

Wildfires in Canada

Wildfire Emergency Response Plan for Indigenous Peoples and Communities 2024 Season

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19th April 2024



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Preface

Wildfires are fast and widespread fires that can affect urban and rural areas. They occur naturally in nature because of lightning or may be due to human activity. The challenge with wildfires is that they can suddenly change direction or “jump” across large distances. Environmental conditions such as wind, heat, fuel (vegetation or deadwood) and the land’s topography can influence the spread of a wildfire¹. It must be noted that wildfires occur in nature to maintain the health and diversity of the forest ecosystem. However, they significantly threaten population health, communities, and economic stability, resulting in widespread property loss and damage.

Internationally, wildfires are increasing in frequency, duration, severity, and number of acres (hectares) burned. Unfortunately, climate change adds a layer of complexity as it creates environmental conditions conducive to wildfires. For example, extreme heat events and El Niño/La Niña trigger and prolong wildfire seasons. Thus, the fires start earlier and end later, impacting the seasonality of wildfires. Paradoxically, wildfires contribute to climate change by releasing carbon dioxide and other greenhouse gases into the atmosphere. Another factor that is instrumental to the intensification of wildfires is population growth, as expansion into more rural areas increases wildfire risk and the vulnerability of communities.²

Canada contains about nine (9) per cent of the world’s forests. Wildfires are commonplace from April to November due to nature (lightning) or human activity. However, in recent years, Canada has followed the global trend with a significant increase in wildfires. Canada's Western and Northern regions, such as British Columbia, Alberta, and Northwest Territories, have the highest occurrence of, and the most significant risk for, wildfires. Approximately 8000 wildfires occur annually in Canada, destroying 2.5 million hectares on average.³ This is partly due to Canada's changing climate, as the country is warming at a rate that is twice the global average, with the Canadian Arctic warming at three times the global rate. This change provides optimal conditions to prolong and intensify wildfires, which are projected to increase.⁴

¹ International Red Cross and Red Crescent Movement (IFRC). Wildfires. International Federation of Red Cross and Red Crescent Societies. 2024. Accessed February 16, 2024. <https://www.ifrc.org/our-work/disasters-climate-and-crises/what-disaster/wildfires>.

² World Health Organization (WHO). Wildfires. World Health Organization. 2024. Accessed February 16, 2024. https://www.who.int/health-topics/wildfires#tab=tab_1.

³ Aziz, Saba. “A Look at Canada’s Wildfires in Numbers and Graphics over the Decades.” Global News, Global News, 21 July 2021, Accessed February 16, 2024. globalnews.ca/news/8045796/canada-wildfires-yearly-trends/.

⁴ Natural Resources Canada (NRC). Climate change adaptation in Canada. Natural Resources Canada. May 17, 2023. Accessed February 16, 2024. <https://natural-resources.canada.ca/climate-change/what-adaptation/10025>.

As one of the most catastrophic years for wildfires, 2023 afforded a glimpse into the future. According to data reported as of November 2, 6,623 fires decimated 18,401,197 hectares, surpassing the 10-year average of 5,597 wildfires that consumed an average of 2,751,161 hectares. These fires caused emergency evacuations of thousands of people and several Provincial States of Emergency. There was a high demand for emergency response and essential resources at the local, provincial, federal, and international levels, coordinated through the Canadian Interagency Forest Fire Centre (CIFC).⁵

Moreover, not all of Canada's estimated population of 40,528,396 is impacted in the same manner.⁶ Existing inequities are exacerbated for specific populations, such as the unhoused, those of lower socioeconomic standing, and Indigenous peoples, as they are often underserved, unemployed and marginalised. Indigenous people are the most vulnerable of the vulnerable due to their connection with the land. Furthermore, most live in high wildfire-risk regions in Western and Northwestern Canada. As of 2021, 1,807,250 people were identified as one of the three (3) groups (First Nations people, Metis, and Inuit) of Indigenous communities. They account for 5.0% of the total population but experienced 42% of wildfire events.

Moreover, between 1980 and 2007, 75% of the evacuation events involved First Nation communities.⁷ The disruption of their traditional activities and separation from their land has severe psychological, emotional, and spiritual ramifications crucial to their subsistence and economic stability. This disaster response plan serves to develop a process to build resiliency and provide the means to mitigate loss of life and livelihood for Indigenous peoples and communities within the context of wildfires.

⁵ Natural Resources Canada (NRC). National wildland fire situation report. Canadian Wildland Fire Information System. 2024. Accessed February 16, 2024. <https://cwfis.cfs.nrcan.gc.ca/report>.

⁶ Government of Canada SC. Canada's population estimates, third quarter 2023. The Daily -. December 19, 2023. Accessed February 16, 2024. <https://www150.statcan.gc.ca/n1/daily-quotidien/231219/dq231219c-eng.htm>.

⁷ Batdorf B, McGee TK. Wildfire smoke and protective actions in Canadian Indigenous communities. MDPI. July 27, 2023. Accessed February 16, 2024. <https://www.mdpi.com/2073-4433/14/8/1204>.

Signature Page

I have reviewed and supported the implementation of Wildfires: Emergency Response Plan for Indigenous Populations.

Public Safety Canada

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| Minister of Public Safety, Democratic Institutions and Intergovernmental Affairs | Date |
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| President of the King's Privy Council for Canada and, Minister of Emergency Preparedness, and Minister responsible for the Pacific Economic Development Agency of Canada | Date |
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Public Health Agency of Canada

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| Minister of Health | Date |
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| Canada's Chief Public Health Officer | Date |
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| President of the Public Health Agency of Canada | Date |
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| Executive Vice-President of the Public Health Agency of Canada | Date |
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Health Canada

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|-----------------|------|
| Deputy Minister | Date |
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Indigenous Services Canada

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| Minister of Indigenous Services | Date |
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Mission Statement

Public Safety Canada⁸

To build a safe and resilient Canada.

