

## Lessons on COVID-19 mitigations on the Lump Gulch Fire

The Central Montana Zone Type 3 Incident Management Team took command of the Lump Gulch Fire at noon on Sunday, June 14<sup>th</sup>. As part of the in-brief the hosting units asked for a Lessons Learned document at the conclusion of the assignment. What follows is the IMT's account of dealing with COVID-19 mitigations on an incident.

Large fires in Central Montana are rare this time of year and many people were caught off guard by this fire. The Central Montana Zone IMT was not scheduled to be available until July 1<sup>st</sup>. This fire was the first time many of the area dispatchers had used the new Interagency Resource Ordering Capability (IROC) system. As the IMT was assembling there was a feeling of rushing, of plans being made on the fly.

The IMT, like the rest of the firefighting community, had been reading lessons learned from around the country for months. We had met to talk about potential mitigations and felt we had reasonable plans to deal with the potential issues. But vigilance is hard to maintain against an unseen threat. Throughout the ongoing COVID-19 pandemic, Montana has been largely spared. Confirmed cases have been near the lowest in the country and the governor had relaxed most of the restrictions almost 2 weeks prior to the fire.

### In-Briefing

When the IMT arrived for the in-briefing at the Montana Department of Natural Resources (MTDNRC) Central Land Office (CLO), only the Incident Commander went inside. The CLO Area Manager affirmed his agency's commitment to taking COVID-19 seriously and asked that all non-essential personnel remain out of the office.

The in-briefing was outside and well planned with tables and chairs spaced for social distancing. However, shortly after the in-brief started, rain began to fall. The rain steadily increased until the local staff relented and opened their shop doors. Everyone filtered inside for breakouts. Spacing was difficult to maintain as everyone circulated around to get their



*In-Briefing at CLO Shop*

questions answered. This was the first fire of the year for most and the first time seeing their counterparts since last season. The uncomfortable “no handshake” greeting was mostly used, but conversations were difficult to hear with the crowd so everyone crowded together.

## Logistics

### *Alaskan Fire Camps*

*Typically, on large Alaskan fires, operational resources do not return to a central camp. Crews usually remain in small spike camps and are supported remotely by the ICP. This places a large workload on the logistics section, but greatly reduces exposure of operational resources to infectious disease and travel risks.*

Prior to the in-briefing it had been decided to have the Incident Command Post (ICP) at the school in Clancy, MT. The school was near the fire, so it would reduce driving time and line resources would not have to deal with morning traffic congestion. The IMT had discussed running an “Alaskan-style” camp in the preseason as the most likely way to mitigate potential COVID-19 exposures.

After the in-brief, the agency administrators and the incident commander changed course on the camp. Rain had started falling steadily and more was forecasted for the next week. Also,

although the fire was predominately on federal land, any possible spike camp locations were on private land. This would have required several land use agreements (LUA’s). The decision was made to host the entire incident organization at a hotel. The IMT’s logistics chief along with the local unit located a large hotel on the south end of Helena. The hotel was largely empty due to there being few travelers in the area and it had several large conference rooms available. Using the hotel as housing and ICP eliminated many logistical needs. All crews were self-sufficient and could feed themselves. Personnel needs and costs were also significantly reduced by not needing showers, caterers, outhouses, hand-wash stations, basecamp managers, drivers, etc.

The ICP was located in one of the large conference rooms. This allowed for adequate spacing between functional areas and controlled access. Initially the IMT had the doors open to the ICP conference room with signs stating “IMT Members Only.” Each functional area used tape to delineate proper spacing. Most visitors actually followed this direction and stood on the tape. Unfortunately during the morning briefing, people started congregating in the IMT space. Eventually the



doors had to be closed with a single entry point “guarded” by a table. This table eventually served as the physical contact point for the IMT.

## Briefing

When the IMT took over the fire at noon on June 14th, there were approximately 150 personnel on the fire. Most of the personnel were on hotshot crews or Type 2IA crews. The Operations Section Chief (OSC) passed the message for only crew leaders to attend the morning operational briefing on the afternoon of June 14th. The IMT assumed only 15-20 personnel would be at the morning briefing. The morning of June 15 the IMT entered the briefing room and were greeted by a large crowd. Old habits are hard to break. Entire engine crews were in the room and crew leaders brought trainees and squad leaders. This was the first large fire of the year and was also visible from the capital, generating a lot of interest.

