PIOs) have the technology, training, and coordination to be effective and proficient. Practice and prepare to enhance knowledge and the skills necessary to efficiently conduct work off-site. Conduct as much work as possible virtually.
- Be prepared to be self-sufficient for several days, including potential remote/spike camp locations.
- Ensure PIOs have technology to support virtual assignments.
- Traditional fire prevention activities like public presentations, information booths, etc. will not be possible. Focus instead on Public Service Announcements (PSAs) and streaming video.

Incident Response

- Remote work assignments and virtual workspaces should be used as much as possible.
- Traditional activities like public presentations, information booths, etc. will not be possible. Focus instead on PSAs and streamed video.
- Media visits to ICP should not occur. Stock video tours and interviews can be provided to media for virtual access to the ICP.
- Use advanced telephone technology to communicate with audiences remotely.
- Use existing systems to the fullest extent such as Inciweb (https://inciweb.nwcg.gov/), Social Media and email publication tools such as Constant Contact.
- Use email lists as much as possible to distribute daily updates. Reach out to traditional trap line locations such as stores and other public places to get them on email distribution lists.
- Coordinate COVID-19 messaging primarily with the host agency Public Affairs Officer. If this coordination is not possible, consult the county or local public health department. Ensure all fire messaging includes a COVID-19 message when approved by these entities.
- Conduct video/virtual public meetings using available technology. Invest in quality equipment (cameras, tripods, microphones) to improve quality for live-streamed events.
- Implement a strategy that utilizes a "skeleton" staff physically located at the incident, with support staff off-site. On-site PIO would coordinate with other functions and resources, funneling current information to rest of Info staff for dissemination.

- Leverage resources with cooperators and partners when looking outside the agencies for PIO skills to support efforts.
- Utilize "portable" info boards, in the form of an electronic community newsletter for dissemination of information to affected entities; enlist the cooperation of businesses or other establishments to "adopt" an information bulletin board to post maps and information (distributed by PIO via electronic means).
- Conduct video/virtual community information meetings using available technology. Ensure a consistent feedback loop for two-way communication with the community.
- Utilize VOST (Virtual Operations Support Team) for social media monitoring and transmission of approved messages, further minimizing travel to incident.
- Information Links. Many reference documents pertaining to virtual operations and best social media practices are collected on the NIFC website https://www.nifc.gov/PIO_bb/pio_main.html

Exposure Response

- Follow the most current direction from the Centers for Disease Control and Prevention and local health authorities. https://www.cdc.gov/coronavirus
- Implement team or local unit exposure response plan.
- Report any information gained from the community on known or suspected sources of exposure (within HIPAA constraints) to the Incident Commander (IC) and Medical Unit Leader (MEDL).

Updated: 4/8/2020

Back to Appendix B Outline

Safety

Fundamental approaches to safety and risk management on wildland fire incidents should still be applied in the COVID-19 environment however the circumstances surrounding virus transmittal and severity require a new filter be added to virtually every activity we perform. Careful analysis should be considered regarding exposure potential, preventative measures, and environmental controls.

Prevention

- Follow guidance included in the All Fire Personnel Best Practices (Appendix A).
- Be familiar with sources of "best available information" regarding practices that reduce the risk of exposure or transmittal of COVID-19.
- Review the NWCG Infection Disease Guide before deployments. (link below).
- Consider IMT staffing and tasking for managing COVID-19 in the fire response environment. It is recommended that a Medical Officer or Liaison be identified so this responsibility is not deferred to the Safety Officer.
- Consider having an off-site (virtual) additional position serving in the safety function for complex incidents.
- Ensure personal protective and sanitization items are sufficient for the assignment.
- Plan for contingencies and emergencies where PPE and sanitization items may not be sufficient.
- Review normal position procedures and think in terms of what may need to be different in the pandemic environment.
- Maintain a list of COVID-19 SMEs and potential contacts for the PNW. This may include county and state public health agencies, hospitals, etc.
- Understand the risks or consequences that come with accepting assignments outside the local, state, or geographic area.
- Review the NWCG Infectious Disease Guidance.

Incident Response

- Remain focused on identifying the hazards and risks associated with the wildland fire environment while filtering for the likelihood of exposure or transmittal of COVID-19.
- Contact and utilize SMEs such as personnel from the county or state healthcare authorities to provide guidance on the implementation of measures to reduce the risk of exposure or transmittal of COVID-19.
- Encourage practices recommended by the CDC or state or local health authorities for transmittal avoidance with a filter for what can be practically applied in the emergency response environment.
- Collaborate with the Medical Unit Leader to prioritize the incident needs for supplies and equipment related to transmittal avoidance or management.
- Ensure the incident medical plan (ICS-206) contains information related to responder direction for communicating and transporting COVID-19 suspected illness.
- Understand reporting requirements for suspected and confirmed COVID-19 illness.
- Engage with Logistics Section regarding incident facilities, size, equipment needs and procedural adjustments necessary to enhance preventative measures.

Exposure Response

- Follow the most current direction from the Centers for Disease Control and Prevention and local health authorities.
- CDC: https://www.cdc.gov/coronavirus
- Washington: https://www.doh.wa.gov/Emergencies/Coronavirus
- Oregon: https://govdtatus.egov.com/OR-OHA-COVID-19
- Implement team or local unit exposure response plan. When an Incident Management Team is assigned, the Incident Within an Incident (IWI) plan should address processes, protocols and assigned duties for exposure.
- If directed, conduct fact-finding regarding potential origin or recent exposure of a suspected patient.
- Provide recommendations for quarantine and sanitization of possible host sites when the circumstances require follow-up.
- Produce information necessary for reporting purposes.
- If the on-site safety officer becomes exposed or infected, the off-site safety officer can ensure continuing operations.

Updated: (4/10/2020)

Back to Appendix B Outline

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Liaison

This document is intended to be used as a tool for extended attack/complex wildland fire response for Liaison Officers during the ongoing COVID-19 Pandemic. The following guidelines were developed based on the advice of health and safety authorities in March of 2020. As the situation develops and more information becomes available, these guidelines should be periodically updated.

