Incident Logistics in the Age of the COVID-19 Virus

"You will not find it difficult to prove that battles, campaigns, and even wars have been won or lost primarily because of logistics."
-General Dwight D. Eisenhower

There are approximately 30,000 wildland firefighters in the United States. On a large wildland fire, it is not unusual to have thousands of hungry, tired firefighters and law enforcement officers being supported out of an Incident Base Camp. Over 8,000 responders moved through the Incident Base Camp at the 2017 Thomas Fire in Ventura and Santa Barbara Counties – all needing food, fuel, rest, showers, laundry, supplies, medical care, and briefings on the actions they would execute out on the line. All were breathing, sneezing, coughing, and eating in tight, crowded facilities.

If that does not scare you enough in the time of the 2019 Novel Coronavirus (COVID-19), think about the 2010 Deepwater Horizon oil spill that spanned five states and had as many as 50,000 responders from all over the globe. What if we had another large-scale disaster like that now?

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The worldwide impact of COVID-19 has forced Logistics Section Chiefs (LSCs) to completely alter the way they think about providing essential support to emergency

responders. As we enter the 2020 season, those within the wildland fire management community fear that an Incident Base could be a factory for spreading the COVID-19 virus, devastating our response capabilities and management of wildfires in the United States. Infected firefighters might then take the disease home to their fire stations, communities, and families.

As LSCs, we know we must continue providing service and support for responders in a COVID-19 response world. Fires still need to be put out; oil spills still need to be cleaned up; and rescue efforts still need to happen after hurricanes and earthquakes. Now we must change our way of doing business and do all we can to protect our responders from the virus. How do we maintain social/physical distancing in typically crowded Base Camps? How do we feed our responders while maintaining hygiene protective measures? Should crews be riding shoulder-to-shoulder in a crew vehicle? Do we use tents or motels? How do we conduct a briefing, so attendees are not crowed in a briefing tent? How can Logistics help our responders and their families stay healthy?

Recently, the National Multi-Agency Coordinating Group (NMAC) at the National Interagency Fire Center in Boise, Idaho, activated all three Area Command Teams (ACTs), comprised of Subject Matter Experts (around 10 per team) from all disciplines of wildland fire response. Their task was to develop Wildland Fire Response Plans (WFRPs) 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. These plans are intended to be single points of reference, providing considerations or “Best Management Practices” (BMPs), for those tasked with the management of wildland fires. The WFRPs specifically target the wildland fire responder; however, the content has great value and can be aptly applied in the All Hazard response community.

In creating the COVID-19 Wildland Fire Response Plans, we were asked to stay at the 30,000-foot level with our ideas. While our focus was on wildland fire, many of these BMPs have global all-hazard applicability that should be considered during your response in a COVID-19 environment and beyond. We looked at these BMPs from the viewpoint of the LSC and the six units within the Logistics Section.

BMPs common to all Logistics sections

- Conduct “COVID-19 Screening Tool” daily. Follow established crew/section procedures.
- Ensure proper Personal Protective Equipment (PPE), as recommended by the Centers for Disease Control and Prevention (CDC), is available.
- Follow CDC and local health agency protocols for cleaning all work surfaces, tools, vehicles, and equipment.
- Consider additional sanitary facilities to accommodate personnel cleanliness.
- Ensure development and implementation of social/physical distancing practices.
- Have contingency plans (PACE – Primary, Alternate, Contingency, Emergency) in place for connectivity failures (extra landline phones, etc.).

BMPs for the Logistics Section Chief

- Plan for unconventional Incident Command Posts (ICPs), camps, lodging, or situations; and for supporting them with diminished capabilities.
- Plan to establish and support scattered spike camps (divisions, segments, etc.) to meet modular isolation recommendations.
- Prepare ahead of assignments how to logistically support an incident with increased staffing and equipment.
- Coordinate with local and regional supply caches to determine COVID-19 support capabilities for an incident.
- Consider badging at ICP, base, and other satellite facilities.
- When possible, shift away from large centralized ICPs and camps.
- Limit interaction between the incident and local communities.
- Arrange for on-incident support vendors and contractors (fueling, maintenance, sanitation, laundry, etc.) that are following CDC and local health authority COVID-19 protocols.
- Implement rigorous cleaning and sanitation practices, per CDC and local health authority recommendations.
- Order additional Logistics Section staff to support dispersed operations. Increased staffing will allow greater presence at Check-In, Supply, and Demob.
- Plan for scenarios where isolation locations can be established.
- Check with Facilities for security needs at isolation areas.
- Work with local and regional caches to establish ordering and return protocols.