The need for a larger briefing room was quickly identified and remedied. A different conference room, triple the size, was used after the initial briefing. Despite this, too many people still showed up and spacing was not adhered to. On the third day seats were spaced and all IMT members wore face coverings. The briefing room had two doors so signs were posted to designate one for “enter” the other “exit” to provide for one-way traffic flow. By this point only necessary personnel were showing up and most wore face coverings.



*“Guard” Table*



*Briefing on June 15th.*



*Briefing on June 17th*

## Plans and Finance

Check in and finance were initially conducted using a “reduced exposure” method by having one customer at a time in front of the check in table with blue tape on floors to designate 6 feet distance between customers and IMT members. After the initial rush of getting the IMT in place, the pace slowed down. The fire had stalled and this allowed the opportunity for some experimentation with “virtual” techniques.

Finance set up a process for digital CTR submission. Fire personnel could either use a digital CTR and sign using an Adobe app, or take a picture of their signed CTR. These signed CTR’s were sent to finance through email and text messages. Unfortunately with the backlog of FireNet accounts being set-up, finance had to use their work email. This meant that there was no shared electronic inbox. When the finance POC received an email or text CTR, they would upload the CTRs to the electronic file folder in Box labeled ‘For Entering and Filing’. Errors with the mobile Box app caused some files to not upload to the web version of Box/Pinyon. Troubleshooting figured out that this resulted when trying to rename the CTR by last name prior to filing in Box for ease of entering.

The IMT experimented with different ways to accomplish check in and Demob. Eventually the “Guard” table was used for check in/demob and was the point of contact for the IMT. QR codes linked to a form asking the standard demob questions were used and the table was staffed by an IMT member to mediate interactions between finance and supply or to help technology-challenged customers with the process of check in/checkout. Demob functions were completed electronically using a spreadsheet which was populated in real-time from answers to the questions posed from the QR code. Similar to “virtual” time submission, most crews and engines had no issues with this venue. Equipment operators, on the other hand, tend to be older and often do not have devices capable of these “virtual” functions. IMT personnel used face covering and gloves when interacting with personnel that required hard copies. Another unanticipated hole occurred when an AD employee checked in and a day later was determined to not have a current red card.

The IMT also ran into discrepancies in documentation standards. The local Forest Service district required all documentation to be electronic and in Pinyon. The local State unit required a hardcopy Doc Box. Yet FireNet is the nationally directed site for shared documents. Both Finance and Plans recognized early on that additional personnel will be needed just to manage electronic documents. File structures and naming conventions will need to be standardized. When Plans searched the NWCG Documentation Committee website, there was no mention of electronic data standards. Thankfully the Forest Incident Business Advisor (IBA) created the desired file structure at the outset of the incident.

## Safety

Immediately upon arrival, the Safety Officer started contacting the local health departments. The majority of the fire sat in Jefferson County and the ICP was in Lewis & Clark County. Both county public health departments were contacted and recommendations for camp set up were gathered. Jefferson County, due to its more rural setting, was not that concerned. Lewis & Clark County, on the other hand, had several recommendations regarding table layout, physical distancing, and face coverings. The recommendations were for one person per table and face coverings if 6 ft. spacing could not be maintained.

The Safety Officer also quizzed Lewis & Clark County on the process in case of a suspected COVID-19 case. Following is the current protocol:

1. *Testing occurs.*
2. *If Positive, the Doctor will gather personnel information.*
3. *Contact Tracing would start.*
4. *Contact Tracing- Identify as many people as possible that were around the infected individual 48 hours prior to when they were symptomatic. This would apply to those who were nearby the positive individual for 15 to 30 minutes and at arm lengths distance.*
5. *Those identified as being contact traced would need to be quarantined for two (2) weeks. This would be a quarantine at work. Limiting movement where you would go to a room and would not be able to go to public places such as a restaurant. Meals would be delivered and left at door.*

This protocol was placed in the Incident Action Plan (IAP) to inform fire personnel of the process and the possible consequences. Everyone's beliefs and thoughts on COVID-19 are different. Some fire personnel were not concerned about the health effects, but the effects to their peers were much more of a concern.

On June 18, the IMT invited Dr. Harry Sibold to speak at the operational briefing. Dr. Sibold has been advising the regional incident medical specialist program and IMT's across the country on COVID-19. The presentation allowed fire personnel to hear the latest information and ask questions of an expert. Most felt appreciative to hear someone who was a medical expert and understood the work we do. It became abundantly clear that "best management practices" are changing rapidly around this pandemic and there is a need for regular "briefings" to update everyone. Afterwards, a hotshot superintendent asked why we couldn't post a briefing from Dr. Sibold weekly on the Northern Rockies website. This could be similar to the regular weather briefings produced by the predictive services.