When on an incident during a COVID-19 pandemic, the number of cooperators and assisting agencies may expand. Atypical agencies could include, Oregon Health Authority, Washington State Health Care Authority, local hospitals and clinics, local and/or county public health officers, regional healthcare coalitions, local, regional or state Emergency Operations Centers (EOCs) and Multi-Agency Coordinators (MACs), some of which may never have encountered an Incident Management Team (IMT). This lack of experience with IMTs will require more mentoring with some cooperators than is usual. The Liaison might be the initial contact and a larger complement of Liaison Officer's may be needed to facilitate and maintain all necessary relationships.

A unique feature of the Northwest is the presence of large private timberlands and a variety of wildland fire resources that may be present during all phases of fire suppression activities. Currently outstanding relationships exist with these key stakeholders and Liaison Officers must actively engage with their respective representatives. Wildland firefighters and agency representatives from the timberland industry must be informed of the best management practices in Appendix A and other appropriate appendices depending on the type of resources engaged.

Given the potential exposure and spread of COVID-19 the intent is to adapt to a virtual work environment understanding that there will be variations to virtual work based on incident complexities. Extra diligence will be needed to ensure that relationships are established and maintained with all stakeholders and partners in a virtual environment.

Prevention

- Follow guidance included in the All Fire Personnel Safety Best Practices (Appendix A).
- Ensure you are properly equipped/trained to accept virtual assignments.
- Be prepared to be self-sufficient for several days including potential remote/spike camp location: extra clothes, food, water, etc.

Incident Response

- When possible, avoid large fire camp configurations by working remotely/virtually.
- Utilize communication technology (zoom, skype, etc.) in order to have cooperator meetings and share information with participating agencies. This will require ensuring technology links are available to participating agencies.
- Consider recording presentations to deliver to stakeholders and partners in lieu of in-person cooperator meetings.
- Practice physical distancing or virtual Command & General Staff (C&G) meetings.
- When possible, avoid large fire camp configurations by working remotely/virtually.

- Utilize communication technology (zoom, skype, etc.) in order to have cooperator meetings and share information with participating agencies. This will require ensuring technology links are available to participating agencies.
- Consider recording presentations to deliver to stakeholders and partners in lieu of in person cooperator meetings.
- Consider use of additional Liaison Officers (LOFRs) and trainees to manage virtual work activities including assignment to other remote/virtual locations where direct linkage to the ICP is necessary, e.g., Emergency Operations Centers (EOCs), Command Centers, regional Multi-Agency Coordination Centers, Joint Field Office (JFO), etc.
- If deemed necessary and essential to meet face to face, or have a meeting make sure participants have read and agreed to the preventative measures in [Appendix A](#) prior to the meeting.
- Local agencies managing the pandemic should be engaged as early as possible to discuss potential incident impacts on the community. If the incident necessitates consider a Deputy Liaison to deal strictly with pandemic issues.
- Initiate contact with state and local elected official, tribes and other government agencies to identify issues related to COVID-19 within the response area.
- Initiate contact with local/county/state law enforcement officials to assure relationship and contact information is completed for initiating the need for evacuations and re-population within the response area.
- Identify and establish relationships with cooperators including health departments and local EOC.
- Ensure telecommunication connectivity with Incident Command Post (ICP).
- Ensure participating agencies have a copy and understand the IMT COVID-19 protocols, best practices, and amended typical operational procedures.
- Assist Safety Officer and Medical Unit Leader to gain information regarding the capacity and integrity of the local and regional healthcare system(s).
- Assist Safety, Medical, Interagency Regional Representative (IARR), and home unit as requested when personnel assigned to the incident are treated for COVID-19.
- Consider ordering a Liaison with FEMA's Emergency Support Function 8 (ESF8) experience.

Exposure Response

- Follow the most current direction from the Centers for Disease Control and Prevention and local health authorities. https://www.cdc.gov/coronavirus
- Implement team or local unit exposure response plan.

Updated: (4/10/2020)

[Back to Appendix B Outline](#)

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Incident Commander

Incident Commanders will be faced with managing responses in a systematically different way in the COVID-19 environment. Minimizing exposure to personnel through maximizing who can work virtually and organizing in ways that avoid large populations of responders being in close proximity while ensuring communication of intent and direction are not compromised. IMTs will follow the most current and relevant direction from the COVID-19 Wildland Fire Medical and Public Health Advisory Team (MPHAT).

Prevention

- Follow guidance included in the All Fire Personnel Best Practices (Appendix A).
- Review ICS functions on the Incident Management Team (IMT) to identify those essential to be on the incident, who can work from their home unit and those that can work off-site in small groups.
- Pre-identify IMT members who may be in need of unique workplace accommodations to minimize exposure risks
- Maximize the use of video/phone conference capabilities to convene the IMT for pre-response planning.
- Become familiar with health and hygiene practices necessary to minimize impacts of COVID-19 and ensure your team has a functional plan to implement those on an incident, utilize the CDC and health authorities to guide those practices.

Incident Response

- Consider the application of video/phone conference and minimal in-person participation at incident in- briefings and close-outs.
- Establish dialogue with agency administrators regarding risk tradeoffs associated with alternative suppression strategies, taking into account COVID-19 concerns.
- Ensure deployment of assigned personnel maximizes distancing opportunities without compromising communications and safety.
- Develop a COVID-19 exposure response plan for the incident based on input from the local health authority's direction and guidance.
- Consider the addition of a Medical Officer position to the Command Staff or a Medical Unit Liaison/Coordinator to manage the workload that may transpire with COVID-19.
- Recognize limited capacity of smaller community's health systems and the impacts of fire camps and other activities to those systems. Consider bringing in additional health care professionals to boost local capacity.
- Consider shift length and work/rest ratio opportunities to enhance distancing opportunities.
- Be familiar with local direction (agency/state/county) regarding testing, isolation, and treatment of COVID to ensure compliance with these policies/practices.
- Consider the impacts of COVID-19 to evacuations and centers. Have discussions early on with law enforcement, local health care providers, and shelter personnel. Minimize the duration of time that citizens are displaced.
- Ensure engagement with stakeholders and the public is maximized through technology and social media sources to avoid exposure through large gatherings and interactions.

