

COVID-19 and wildfires: Concurrent disasters and risk communication in B.C.

A preliminary report submitted to the Institute for Catastrophic Loss Reduction

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1.0 Introduction

This report is intended to supplement the study “Fighting the raging beasts’ blaze: Examining the effect of message framing in wildfire news reports on risk perception.” This follow-up qualitative study examined health communication during concurrent disasters (e.g., wildfires in 2020 and the COVID-19 pandemic). A body of “multi-hazard” research exists, though these studies seldom address overlapping disasters and the difficulties around decision-making (Risk Communication in Concurrent Disasters Working Group, 2020). For many community members in British Columbia (B.C.), COVID-19 unfolded at a time when they had to deal with the social, economic, and health consequences of wildfires. Emergency management personnel, public health, and communication professionals were equally faced with managing and communicating COVID-19 risk and safety recommendations simultaneously with wildfire risk communication.

2.0 Research Questions

The major research questions included the following (based on priority research topics and questions from the research agenda-setting paper from CONVERGE’s Risk Communication in Concurrent Disasters Working Group [2020]):

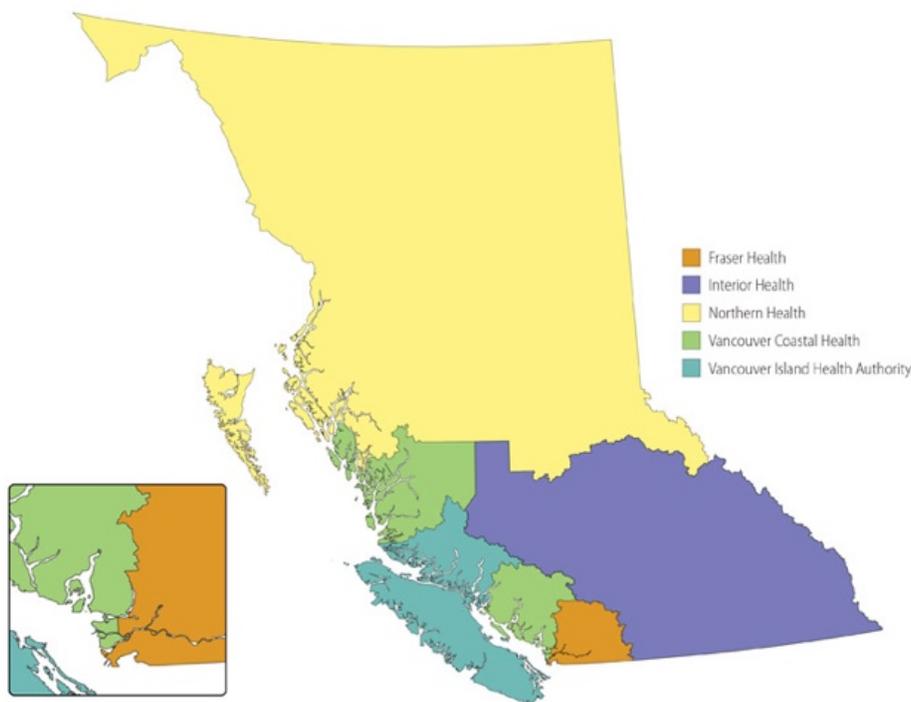
- What are the best channels for communicating health-protective messages amid concurrent disasters?
- How are community members making sense of contradictory health-protective messages?
- How were otherwise consistent risk messages for wildfires modified to account for COVID-19?
- What are the unintended consequences of contradictory health-protective messages?
- How are these wildfire and COVID-19 health-protective actions prioritized or negotiated?

3.0 Study Area

The study was conducted with key informants and community members living in the B.C. Interior. This area is loosely defined as including the fourteen regional districts without a coastline along the Pacific Ocean or the Salish Sea, as well as not part of the Lower Mainland. This combination of regions has a population of approximately 1,054,696 (as of February 2021, Government of British Columbia, 2021) and covers a land area of approximately 669,648 km² (as of 2016, Government of British Columbia, 2016).

Figure 1

Map indicating Interior Health / British Columbia Interior area (“Regional centres”, n.d.)



4.0 Methods: Participants, Recruitment, and Data Analysis

Twelve semi-structured interviews were conducted with six community members, three public health professionals at Interior Health, and three media professionals. Community members’ recruitment targeted those who may be more vulnerable or concerned about COVID-19 and/or wildfires due to their or a loved one’s age (e.g., over 65) or their or a loved one’s pre-existing conditions (e.g., respiratory illness). A poster and description for these interviews were posted in open-access social media groups and advertisements in local news sources to recruit participants. Participation was voluntary and consent was collected before any data collection. Upon completion, participants were provided with a \$10 gift card for the “Gift of Choice” (President’s Choice® or Joe Fresh®) as a token of our appreciation for their time.