As the flight path of the fire became clearer, the Safety Officer again contacted Lewis & Clark County Public Health. This time to inquire about testing fire personnel before they demobed. Every time the IMT attempted to contact the county public health department, calls were met

with a voicemail message. Often times it took several attempts before calls were returned. The anticipated start of demob was coming near and the Safety Officer wanted an answer on testing. The PIO trainee on the IMT was a Montana Department of Emergency Services employee and used their department to apply some pressure. Also the Incident Commander contacted the District Ranger to also push for some answers. Finally the health department responded. There was not enough time to set up testing and get results back before demob. Maybe on a longer duration fire this may be an option.

## **Operations**

On June 17<sup>th</sup>, the fire was receiving significant rain, so line personnel were pulled back into camp. Operations tasked the Division Supervisors with leading a discussion on lessons learned as it relates to attempting to operate with the COVID 19 element. Following is a synopsis of bullet statements which capture the thoughts and discussions that occurred. Most of these were questions because the uncertainty of how employees will be supported is still unclear.

- What is the process if a positive test is generated from a person in the fire camp?
- What is the time or distance or interaction that warrants a test for those in contact?
- Will a person be taken care of if they are positive?
- What does that look like?
- Are we going to be taken care of and in what way?
- If even 1 person on the incident tests positive, does that mean everyone is a potential contact case?
- Are there quarantine facilities, do we quarantine here or somewhere else?
- Who pays for a quarantine facility?
- Should we be testing all fire fighters when they come off the fire so we know we are getting sent home safe and uninfected?

Here are comments specific to the Lump Gulch Fire:

- We had briefings in a large conference room
- More people attended than we anticipated and no one wore masks
- Next we moved to a much larger room, we had fewer folks, but still no one wore a mask
- We eventually had few people without masks in a briefing
- The motel and being self-sufficient completely reduced needing a caterer, toilets, hand wash stations, garbage, camp crews, security, a land use agreement, setting up internet, etc.
- The ease with having the accommodations already in place with all the amenities was huge
- Having rooms with showers kept all fire fighters clean and sanitary
- People were able to eat to a specific dietary need



On the fireline, crews stayed contained to their modules. There were interactions between crew overhead and IMT operations personnel, but for the most part work was largely unchanged.

## Conclusion

The IMT's demob plan was to complete the closeout and demob on the afternoon of June 19. That afternoon the closeout was held in the large conference room used for briefings. Chairs were spaced out in a large circle, and a conference call line was also set up for those not able to attend. The IMT did not require face coverings, but did wear them themselves. This example encouraged everyone else attending to also wear face coverings. The large spacing and face coverings lead to difficulties hearing participants. Speakers could not be heard on the conference call without standing near the telephone. The difficulty with hearing and having to remove face coverings every time someone spoke seemed to stifle discussion.

The difficulties with hearing and stifled discussion highlighted some of the unforeseen consequences of our COVID-19 mitigations. Many of these details will not reveal themselves without practice or implementation. Thankfully this fire's pace allowed the IMT to experiment and see what works. Since COVID-19 is a public health issue, coordination with the county public health departments is crucial. Each county is going to be different in their expectations and capacities, start having conversations before the fire starts. Also, IMT's and Agency Administrators need to keep up to date on the current COVID-19 mitigations. Firefighters are intelligent, so trying to enforce mitigation measures that are no longer recommended will eat at our credibility. Those mitigations and expectations that are identified need to be clearly communicated. We need to stop pushing this down, leaders need to lead. Finally the IMT would like to thank all the fire personnel for their patience as we were finding the path forward.

### ***Lump Gulch Fire Desired End State:***

*All fire personnel return home safely and do not contribute to the spread of COVID-19 to their communities. The fire spread Potential is minimized. Access lines and Helispots are in place to facilitate future patrol and mop-up operations. Fireline adjacent to private structures is fully contained. The public and our cooperators are informed on the fire status and know they will be living with this fire and the accompanied smoke for the foreseeable future.*

Prior to the IMT's demob day, a survey was created in Survey Monkey and passed to all fire personnel through text messages. The IMT received 18 responses from the 130 personnel assigned to the fire. Some of the responses were consolidated within crews and personnel without a smart device were probably unable to

participate. The results of the survey can be found after the summary of lessons learned.