Exposure Response

- Follow the most current direction from the Centers for Disease Control and Prevention and local health authorities. https://www.cdc.gov/coronavirus
- Implement team or local unit exposure response plan.
- Ensure local health officials are involved in cooperative communications.
- Determine reporting process for COVID-19 related exposure (local level, home unit, ICS-209, etc.)

Updated: (4/10/2020)

Back to Appendix B Outline

This Plan is maintained by the Pacific Northwest Coordinating Group

Agency Administrator

The purpose and intent of the Best Management Practices (BMPs) for Agency Administrators is to list practices for prevention of the COVID-19 virus before and during incident response. If known or suspected exposure occurs during incident response, what practices must be implemented for the person and possible contacts with others to prevent the spread of the virus? Likely the most important component of Agency Administrator BMPs is the known information for the spread of the virus is rapidly changing, thus there must be a collective corporate will to add and update Leader's Intent and consideration must be given to an interagency effort to ensure an integrated and common operating picture from leadership. Agency Administrators must practice a Risk-Informed Decision-Making Process and carefully examine the risk tradeoffs with wildland fire suppression and COVID-19 exposure. This may result in a "least worst choice."

Whatever actions are taken this season should not be looked at as a temporary fix for a temporary situation. Rather, they should be looked at as possible permanent changes to how we fight wildland fire into the future that make us, as a group, more resilient. Agency Administrators must provide clear Leader's Intent for the following prevention, incident response and exposure measures.

Prevention

- Refer to Appendix A – All Fire Personnel Best Practices for COVID-19. The most important value to be protected is human life and that all normal activities of wildland fire will be further complicated with the COVID-19 virus pandemic for the 2020 Fire Year.
- Ensure all incident personnel, including IMT members, support team members, Prevention Teams, Critical Incident Stress Management Teams (CISM), Buying Teams, Incident Business Advisors, and all other supporting individuals regardless of whether they are working on-site or virtually, are fully aware of and practice recommended safety and health measures as listed in the All Fire Personnel Best Practices for COVID-19 (Appendix A).
- During the 2020 fire year, using all viable technology, organizations will maximize virtual environments to the extent possible. This includes all components of complex incident management inclusive of T3, T2, T1 and Area Command organizations; this includes all components of coordination and dispatch functions.
- With the added complexity of COVID-19, all wildland firefighters have the absolute right to turn down an assignment because of concern with exposure.
- Provide leader's intent and support for the "Module as One" concept
- Increase emphasis on the fire prevention program
- Support and authorize the use of militia personnel to respond to incidents.
- Consider closures of areas and burn bans where risk of human caused fires could contribute to response workload.
- Communicate with jurisdictional partners any changes to strategic response to wildland fire planning or resource contributions to local or geographic efforts.
- Manage public and political expectations of wildland fire response in a reduced resource environment; it is going to take political courage to follow through.
- Review approval processes (such as mechanized use in the wilderness) to minimize delays that may occur in the initial attack phase of response; this should be coordinated on adjacent units regardless of jurisdictions.

- Address continued sanitation efforts and consider 14-day isolation for resources returning from travel and 14-day isolation for onboarding employees.
- Teleworking and virtual environments will be the norm for all employees.

Incident Response

- Ensure local Fire Management and initial attack ICs are provided with expectations for application of agency COVID-19 related procedures in the emergency response environment.
- Include COVID-19 mitigation procedures and priority in IC's Delegation of Authority and/or leaders' intent documentation for T1, T2, and T3 incidents.
- Develop a unified/interagency Delegation of Authority before active wildland fires occur, address COVID-19 leader's intent in the delegation.
- Coordinate with Incident Commander/IMT on the use of virtual positions at the time of mobilization and throughout the incident.
- Use agency personnel in non-operational roles to support the wildland fire missions.
- Evaluate objectives and needs when designing mop-up operations to ensure that the severity and duration of firefighter exposure is considered and addressed to the degree possible.
- Ensure sufficient incident support staff (logistics, READS, AA representatives) are available.
- Engage with interagency partners on multijurisdictional incidents regarding consistent practices for COVID-19 management in the incident environment.
- Prepare WFDSS products that articulate how the incident strategy or courses of action are influenced by COVID-19 avoidance/management factors.
- Because of mobility issues, clarify that responses will be geographic in nature, very local in some cases (e.g. forest, park, or statewide), and not necessarily agency specific. Strong collaboration among interagency partners is vital to be successful within the response areas.
- Include objectives for IMTs to use non-traditional fire camps, spike camps, line spike activities, and virtual positions in an effort to support the "Module as One" concept which is to minimize exposure by not mixing personnel, e.g., same personnel assigned together for an entire season, on the same schedule, to the same vehicle, on same assignments, in same camp, etc.
- All agencies within the GA with wildland fire responsibilities should consider relief for natural resources and other administrative assignments when possible to support wildland fire efforts.
- Wildfire emergency rehabilitation (e.g. BAER for federal agencies) activities should follow same protocols and principles as wildfire suppression activities to reduce employee exposure to COVID-19.
- Provide clear leader's intent and a complete risk-informed decision-making process before using wildland fire to meet resource objectives, which may also reduce exposure to firefighters, and only when this suppression strategy does not reduce initial and extended attack operations.
- Initial actions on unplanned wildland fires should focus on limiting the duration of the fire, reducing exposure to COVID-19 and long-term smoke exposure to the firefighters and the public.
- Recognize limited capacity of smaller community's health systems and the impacts of fire camps and other activities to those systems. Consider bringing in additional health care professionals to boost local capacity.
- Develop relationships with local health authorities. Provide guidance on local protocols and situation. Recommend local health authority SME to work within IMT Command Staff.

Exposure Response

This area would include best practices in the event of a known exposure.

- Follow the most current direction from the Centers for Disease Control and Prevention and local health authorities. https://www.cdc.gov/coronavirus
- Implement team or local unit exposure response plan.
- When firefighters are demobed due to potential COVID-19 exposure or symptoms, inform the affected employee's Agency Administrator.
- Ensure staff follow through with tracing potential exposure and employee/cooperator notifications.
- If notified by employee or Health Department of positive COVID-19 test results Inform IC/IMT/Fire Management, without disclosing PII and in compliance with agency policy and HIPAA regulations.
- Share exposure lessons learned with other agency administrators and unit employees.