The semi-structured interviews were conducted and transcribed with the zoom.us Education license. The interview questions were developed with guidance from two Interior Health Authority (IHA) Regional Practice Leads from the IHA Research Department to enhance the relevancy, necessity, and appropriateness of the questions for the project. The transcribed interviews were imported into *ATLAS.ti*, a qualitative data analysis software for thematic analysis, generally following the QUAGOL method (Dierckx de Casterle et al., 2012) as well as the constant comparative method (Corbin & Strauss, 2008).

5.0 Preliminary Findings

Quotations and pseudonyms are used to illustrate and contextualize some of the main findings.

5.1 Main sources of information for wildfire events

The most common source that community members turned to for information about wildfires in their area was social media, particularly Facebook groups: “usually Facebook like you know the community forum is a great one ... [BC town] has a community forum as well, and but ours is like little, and it seems to just ... important info goes there ... if it's there then it's usually you know pretty big” (Justine, community member).

Community members also turned to the B.C. Wildfire Service app, webpage, and phone alerts to keep up with the fire map for evacuation alerts nearby; this source was deemed to be very reliable and credible. For example, community member Ann noted that they “would rather get [their] information from the B.C. wildfire app itself. Because, then it actually has that map and all the information and all the documents as well, for all of the - if people are going to be getting evacuated it actually has those legal notices on there.”

Lastly, community members turn to local news sources like Castanet and broader news outlets like Global News and CBC (B.C.) for more general wildfire information. A public health professional (Bruce) noted that some of the best news channels for disasters have been the “big traditional media [channels] ... that would mean provincial media, the Globals, the CTV, the CBC, because they really go into the broad overarching fundamentals and share the big picture”. A local media professional (Lydia) also agreed that they cross-check their information from other big media sources, such as “CP Associated Press, Reuters and NBC out of the US, and ... [relying] on sources of information that come from their stories as well and CBS as well.”

5.2 Main sources of information for COVID-19

For COVID-19 information, community members mostly turned to Interior Health, whether on their website or watching/listening for Interior Health information on TV or radio news. Community member Ann mentioned that they seek out news “from Interior Health because it is, the most ... updated [and] specific to [their] area ... [they] trust Interior Health [and] their data.” Community members also turned to social media, similar to seeking out wildfire information. However, rather than turning to Facebook groups and posts from other community members, they seek out video content from press conferences and briefings:

“When I went to go look for those videos, I basically found, most of them on Facebook, because people were sharing them so much. As soon as I'd see Justin's [Trudeau] face, I'm like - oh I gotta watch this so, yeah that's where I would find - I actually didn't go to the website itself, it was just a video I found.” (Ann, community member)

A public health professional (Bruce) noted that they “did do quite a few social media and influencer campaigns in the problem areas, ... connected with social media influencers and coordinated with them on campaigns or did ... paid or organic social media stuff”. They worked to stream “regular press conferences ... on a YouTube channel, Facebook or Twitter ... Citizens could just tune in and watch it verbatim and didn't need to pick a media outlet” (Bruce, public health professional). Media professional Fiona agreed that they “turn more often now to critical voices ... doctors, epidemiologists ... who have a different perspective on how things are going.”

Similar to wildfire information, community members also turned to broader news outlets for COVID-19 information. These broader news outlets can be great for video/audio content and to gain a broader understanding of how COVID-19 is rolling out at a provincial, national, and global level. For instance, a public health professional (Isaiah) had received feedback “from First Nations groups who have a history of like an oral history ... [who] want audio and video format information rather than written articles or written social media posts,” which has been made accessible from social media channels and broader news sources.

5.3 Contradictory messaging and recommendations

For the most part, community members noted that they regularly use their judgement to decide which recommendation is most important and health-protective to follow:

“When you have a wildfire, you have to get out of its way. I mean, you have no choice, right? But it's general human nature. If you have to do something, just go and do it safely, right? It doesn't mean you're not going to follow all of the procedures for COVID just because you got to leave your house, you're still going to be safe, right? Yeah, so really anybody who says that oh - it's conflicting and stuff, well, what do you want to do? You want to blame somebody for what's happening to you? No. Just do what you gotta do, save your own skin, and go, right? To me, I don't understand that. If you're getting two conflicting things, then you're an adult, make up your own mind.” (Ann, community member)

They added that recommendations, especially for COVID-19, can be hard to understand, and that stronger leadership is needed to provide assertive restrictions and guidelines to follow:

“I think a lot more can be done to communicate, to be definitive about the best approach, I think, a stronger leadership would be great ... I think a lot more can be done to communicate, to be definitive about the best approach, I think, a stronger leadership would be great ... Perhaps the government's job is to be, at least have a stricter line. To communicate and then hold people to that standard ...” (Daniel, community member)

One of the public health professionals (Isaiah) commented on the unintended consequences of contradictory protective action recommendations: “Where were they getting their messaging from? Is it from the health authority saying we're doing this, is it from the news saying this is happening, is from the patients? ... So, the more sources of messaging you have and the more potential conflict you have in the messaging, the more difficult it is. And, if we have conflictual information and messaging then we start to lose confidence in what the message is.”