### **Summary of Lessons Learned**

- In order to be able to get ICP established and operational concurrent with COVID guidelines, plan to purchase hand sanitizer/antiseptic wipes/masks through local purchase as opposed to waiting for an order to be filled through the usual ordering channels.
- Assume more people will attend than you expect. Provide a briefing space large enough to allow for proper social distancing. Set the expectation at the beginning of the briefing. Incoming IMT could have worn face masks to set the example. It was a nice day, briefing could have been spontaneously moved to the parking lot.
- Leaders need to lead. We cannot just dip our toes in. Set clear expectations and communicate them. Most everyone is looking for guidance and dislike the “Do what makes you feel comfortable” guidance.
- ICP should be set up to minimize folks from unnecessarily coming in. Check-in/Demob should act as a barrier to the rest of the C&G if in a large conference room.
- Have one electronic inbox (Email address of your choice and/or phone number for texts) and have one person only monitoring incoming time and putting it in a central location for processing. If needed, have 2 separate electronic inboxes, one for personnel and one for equipment time.
- Remain flexible as not all folks have the ability yet to go totally electronic.
- Bring mobile Sneeze guards for all time and finance personnel
- Questions we pondered – is fully electronic finance necessary in a COVID environment or is social distancing the requirement?
- Don’t wait to learn all the new programs on the fly. Practice scenarios with your IMT members before an assignment.
- Expect your production to be at a slower pace.
- There are many rules and regulations that challenge or prevent us from using communication platforms accessible to other agencies/partners given our new work environment. However, with all the remote or virtual options being explored, many of these will end up creating efficiencies that will turn into the new normal. For example, virtual check-in/demob, online meetings (Teams, Zoom, etc). Trello has been a great tool for resource tracking between functions.
- Our environment would feel safer having extra people available to providing antibacterial sanitation on common surfaces like door handles, buttons, pens, machines etc. They could also be used to do errands, provide an extra pair of hands/eyes. The questions is who does this? Will we have camp crews available?
- An order for COVID PPE was placed immediately upon ICP set up. A communication glitch occurred and the supplies didn’t arrive until the afternoon of the following day.



Therefore we did not have COVID PPE available for initial morning briefing. Pre-orders should be mandatory or the IMT needs to carry a purchase card for making local purchases. We were fortunate to be in a city where these items were readily available. This may not be the case in more rural areas.

- The hotel and being self-sufficient completely reduced needing a caterer, toilets, hand wash stations, garbage, camp crews, security, a land use agreement, setting up internet etc.
- Contact the county public health department you are in ASAP to see what their C-19 protocols are (social distancing recommendations, testing options, etc.)
- The need for cell phone numbers and email addresses for every resource is more critical than ever so virtual information can be shared widely (remote check-in, surveys, IAP's, CTR's, virtual meeting links, remote demob, etc.)
- There are large gaps in understanding different agencies policies. AD employees, especially those filling Safety Officer roles, are largely in the dark when it comes to all the discussions that have gone on within different agencies concerning how to respond to incidents in a Covid-19 environment.
- Expect an inner journey in the process of learning new personal boundaries and comfort levels. It's surprising how it changes with regard to other reactions and behaviors.
- IMT's, AA's, and firefighters need to keep up to date on the latest BMP's. How can we facilitate this without overwhelming people.
- Old habits are hard to break. It's difficult to not shake hands with old friends or when meeting new people.

The IMT sent out a survey to provide an anonymous conduit to gain a sense of what peoples comfort level. Eighteen people responded with an approximately 14% response rate. Below we provide the raw data results and the questions asked:

**Lump Gulch Fire Response COVID-19 Mitigation Survey**

How safe do you feel with the COVID-19 mitigations provided for each category below? (If a section does not apply to you, feel free to skip over it)

1. How safe did you feel with COVID-19 Mitigations at the ICP?

Unsafe    Ok    Safe    Very safe    N/A

Please explain how we can improve and what we did well:

2. How safe did you feel with COVID-19 Mitigations at Briefings?

Unsafe    Ok    Safe    Very safe    N/A

Please explain how we can improve and what we did well:

3. How safe did you feel with COVID-19 Mitigations at the facilities?

Unsafe    Ok    Safe    Very safe    N/A

Please explain how we can improve and what we did well:

4. How safe did you feel with COVID-19 Mitigations in the field?

Unsafe    Ok    Safe    Very safe    N/A

Please explain how we can improve and what we did well:

5. Is there anything else you would like us to know?

Submit

Powered by SurveyMonkey

### 1. How safe did you feel with COVID-19 Mitigations at the ICP?

5.6%	Unsafe
50	Ok
33.33	Safe
11.11	Very safe

Did well: addressing the fact that the first briefing room was not a sufficient size.

Hand sanitizer and mask were readily available.