Updated: (4/17/2020)

Back to Appendix B Outline

This Plan is maintained by the Pacific Northwest Coordinating Group

Fire Management

The intent of this section is to provide suggested practices for Fire Managers and Duty Officers to consider. Implementing practices that minimize exposure of potential COVID-19 vectors to employees should be implemented while balancing response efficiency and effectiveness.

Prevention

- Follow guidance included in the All Fire Personnel Best Practices (Appendix A).
- Minimize cross module contamination and employee exposure potential by considering:
  - Avoid assigning "fill behind" firefighters to modules outside the local area except those essential to maintain minimum safety requirements. Interchanging personnel increases the chances for contamination.
  - Consider limiting training assignments to within module or within the state / local area. Avoid mobilizing trainees outside of the state or geographic area with the exception of those rostered with Incident Management Teams (IMTs).
- Stagger extended attack responding modules to alternate closest force response as much as possible. Ensure interagency response is maintained to best reduce exposure.
- Initial response and extended response shifts should emphasize and promote decontamination and individual care considerations. Time in the shift length to perform these responsibilities must be provided.
- Consider potential complexities surrounding evacuations and sheltering displaced residents in the COVID-19 environment. Engage with local authorities' regarding preplanning to avoid issues that may otherwise compromise safe operations.
- Update Staffing and Action Guide to incorporate local response mitigations. Consider the impacts of operating with 2 min. vs. 2 hr. response times if firefighters are working from home or in a virtual environment.

Incident Response

- Create suppression strategies to minimize assigned personnel and incident duration.
  - Use predictive services and professional judgment to balance assigned resources and incident duration.
  - Use strategic fire planning elements and consider having remote decision support in place to assist units with decision development.
- Establish clear expectation of aggressive initial response to minimize the possibility of large fire response requirements, including multiple start prioritization.
- Prioritize fire prevention patrol to deter and detect fires.
- Consider ordering and implementing a saturation patrol strategy when Public Service Announcements (PSAs) at high risk/probability of large fire growth.
- Minimize briefing size and limit face to face contact as much as possible. Consider if operational briefing can occur over the radio during Initial Response. Limit face to face briefings to 10 leaders or less if possible.
- Decentralize Staging Areas to limit face to face contact with other modules.
- Consider the application of aviation and mechanized assets in the initial attack phase to reduce assigned personnel.
- Hold assigned modules on incidents overnight to minimize home exposure potential.

71

- Utilize line spike and small spike camps as much as possible. Encourage modules to become self-sufficient as logistical support will be challenged.
- Work with Agency Administrator to build COVID-19 response and mitigation strategies into WFDSS and establish interagency response objectives during extended attack or for incoming IMTs, using CDC and Health Authority practices to guide these strategies.

Exposure Response

- Follow the most current direction from the Centers for Disease Control and Prevention and local health authorities. https://www.cdc.gov/coronavirus
- Refer to the NWCG infectious disease guide for incident-based information: https://www.nwcg.gov/committees/emergency-medical-committee/infectious-disease-guidance
- Ensure a local/agency plan for COVID-19 testing, treatment, isolation is adhered to during initial attack response.
- If cross module or cross agency COVID-19 transmittal occurs during fire response, work with partner agencies to investigate the source and develop mitigation measures.

Updated: (4/10/2020)

Back to Appendix B Outline

This Plan is maintained by the Pacific Northwest Coordinating Group

Wildland Fire COVID-19 Screening Tool
Interim Standard Operating Procedures
4/15/2020

NOTE: This Screening Tool represents interim guidance. Additional clarification will be coming as soon as it is defined.

<u>DO YOU HAVE ANY OF THESE SYMPTOMS?</u>

Today or in the past 24 hours, have you had a fever or a combination of more than one of the other any symptoms listed below **in addition to your normal work-related issues?**

- Fever, felt feverish, or had chills? Repeated shaking with chills?

- Cough? Shortness of breath or difficulty breathing?

- Muscle pain? Headache? Sore throat?

- New loss of taste and/or smell?

If in doubt about any of these symptoms, consult a Physician.

In the past 14 days, have you had contact with a person known to be infected with the coronavirus (COVID-19)?

Take temperature with touchless thermometer if available

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Interim Standard Operating Procedures
4/15/2020

INSTRUCTIONS FOR SCREENING

☐ If resource is positive for any symptoms prior to mobilization **DO NOT MOBILIZE**.

☐ At Entries – Consider the adequate number of personnel needed for screening. Although medical personnel are ideal, screeners do not have to be medically trained.

- o If resource is positive for any symptoms including fever (over aside.100.4) at entry **DO NOT ANNOUNCE** - ask to step aside.

- o Escort sick individual to isolation area.

- o Isolation support personnel should begin documentation. Have sick individual contact Supervisor for further direction.

- o Notify public health officials.

- o Have individual transported as appropriate.

- o Protect and secure any collected Personal Identifiable Information or Personal Health Information

To: Fire Management Board and Non-Federal Wildland Fire Partners
From: COVID-19 Wildland Fire Medical and Public Health Advisory Team (MPHAT)
Date: 04/15/2020
Subject: COVID-19 Interim Screening Protocol for Wildland Fire Personnel

Purpose:

The interagency wildland fire community is committed to preventing the spread of COVID-19 and promoting the health and wellness of all wildland firefighters and support personnel. Consistent and continual monitoring of personnel is the first step in preventing the movement of potentially infected individuals and the spread of COVID-19. This memorandum establishes interim standard operating procedures and protocols for screening of wildland fire personnel at duty stations and during incident management activities to protect all personnel, appropriately manage potential COVID-19 infection, and reduce risk.

Background:

In December 2019, a novel (new) coronavirus known as SARS-CoV-2 was first detected in Wuhan, Hubei Province, People's Republic of China, causing outbreaks of the coronavirus disease COVID-19. The virus has now spread globally. Across the U.S., public health authorities have issued significant restrictions on public gatherings and implemented social distancing practices.