BMPs for the Ground Support/Transportation Unit

- Limit personnel numbers and foot traffic in the mechanic and inspection areas.
- Maintain BMP protocols with drivers when transporting personnel and materials.
- Establish and implement a "one driver-one vehicle" assignment policy.
- Brief all vehicle and equipment contractors on required prevention practices daily.
- Maintain situational awareness when transporting people or materials (airport runs, spike camp runs, etc.).
- Thoroughly clean and decontaminate interior of all arriving ground support unit vehicles prior to use.

BMPs for the Medical Unit

- Implement medical screening prior to entry into incident facilities.
- Consider establishing ICP/Base Camp as a “clean zone.”
- Control access to ICP/Base Camp.
- Consider virtual work environment, where feasible.
- Medical unit personnel should review the most current guidance from the CDC.
- Consider placing an Infectious Disease Technical Specialist (THSP) in the Command structure.
- 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. Consider alternative testing and treatment locations.
- Identify alternative methods of providing medical supplies other than physical contact.

- Prepare to establish a minimum of four medical stations at ICP/Base Camp:
  - Typical illness/injuries associated with suppression work.
  - Triage for COVID-19.
  - Quarantine, per local health official order.
  - Isolation, per local health official order.

BMPs for the Supply Unit

- Develop a Supply Unit incident-within-an-incident (IWI) COVID-19 protocol.
- Arrange for additional unit-dedicated sanitation facilities and support.
- Consider using more area to issue and receive accountable and expendable items to maintain social/physical distancing practices.
- Consider using virtual technology for Ordering to increase social/physical distancing.
- Limit the number of personnel working in a yurt, tent, building, or room.
- Limit the number of personnel at distribution and receiving to essential people only.
- Establish sanitation requirements for all cache returns, based on CDC and local health agency protocols.
- Consider ordering heavy on MREs, 1660 and 1675 lots, and barrier kits.
- The Supply Unit Leader and Cache Manager should be in contact daily.

BMPs for the Food Unit

- Complete all food item preparation and packaging for delivery according to FDA guidelines for food preparation, given the current COVID-19 situation.
- While infection is most likely caused by person-to-person contact, ensure safe handling of all backhaul by wearing gloves and performing proper hand hygiene.
- Recommend additional cleaning/sanitation protocols.
- Ensure food service contractors, caterers, and vendors are implementing COVID-19 practices and following local health department standards and guidelines.
- Increase capacity of self-sufficiency in Food Unit by being able to support seven days of fresh foods, bag lunches, freeze dried foods, or MREs.
- Federal caterers will continue to supply meals, with various modifications: seating may not be provided; self-serve areas will no longer be available; use of services through walk-up windows will be limited; and the use of a self-serve salad bar will be discontinued. Consider having the caterer provide meals in “to-go” boxes rather than sit down meals (no mess tents).
- Mobile Kitchen Units (MKUs) will continue to supply meals, with potential modifications: use of services through walk-up windows will be limited; and the use of a self-serve salad bar may be modified. MKUs will have additional staffing, more handwashing stations, and foaming hand sanitizer stands.
- Remove self-serve drink stations; have an individual issue drinks at a staffed station.
- Services should be provided to Incident Management Team (IMT), ICP personnel, and resources that are in close proximity to ICP; however, most fireline resources can be supported through small spike camp operations (to-go style feeding options, similar to “hot cans” or Cambro containers).

- If supporting multiple small spike camps, increase packaging needs and logistical support, if delivery is required. Packaging will increase trash/recycling volumes.
- Plan, accordingly, as caterers may have supply issues.
- Consider MREs for initial attack, extended attack, and Type 3 fires when other options are not viable.
- When utilizing restaurants, ensure they have facilities large enough to implement increased social/physical distancing or use a takeout option.
- Consider staggering serving times and using alternate serving method(s) to meet social/physical distancing guidelines.