5.4 Wildfire messaging modifications due to COVID-19

Public health officials were asked if they found that the public health recommendations for wildfires had changed from previous wildfire seasons as a result of the COVID-19 pandemic and its associate recommendations. A vital modification from otherwise consistent wildfire risk messaging was the cross-communication between departments and organizations that had not necessarily communicated as much in the past with the typical crises in the area (e.g., flooding,

wildfires). The public, as well as the various B.C. organizations that are involved in other related disasters, developed a greater awareness of what public health does and what they can do.

“I think sometimes we looking to try to figure out what do each other do and what is our roles. And I think in infectious disease outbreaks, it becomes ... even more reason why we have to have good consistent open communication, so that we can actually work together right so that we're providing our patients and our communities with the same sort of united front so they're not hearing something different from their physician, you're hearing something different from the news. And then they're hearing something different from public health right.” (Isaiah, public health professional)

Certain planning and response processes for wildfires were more challenging as a result of the COVID-19. For instance, one public health professional commented on transferring patients from a hospital that had a wildfire in dangerously close proximity.

“...public health guidance around decanting a hospital and transferring patients elsewhere in preparation for hospital evacuation, which we have evacuated a hospital recently, a couple years ago. In the [B.C. town] hospital, so the process behind that, the whole public health aspect to evacuating a hospital and having that looked at while maintaining COVID-19 public health measures... completely different than what we would have done in [B.C. town] two years before.” (Bruce, public health professional)

Public health professionals noted that the recommendations themselves around wildfires had not necessarily changed, but the processes themselves with which the public health professionals were involved changed. A related example involved how public health professionals “took the extra time to search by postal code, if there was anyone in [an area under threat by wildfire] who were either positive or isolating ... made sure that all of those people had somewhere safe to go where they wouldn't cross-contaminate anyone else, so the evacuation procedures were much more involved, so there were extra steps. But the decision whether or not to evacuate was the same” (Huang, public health professional).

Message consistency was key amidst the concurrent disasters, so the communications department became a vital resource to ensure that wildfire and COVID-19 messaging were consistent:

“They're the ones that have the strategies or have, you know, a finger on the pulse with other media. What are the other media channels talking about, what are the hot topics and what is the misinformation potentially that we need to mitigate? And then they usually bring the key messages and ... they bring it to [the chief medical officers] to make sure that it is factually correct and then they'll release it.” (Huang, public health professional)

Amidst both disasters, the communications department within Interior Health was vital in helping to “translate ... technical advice or nuanced messages to plain language and help [to] decide ... which messages to send ... [and] through which avenues” (Huang, public health professional).

5.5 Health priorities amid concurrent disasters

Formerly, wildfire messaging would have been based on basic statistics, facts, and logistical updates, but with COVID-19, the pandemic itself was weaved into wildfire stories. For instance:

“...it’d be like the ... wildfire has grown to X hectares and ... public is reminded that in the case of evacuation or ... whatever all important public health, public health guidance, and then we would have listed the guidance. That was huge at the time, and it would have been physical distancing, and hand washing and probably no gathering, no groups, no events and probably wearing masks if you are in a tight situation but masks was a little less back then in B.C.” (Bruce, public health professional)

Another public health professional mentioned how wildfire messages emphasized defensible space, such as cleaning space around your home from debris, especially since the wildfire risk in 2020 was so low. At the same time, messages were expressed adding that “this isn’t a time to go over and help your neighbours ... you need to have social distancing ..., even if you were preparing for [a wildfire], you cannot throw out your COVID protective measures” (Isaiah, public health professional). Similarly, the protective actions that community members prioritized that were top of mind included mask-wearing, hand washing, and get vaccinated when possible.

6.0 Conclusion

Many of the public health professionals reflected on the challenge of coordinating communications. They had experienced difficulties initially at the onset of the pandemic regarding communications between different departments and organizations. This was a result of differing expectations and anticipations, but as the pandemic progressed, they were able to make information more easily accessible and streamlined. The pandemic truly showcased the importance of transparent, open information and communication.

These preliminary results can contribute to a deeper understanding of community members’, public health professionals’, and media professionals’ responses to concurrent disasters and their associated risk messages. These findings can also be used by local public health units, media organizations and emergency services to design adaptive communication strategies amidst concurrent disasters. These findings will also contribute to the growing body of research concerning health and emergency communication, climate change and natural disasters and how natural events influence human behaviour, especially amidst concurrent disasters.

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