This disease poses a serious public health risk and can cause mild to severe illness; especially in older adults or individuals with underlying medical conditions. COVID-19 is generally thought to be spread from person-to-person in close contact and through exposure to respiratory droplets from an infected individual. Initial symptoms of COVID-19 can show up 2-14 days after exposure and often include: fever, cough or shortness of breath. Recent studies indicate that people who are infected but do not have symptoms likely also play a role in the spread of COVID-19

With the intent to sustain a viable, safe and effective wildland fire management workforce, (Federal, State, local and Tribal assets) during the COVID-19 pandemic, a preliminary measure is to establish common infection screening protocols utilized across the wildland fire community. The MPHAT has been established by the FMB with concurrence of the Fire Executive Council to address medical and public health-related issues specific to interagency administration of mission critical wildland fire management functions under a COVID-19 modified operating posture. The MPHAT includes interagency representation and interdisciplinary expertise (including CDC-NIOSH and medical professionals from USFS and DOI) to advise on all medical and public health related aspects of COVID-19 planning, prevention and mitigation. To that end an interim standard operating procedure has been developed and recommended by MPHAT for immediate adoption and utilization by wildland fire personnel at duty stations and wildland fire incidents to reduce the risk of disease through common screening protocols.

Rationale:

The scale and potential harm that may be caused by this pandemic meets the American Disabilities Act *Direct Threat* Standard.[1] Therefore, routine screening in the workplace is justified and warranted to prevent further community spread of the disease. By identifying, properly triaging, and managing personnel with exposures and these symptoms, personnel can reduce the spread and better mitigate COVID-19 infections among their workforce.

Instructions:

The following screening guidance is recommended for adoption and implementation at duty stations and for all incident management activities across the interagency wildland fire community, as frequently and extensively as possible. Supervisors and incident managers should plan and resource accordingly to support the following SOP:

Pre-Mobilization

Supervisors should ensure personnel have no present symptoms of illness using the *Wildland Fire COVID-19 Screening Tool* prior to consideration of incident assignments. In addition to this initial screen, Supervisors should inform personnel going on assignments of ongoing routine daily screening on all incidents during COVID-19.

Arrival/Entry to Location

All resources accessing any entry point location will wash their hands. If soap and water are not available hand sanitizer may be used. Each resource will proceed to receive verbal screening using the *Wildland Fire COVID-19 Screening Tool* and if possible, have their temperature assessed using a touchless thermometer. Supervisors and incident managers should determine the number of personnel required to support the screening process and consider scheduling and/or staggering resource arrival times to minimize crowding at arrival/entry locations.

Daily Screening

All resources should be encouraged to report any emerging symptoms to their supervisor (Crew Boss, Unit Leader, Module Leader, Duty Officer, Division Supervisor, Floor Supervisor, etc.). In addition, super- visors should assess subordinates' health daily using the *Wildland Fire COVID-19 Screening Tool* to ensure no emerging symptoms. It is recommended the screening questions are asked of all personnel routinely throughout the day.

Positive Screenings

Persons with indications of illness prior to mobilization should be excluded from incident assignments until they meet the return to work criteria as described by CDC (7 days after the start of symptoms and at least 3 days after the last fever not requiring fever reducing medications, and symptoms are improving). Persons found meeting sick criteria or found to be with fever on arrival at an incident entry location should not be allowed entrance and, as above, should be excluded from incident assignments until they meet the return to work criteria as described by CDC. Next steps should be coordinated with unit leadership, the medical unit and/or local health authority. Prior to release and return to home, individuals with signs or symptoms of illness posing a risk of COVID-19 transmission should be isolated in a separate location. This may require separate, dedicated and staffed areas/facilities to ensure that individuals with potential COVID-19 infection do not comingle with other fire personnel.

Confidentiality of Medical Information:

Any medical information gathered is subject to ADA confidentiality requirements [3] [4].

Tools and Supplies

- Verbal Screening - use the *Wildfire COVID-19 Screening Tool*
- Temperature Checks - use only touch-less infrared thermometer if available.
  - Incident management personnel involved with screening should consider purchasing touchless thermometers prior to assignment. Incident emergency medical personnel are strongly encouraged to bring their personal touchless thermometers if available.
- Mask or Face Barrier **-** Current CDC guidance includes wearing cloth face coverings in public settings where other social distancing measures are difficult to maintain, especially in areas of significant community-based transmission. The use of simple cloth face coverings is

76

recommended to slow the spread of the virus and help people who may have the virus and do not know it from transmitting it to others. As of April 2020, masks made from cloth material are considered acceptable facial barriers.

- ☐ Isolation - use separate facility, yurt or personal tent.
- ☐ Dedicated Wash Stations - Consider the number of dedicated wash stations and/or portable restrooms needed to maximally support each bullet above.

Personal Protective Equipment

The NFES 1660 – *Individual Infectious Barrier Kit* or NFES 1675 – *Multi-Person Infectious Disease Barrier Kit* (as needed) should be used under the following circumstances:

- ☐ Workers engaged in screening at arrival and entry location
- ☐ Workers helping to manage sick and/or asymptomatic personnel with recent COVID-19 interaction.
- ☐ Workers helping to sanitize infected areas, or any areas suspected of infection

Note: Appropriate techniques for using personal protective equipment including donning and doffing can be found at:
https://www.cdc.gov/coronavirus/2019-ncov/hcp/using-ppe.html

References:
[1] Interim Guidance for Businesses and Employers to Plan and Respond to Coronavirus Disease 2019 (COVID-19)
[2] Symptoms of Coronavirus
[3] Pandemic Preparedness in the Workplace and the Americans with Disabilities Act
[4] 29 CFR § 1630.14 - Medical examinations and inquiries specifically permitted.
[5] DOI COVID-19 Risk Assessment & Decision Matrix for Managers (*DOI Access Only*)
[6] Discontinuation of Isolation for Persons with COVID-19 Not in Healthcare Settings (Interim Guidance)
[7] Personnel in Mission Critical and Essential Function Positions (*DOI Access Only*)
[8] Coronavirus Disease 2019(COVID-19). Use of Cloth Face Coverings to Help Slow the Spread of COVID-19.