BMPs for the Communications Unit

- Communications Unit Leaders (COML) and Information Technology (IT) Specialists should develop plans for effective use of communications and IT equipment, determining which position/tasks can be done virtually.
- Develop standards for cleaning radio kits, repeaters, IT hardware, and storage labeling. Include best practices information with kits for care, use, and return. Follow manufacturers recommendations.
- Develop or review the IWI plan, with COVID-19 in mind.
- Require training on COVID-19 protocols for incoming resources prior to assigning tasks.
- Consider expanding bandwidth capabilities to meet the needs of the incident. Improve both incident ICP/Base and field connectivity when working virtually or in remote locations.
- Clone one radio for a crew and have crew resource clone the remainder of their radios.
- Consider modes of travel when selecting equipment (repeaters, phone equipment) locations, as it relates to potential for exposure.
- Utilize storage devices such as assigned/non-returned USB drives to share information and programming to reduce handling of hardware between incident personnel.
- Develop strategies for distribution of batteries and communication supplies. Set up pick-up and drop stations for supplies and waste; consider exposing supplies to open air/sunlight to limit virus exposure and spread when possible.
- Expand Communications/IT footprint to ensure social/physical distancing in facilities or other structures. Consider having RADOs work from remote/offsite locations.
- Utilize Cloud storage or electronically send files to reduce person-to-person contact.
- Develop tracking log for devices cleaned during an incident and prior to demobilization.
- For radio repair/replacement, control access to one person at a time.
- Source and front-load acquisition methods to expand IT capability.

BMPs for the Facilities Unit

- Develop a Facilities IWI procedure prior to assignments.
- Pre-order needed cleaning and sanitation supplies and PPE (face mask, gloves, gowns).

- Consider the need for expanded areas for all required workspaces.
- Work with local health agency to determine geographic areas with low incidence of COVID-19.
- Establish an isolation area with all required support.
- Provide guidance on use of PPE to all Facilities staff and camp crews.
- Coordinate with other units and sections for a rigorous cleaning and sanitizing schedule.
- Ensure ALL contractors have COVID-19 compliance procedures in place and are implemented.
- Limit unit exposure to essential personnel only.
- Post CDC and local health agency protocols in prominent areas of ICP/Base/Spike Camps, etc.
- If hotels/motels are used, consider the social/physical distancing requirements when arranging rooms.
    - Modules may use two personnel per room while still maintaining social/physical distancing.
    - Ensure the establishment follows CDC and local health department standards for cleaning and disinfecting the rooms.
- If sleeping trailers are used, ensure the contractor has staff to maintain local health department standards.
- When using sleeping trailers, reduce the amount of personnel utilizing the trailers by half to maintain social/physical distancing requirements.

BMPs for Security

- Develop a Security Unit IWI plan prior to assignments.
- Work with the home unit to determine if the ICP/Base is to be in or near a security high-risk area.
- Restrict access to all incident facilities.
- Establish virtual section meeting and interview methods.
- Consider badging at ICP, base, and other satellite facilities.
- Consider the use of a one-way traffic pattern.
- Check with Facilities for security needs for isolation areas.
- Work with the Medical Unit to identify medical supplies of high value or need.
- Liaise with local law enforcement to ensure a good working relationship, local restrictions, and closures.

The motto of a Logistics Section is simply this – “Yes, we can.” We can provide beans, bullets, and band aids to our responders, but in this time of COVID-19, we will have to take imaginative and thoughtful steps to account for social/physical distancing requirements by redesigning ICPs and Base Camps, meal serving techniques, and personal hygiene guidance, as given to us from the CDC. We must continually monitor and evaluate our BMPs for effectiveness in keeping the virus out of our responder community. Our BMPs will be tested, and we will learn along the way as crews respond to emergencies.

In this article, we have reviewed the BMPs included in the Wildland Fire Response Plans (WFRPs) from the Area Command Logistics Group. To view the complete plan for your Geographic Area, visit the NIFC website.

About the author: Jim Neumann spent over thirty years in the California Fire Service (CALFIRE), to include service as a State Training Officer, and is currently certified as a Type 1 LSC and an Assistant Area Commander, Logistics on a Federal Area Command Team. In addition, Jim applies this expertise and experience to our clients as a lead instructor and subject matter expert in incident response Logistics for EMSI.

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