Utilizing the hotel for ICP and resource housing demonstrates a strong understand of the COVID situation and the desire of the team to explore new approaches to our historical incident management model.

Maybe worth exploring ways to limit potential interactions with the public. ie designated doors and areas for fire personnel only

I think we are very used to having an open door policy with the various sections. Historically, it's been great to be able to walk in and talk to folks.

Although the Team has requested electronic CTRs, General Messages, etc., those folks together in an open room with the door open still encourages people to drop by and contact those folks in person even

though it may not be needed. Although I don't see why many of those folks can't be completely remote, perhaps there are very valid reasons for them on site. However, perhaps it would be more prudent to have operational resources physically interact by some more limited means. (I.e., not open-door)

## 2. How safe did you feel with COVID-19 Mitigations at Briefings?

11.11 Unsafe  
38.89 Ok  
38.89 Safe  
11.11 Very safe

We need to be prepared to lead by example at briefings with spacing, masks, and other precautions.

Alternative venues should be ready (e.g., outdoors, etc.)

If something seems a little off, you can change any sentiment to one that's more accurate

Although I felt safe, it seemed there were maybe other possible mitigations. For example, traditionally we use radio briefings for resources in spike camps. Why not use those here and avoid getting people together in one room/place altogether? Alternatively, other platforms (e.g., MS Teams, Zoom, etc.) can be used that allow for screen sharing (to show maps etc) and allow questions to be answered more easily than the traditional radio briefing.

First operational period briefing in small briefing room was very worry some. After moving to big briefing room, it felt more safe.

Tight spaces with very little masks being worn. Not a single team member had a mask on.

Sometimes you have to set the example.

Spacing was done well Masks could have been required

The morning briefings did not allow for any form of social distancing, no one wore a mask (except one READ) it was awful.

Ensure spacing or don't continue with the briefing

## 3. How safe did you feel with COVID-19 Mitigations at the facilities?

5.56 Unsafe  
27.78 Ok  
38.89 Safe  
22.22 Very safe  
5.56 N/A

I appreciated all the wipes and hand sanitizer at the ready.

I think the hotel and getting folks better rest (especially considering the weather) has been a good thing in keeping folks' health as good as possible. It does come with its own complications - fiscally, logistically, etc. - however I think for this year the benefits out-weigh the drawbacks.

Hand sanitizer at hallway/hotel entrance. Require face masks.

Continue to use motels it reduces all logistics as well as continuing to go self-sufficient

Some way to disinfect seats

#### 4. How safe did you feel with COVID-19 Mitigations in the field?

5.56	Unsafe
5.56	Ok
44.44	Safe
27.78	Very safe
16.67	N/A

All possible mitigations were in place inside the helicopter. Pilot wore Nomex neck gaiter and passengers wore masks. Sanitized aircraft between each flight

I don't have a whole lot to add here...So far the crew has worked fairly independently. Most folks outside the crew have been very mindful and understanding if/when you ask them to mind their space, refrain from shaking hands, etc.

Very Little room for improvement, other than maybe occasional vehicle sharing, briefings were very good

No masks, people were shaking hands, talking over hoods, etc.

Some resources were not distancing enough when having face to face briefings.

Good separation of resources However it is very hard to eliminate contact between overhead and crew leaders. The potential for spread between resources through common overhead links (Divs Crwb etc) is very real even with all our mitigations in place.

The biggest challenge I see is difference between crews in regards to how serious COVID is taken. At this time I have no suggestions on how to improve this but I think we need to continue the conversation among all resources. Safety messages speaking specifically to this point may be helpful.

#### 5. Is there anything else you would like us to know?

We are all learning right now. The team did a great job of acknowledging covid and had ppe on hand for everyone. Each day they were searching for and making improvements and doing their best to be successful

Not at this time. Thanks

For a first roll, that was pretty unexpected, I think it as well. The hotel was a good plan for the health and well-being of the crews. Great job with the time keeping and allowing for the electronic/photo CTRs.

Very professional IAP, really liked the QR maps and IAP, worked great for crew distribution.

It's hard to take covid serious in Montana because we have been lucky to be sheltered. I think you guys are doing a good job starting to start pushing the importance of it now before we get really busy.

What is the agency plan when a camp does have a confirmed case

Poor overall leadership.

I think you did a great job at addressing COVID19. I especially like the ability to submit CTR's via email. Having an electronic form for check-in would be really nice. I think you could create an

Office 365 form easily that could be shared via email or a QR code.  
Thanks for providing a platform for everyone to speak their opinions.  
I appreciate the teams approach and open conversation.  
Thanks for opportunity to provide feedback!