Appendix D – Contact Lists

Name	Position	Office Number
Josh Simmons	NMAC Chair, Director of Fire Operations, BIA	208-433-5372
Aitor Bidaburu	NMAC, Fire Program Specialist, FEMA, US Fire Administration	208-387-5698
Beth Lund	NMAC, Assistant Director of Operations, USFS	208-387-5605
Chad Fisher	NMAC, Fire Operations Program Leader, NPS	208-387-5967
Dan Smith	NMAC, National Association of State Foresters Fire Director	208-387-5653
Ken Schmid	NMAC, Fire Operations, BLM	208-387-5934
Shane McDonald	NMAC, Fire Director, USFW	208-387-5583
Chuck Turley	PNWCG Chair, Wildfire Division Manager, WA DNR	360-902-1300
Mike Minton	PNWCG Vice Chair, Pacific West Deputy Region FMO, NPS	707-498-4435
Bill Slosson	PNWCG, Chief Deputy State Fire Marshal - Washington State	360-596-3928
Bob Madden	PNWCG, Oregon Fire Service	541-322-6300
Carol Connolly	PNWCG, Public Information Specialist, NWCC	503-808-2764
Darron Williams	PNWCG, Wildland Fire Module Unit, BIA	503-231-6759
Doug Grafe	PNWCG, Fire Protection Division Chief, ODF	503-945-7204
Jeff Fedrizzi	PNWCG, State Fire Management Officer, BLM	503-808-6461
John Giller	PNWCG, Fire, Fuels and Aviation Director Regions 6/10, USFS	503-808-2143
Josh O'Connor	PNWCG, Regional Fire Management Coordinator, USFWS	503-872-2756
Lorri Benefield	PNWCG, Planning Section Chief - Portland NIMO, USFS	541-408-7380
Mariana Ruiz-Temple	PNWCG, Chief Deputy State Fire Marshal - Oregon State	503-934-8238
Randy Johnson	PNWCG, Spokane County Fire Chief, Washington Fire Service	509-467-4500
Alex Robertson	Fire & Aviation Staff Officer, COFMS	541-383-5577
Alice Carlton	Forest Supervisor, Umpqua National Forest, USFS	547-957-3200
Andy Barrows	Wenatchee Cache Manager	509-884-6593
Bea Noyes	IFCA Contract Officer, ODF	503-945-7479
Blake Ellis	Fire Operations Manager, ODF	503-945-7437
Bob Roth	Regional Aviation Officer, USFS	503-808-2359
Brent Meisinger	Assistant Fire Management Officer -Suppression, BLM	541-473-3144
Carla King	Roseburg Interagency Center Manager	541-957-3303
Cheri Campbell	La Grande Cache Manager	541-975-5420
Chip Jenkins	Park Superintendent, Mount Rainier National Park, NPS	360-569-6503
Claren Nilsson	Lost River Fire Management	541-273-4737
Colby Drake	Grand Ronde FMO	503-917-9664
Craig Ackerman	Park Superintendent, Crater Lake National Park, NPS	541-597-3001
Dan Foster	Superintendent, Lake Roosevelt Nat. Recreation Area, NPS	509-754-7812
Dan O'Brien	Northwest Coordination Center Manager, BLM	503-808-2732
Darron Williams	BIA NW Region FMO	530-866-0017
Dave Underwood	Regional Aviation Manager, BIA	505-362-7029
Dennis Darling	Fire Management Officer SORO, USFS	360-891-5146
Don Jones	Yakama FMO	509-830-2688
Doug Johnson	Incident Commander Council Chair, USFS	541-383-5582
Dwight Robanski	Liaison Officer, USFS (retired)	
Ed Hiatt	Fire Management Officer, BLM/USFS	541-225-6300
Elizabeth Burghard	District Manager, Medford BLM	541-618-2200
Eric Wisch	Pacific Cascade Region Manager, WA DNR	360-577-2025

Hector Basso	Northwest Cache Manager	541-504-7230
Holly Jewkes	Forest Supervisor, Deschutes National Forest, USFS	541-383-5300
Ike Cawston	Colville Agency FMO	509-978-8043
Janine Smith-Belozer	Regional Aviation Safety Manager, USFS	541-504-7263
Jason Loomis	Operations Working Team Chair, NPS	503-894-1303
Jay Phipps	Safety and Health, WA DNR	360-902-2115
Jeff Casey	Umatilla Agency FMO	541-279-8166
Jeff Dimke	FMO Spokane District, BLM	509-981-3549
Jess Wills	President, Firestorm Wildland Fire Suppression	530-898-8153
Jim Powell	Medical Unit Leader PNW2, USFS (retired)	
Joe Faulise	Logistics Section Chief PNW2, Alaska DOF	907-451-2302
Joe Rose	Vale District Manager, BLM	541-473-3144
John Szulc	PNW Operations Committee Representative, BIA	503-231-6797
Karen Taylor-Goodrich	Park Superintendent, North Cascades National Park, NPS	360-854-7200
Katie Mergel	Training/Contract Operations, USFS	541-504-7339
Kent Koeller	Logistics Section Chief NWT8,	541-416-6482
Kipp Morrill	State Aviation Manager, BLM	916-978-4435
Krissy Mitchell	Incident Business Committee, WA DNR	360-902-1257
Lauren Maloney	Fire Mitigation & Education Specialist, BLM	503-808-6587
Michael Robison	District Manager Coos Forest Protective Association	541-267-3161
Mike Cuthbert	Aviation Safety Manager, WA DNR	360-902-1736
Mike Gomez	Training Specialist, USFS	541-504-7341
Neil Argren	Health & Safety Officer, Cowlitz 2 Fire & Rescue	360-578-5218
Nick Swagger	Logistics Section Chief (t) PNW2, USFS	541-383-4734
Patrick Skrip	District Manager Douglas Forest Protective Association	541-672-6507
R. D. Buell	District Manager Walker Range Fire Protective Assoc.	541-433-2451
Rebecca Slick	Incident Business Advisor, BLM/FS	503-808-6319
Rob Allen	Fire Staff Officer, USFS	509-664-9200
Roger Brandom	Spokane FMO	509-220-5349
Russ Lane	Wildfire Operations & Aviation, WA DNR	360-902-1308
Sara Creachbaum	Park Superintendent, Olympic National Park, NPS	309-565-3004
Shad Sitz	Pacific West Region Aviation Manager, NPS	541-588-0344
Shane Jeffries	Forest Supervisor, Ochoco National Forest, USFS	541-416-6500
Sharrol Pyle	Incident Business Committee, ODF	503-945-7450
Steve Rawlings	Assistant Director Operations, BLM/USFS	530-808-2314
Teresa Alcock	Wildfire Intel & Geospatial Analyst, ODF	503-945-7226
Tim Holschback	Fire Prevention & Policy Manager, ODF	503-945-7434
Todd Welker	Southeast Region Manager, WA DNR	509-925-8510
Tom Montoya	Forest Supervisor, Wallowa-Whitman National Forest, USFS	541-523-6391
Travis Medema	Wildfire Council/Special Projects, ODF	541-945-7429
Trey Leonard	Warm Springs FMO	541-460-0234

Appendix E – Transportation

Pros	**Cons**
Contract (NICC) Jets	
• Personnel can be checked for symptoms prior to boarding as part of the manifest check. • Provides a controlled environment for tracking the movement of personnel. • Minimizes the exposure of personnel to the general traveling public. • Ability to reduce the number of crews on the flight to maintain social distancing. • Possibly easier to obtain emergency clearance of crews from State quarantine mandates. • In the event of a subsequent positive test result, it will be easier to identify personnel who need to be quarantined.	• More flights may be required to transport the crews if social distancing is required. • A subsequent positive test result may result in the quarantine of the entire jetload, possibly even the flight crew.
Commercial Air	
• More flights are available. • In the event of a positive test, only need to quarantine one crew.	• May possibly be more difficult to check personnel for symptoms if crew travels on different flights. • Greater exposure to the general population, leading to a greater possibility of exposure. • May not be able to avoid mandatory State quarantines upon arrival.
Agency Vehicles (IHC's, Engines, Modules, etc.)	
• Immediate mobilization response of resources. • Immediate availability for operational assignments.	• Assigned vehicle mix may not provide proper social distancing, requiring the assignment of additional agency vehicles or providing rental vehicles, delaying response. • Travel issues may arise, such as: lack of open restaurants, rest areas may be closed, difficulty of obtaining overnight lodging, possibly delaying response.
Contract Resources (Crews, Engines, Equipment, etc.)	
• Immediate mobilization response of resources. • Immediate availability for operational assignments	• Contractual vehicle mix may not provide proper social distancing, causing the addition of vehicles outside of the contract, possibly requiring the modification of the contract. May result in a delayed response. • Travel issues may arise, such as: lack of open restaurants, rest areas may be closed, difficulty of obtaining overnight lodging, possibly delaying response.

Pros	**Cons**
Contract Crew Buses	
• One vehicle per crew. • Ability to keep one crew assigned to a single bus. • No need to ensure that the crew has licensed drivers. • Bus operator responsible for cleaning and sanitizing the vehicle.	• May need two buses to maintain social distance. • In the event of a positive test, the whole crew will need to be quarantined, along with the bus operator.
Rental Vehicles	
• Better able to maintain social distancing. • In the event of a positive test, may reduce the number of personnel to be quarantined. • Better able to split the crew for operational assignments.	• Need at least one licensed driver for each vehicle. • Crew members are responsible for cleaning and sanitizing the vehicles. • May need additional vehicles to maintain social distancing.
Helicopters	
• May be the only way to transport crews to some locations.	• May need to clean and sanitize after each personnel flight. • In the event of a positive test, in addition to the crew, the Helitack module and pilot may also need to be quarantined, requiring their replacement.
Boats	
• May be the only way to transport crews to some locations. • Use is not dependent on suitable weather for aviation.	• May need to clean and sanitize after each trip. • In the event of a positive test, in addition to the crew, the operator will also have to be quarantined, requiring a replacement.
Single/Twin Engine Planes (Twin Otter, etc.)	
• May be the only way to transport crews to some locations.	• May need to clean and sanitize after each trip. • In the event of a positive test, in addition to the crew, the pilot will also have to be quarantined, requiring a replacement.
Lowboys & Rental Vehicles	
• Transporting an engine on a lowboy while having the engine crew drive rental vehicles keeps the engine in service in the event a crew member exhibits symptoms or has a positive test while enroute, isolating the whole crew.	• In the event that the lowboy operator becomes ill, the engine may be delayed in arriving.

Appendix F -- Wildfire Smoke and COVID-19

Background on Wildfire Smoke and COVID-19 Risks

Community exposure to wildfire smoke has been directly linked to deaths in the United States. A Washington State study attributed 600 deaths to wildfire smoke in 2017 and a US Environmental Protection Agency study estimated annual mortality from wildfire smoke to be between 1500-2500 deaths.[1,2] In addition to an increased mortality risk, exposure to smoke (from wildfire and biomass burning) may affect lung health and has been found to be associated with respiratory infections (influenza, bronchitis, and pneumonia).[3,4,5] Although research has not been conducted on how exposure to wildfire smoke is associated with COVID-19, it may lead to an increased susceptibility to COVID-19 infection, worsen the severity of the infection and pose a risk to those who are recovering from serious COVID-19 infection. These risks from wildfire smoke and COVID-19 combined are an important consideration for both the health and safety of communities and fire personnel.

Wildfire Smoke and COVID-19 Response Plan

As part of the Interagency Wildland Fire Air Quality Response Program (IWFAQRP), the Forest Service began assessing the implications of wildfire smoke combined with presence of COVID-19 in March 2020, leading to the initiation of a smoke response plan. The IWFAQRP (wildlandfiresmoke.net) was created to directly assess, communicate, and address risks posed by wildfire smoke to the public as well as fire personnel as recognized and authorized under the Dingell Act of 2019. The program depends on four primary components: 1) specially trained personnel called Air Resource Advisors (ARAs) who are deployed to incidents to address smoke issues, 2) air quality monitoring capability through a cache of deployable instruments, 3) smoke concentration, dispersion modeling, and public air quality prediction outreach tools, and 4) coordination and cooperation with agency partners. Although the Dingell Act directs use of ARAs to the maximum extent practicable on federal wildfires with Type 1 teams, wildfires of all organization levels with smoke impact issues may also benefit from ARA assistance. States and tribes use ARAs as well and are anticipated to have similar needs in 2020. Dispatches are similar to the IMET program by name request in coordination with the IWFAQRP as outlined in Regional Mob Guides.

All elements of the response plan are subject to change as new science emerges surrounding wildfire smoke and COVID-19 and as operational needs develop/evolve throughout 2020. In order to address both concerns for communities and fire personnel, the IWFAQRP and its partners are developing tools to address the challenge of wildfire smoke and COVID-19. Tools under rapid development are: 1) a Smoke Ensemble Forecast Tool (SEFT) to improve ARA and partner operational smoke forecasting, 2) a Smoke Early Warning System (SEWS) that integrates fire outlooks and potential for significant fire growth with emissions to provide extended warnings to communities, and 3) a Community Assessment of Prescribed fire Smoke Risk (CAPSR) tool for COVID-smoke vulnerability and at-risk populations. At the national level, IWFAQPR is coordinating with the Centers for Disease Control and Prevention, National Institute for Occupational Safety Health, Environmental Protection Agency-Office of Air Quality Planning Standards, Environmental Protection Agency-Office of Research and Development, National Oceanic and Atmospheric Administration, National Aeronautics and Space Administration, and Federal Emergency Management Administration to ensure alignment,

coordinated and consistent messaging, and to leverage efforts addressing potential risks posed by wildfire smoke and COVID-19.

Key activities of the IWFAQRP and ARAs are highlighted below. Best practices for smoke in an environment with COVID-19 are outlined in the last section below.

Interagency Wildland Fire Air Quality Response Program

- Ensure the national cache of smoke monitoring instruments is adequately stocked, well managed, and ready for dispatch.
- Ensure there will be a prepared cadre of ARAs who are well trained in smoke/COVID-19 issues, prepared to use new analysis tools, and work closely with health agencies on public messaging and outreach.
- Prepare ARAs for collaboration with agency administrators and teams on best management practices for reducing smoke exposure of personnel.
- Assess and maintain a roster of ARAs available for remote assignment.
- Create talking points and guidelines for ARA use when engaging with partner agencies and the public on smoke/COVID-19 health issues.
- Create analysis tools for ARAs and train them to better assess smoke effects to communities at heightened risk of, and/or dealing with COVID-19 outbreak and individuals recovering from COVID-19.
- Develop approaches to have ARAs promote individual and community awareness of interaction of smoke/COVID-19 and how to be more smoke ready.

Air Resource Advisors

- Forecast smoke dispersion and concentrations for fire camps and downwind communities.
- Work with MEDL and local health agencies on smoke issues
  - ➢ Relay information about smoke predictions (expected concentrations and duration).
  - ➢ Characterize vulnerability of community to COVID/smoke.
  - ➢ Design and implement locally appropriate outreach and messaging.
- Promote smoke ready community concepts and inform the public and health agencies where to get additional information.
- Establish key lines of communication with IMT, Planning Section, PIO and AA as appropriate based on IMT guidance.
- Order and deploy smoke monitoring equipment as needed.
- Develop smoke projections from active wildfires.
- Work with local health departments to inform of predicted smoke concentration and duration.
- Use dispersion modeling to help identify best locations to minimize smoke for ICP and remote camp locations.
- Use approved messaging to inform the public about smoke/COVID-19 concerns.
- Collaborate with agency administrators and teams on best management practices for reducing smoke exposure of personnel.

Best Management Practices for Wildfire Smoke Considerations

General

- Based on the concerns regarding wildfire smoke and COVID-19, consider having all fire personnel watch the NWCG *Smoke: Knowing the Risks* video (https://www.nwcg.gov/publications/training-courses/rt-130/hazards/haz508)
- Each Geographic Area should establish "leads" (by state if applicable) to plan for and communicate on potential wildfire smoke interactions with COVID-19. Such leads should have practical smoke experience and/or training.
  - ➢ Assess local smoke monitoring capability for PM2.5.
  - ➢ Inventory federal, state and local agency PM2.5 monitor cache status of equipment, personnel availability and policies for deployment.
  - ➢ Communicate expected needs for IWFAQRP Cache equipment.

Agency Administrators

- Establish relationships and contacts with state and local health departments and air regulatory agencies for use when smoke impacts are anticipated and for use by ARAs when assigned to incidents. Promote smoke ready community concepts and where the public and health agencies can go to get information. See: https://www.epa.gov/smoke-ready-toolbox-wildfires
- Consider assignment of ARAs to an incident (assigned to the IMT) as early as possible to help address smoke issues including smoke and COVID-19.
- Discuss wildfire smoke and COVID-19 when in-briefing IMTs and/or developing delegations of authority with clear expectations for addressing smoke (e.g.: close coordination with Air Quality Agencies and State/County Health Department).
- Establish guidelines for mop-up standards and other administrative and engineering controls to minimize smoke exposure.

Incident Management Teams

- Locate Incident Command Posts, modular base camps and spike camps in areas with least smoke exposure practicable. Use ARAs for assistance on smoke dispersion and smoke accumulation predictions.
- Consider use of hotels with AC/air handling ability or use of air filtration devices to house teams and crews if smoke will be a persistent problem in camps.
- Consider placing an air quality monitor or sensor in camps to track smoke levels.
- Consider providing medical units with air filtration for isolation of COVID-19 patients.
- Use *Six Minutes for Safety* to discuss smoke impacts on firefighter health.
- Discuss ways to reduce working in smoke on a daily basis.
- Rotate personnel in and out of situations where smoke exposure is unavoidable (mop-up, holding, and firing operations) or use other techniques to reduce smoke exposure.

References

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