Public Health Agency of Canada (PHAC)⁹

To promote and protect the health of Canadians through leadership, partnership, innovation and action in public health.

Indigenous Services Canada (ISC)¹⁰

To improve access to high quality services for First Nations, Inuit and Métis.

Public Safety Canada facilitates coordination amongst federal agencies and departments responsible for Canadians' safety and security. Their mandate involves protecting Canadians from risks such as crime, terrorism and natural disasters.¹¹ The Public Health Agency of Canada and Indigenous Services Canada are part of Canada's federal portfolio. Each division consists of an Emergency Management Center targeting the entire or a specific population. ISC partners with *First Nations communities to prevent, prepare for, respond to and recover from emergencies*, whereas PHAC is responsible for the entire population.

⁸ Public Safety Canada. About Public Safety Canada. Public Safety Canada. August 17, 2023. Accessed February 19, 2024. <https://www.publicsafety.gc.ca/cnt/bt/index-en.aspx>.

⁹ Canada PHA of. Government of Canada / Gouvernement du Canada. Canada.ca. November 1, 2023. Accessed February 16, 2024. <https://www.canada.ca/en/public-health/corporate/mandate/about-agency.html>.

¹⁰ Government of Canada; Indigenous Services Canada. Mandate. Government of Canada; Indigenous Services Canada. May 25, 2023. Accessed February 16, 2024. <https://www.sac-isc.gc.ca/eng/1539284416739/1539284508506>.

¹¹ Public Safety Canada. About Public Safety Canada. Public Safety Canada. August 17, 2023. Accessed February 19, 2024. <https://www.publicsafety.gc.ca/cnt/bt/index-en.aspx>.

Statement of Purpose

Wildfires cause destruction, are detrimental to the health and livelihood of civilians, and, in many cases, displace communities. They negatively impact and affect the lives of all Canadians. This is evident in the various hazard guides and disaster plans created by multiple agencies and entities at regional, provincial, and national levels of government to keep Canadians safe. However, through all of this, one population that is most affected by these disasters, yet frequently overlooked, is the Indigenous peoples. Indigenous people comprise 5% of the population in Canada and are the fastest-growing and youngest.¹² Wildfires are devastating to Indigenous communities, as many of them live on the frontlines. They depend on the land for food, and their homes are scattered in remote areas that are not a firefighting priority.¹³ Historically, more than 42% of wildfire evacuations have been from communities, with Indigenous people comprising more than half of the population. Still, they are constantly left out of forest management and fire response decisions.¹⁴

As the Public Health Agency of Canada's Centre for Emergency Preparedness and Response, and under the jurisdiction of Health Canada, we believe we owe it to the Indigenous people of this country - the First Nations, Inuit and Métis - to play our part in the advancement of reconciliation and renewal of relationships that we have promised to achieve under the CIRNAC¹⁵ through the creation and dissemination of this wildfire disaster plan. This plan aims to collaborate with Canadian Indigenous communities on what to do and how to respond during all five phases of emergency management (prevention, mitigation, preparedness, response, and recovery). Our goal for this plan is to include the Indigenous peoples' thoughts and beliefs, be conscious and respectful of their rights, and promote cooperation and partnership with their leaders and appropriate stakeholders.

12 Government of Canada; Crown-Indigenous Relations and Northern Affairs Canada; Indigenous peoples and communities. Published January 16, 2024. Accessed February 19, 2024. <https://www.rcaanc-cirnac.gc.ca/eng/1100100013785/1529102490303>

13 McDonald B, Joyce M, Laffin B. Canada is ravaged by fire, no one has paid more dearly than indigenous people. The New York Times. July 29, 2023. Accessed February 19, 2024. <https://www.nytimes.com/2023/07/29/world/canada/canada-wildfires-indigenous-communities.html#:~:text=indigenous%2Dcommunities.html-Canada%20is%20Ravaged%20by%20Fire,they%20rely%20on%20for%20sustenance>

14 Webber T, Berger N. Canadian wildfires hit indigenous communities hard, threatening their land and culture. AP News. September 26, 2023. Accessed February 19, 2024. <https://apnews.com/article/canada-wildfire-indigenous-land-first-nations-impact-3faabfbadfe434d0bd9ecafb8770afce>.

15 Crown-Indigenous Relations and Northern Affairs Canada. Government of Canada. Canada.ca. November 29, 2023. Accessed February 19, 2024. <https://www.canada.ca/en/crown-indigenous-relations-northern-affairs.html>

Authorities

Under the *Emergency Management Act*, authority is delegated to and by the Minister of Health, who ensures an approach that follows the operational planning framework of the Emergency Response Plan (ERP) and enables the Health Portfolio to optimise the delivery of a coordinated emergency response. This framework is the basis on which this plan was created. It defines how the following entities and organizations must operate to ensure an appropriate response to the emergency:

- Public Safety Canada
- Public Health Agency of Canada
- Health Canada
- Canadian Interagency Forest Fire Centre
- Indigenous Services Canada
- Canadian RedCross
- First Nations Health Authority
- Provincial Government Emergency Management

Definitions

CIFC: Canadian Interagency Forest Fire Centre

CIRNAC: Crown-Indigenous Relations and Northern Affairs Canada

EMCR: The Ministry of Emergency Management and Climate Readiness

ERP: Emergency Response Plan

FNHA: First Nations Health Authority

HC: Health Canada

ISC: Indigenous Services Canada

PHAC: Public Health Agency of Canada

Communications Plan

Internal Communications: Provincial and Territorial fire management agencies are responsible for communicating fire alerts or warnings to their communities. Forms of communication that have remained effective in reaching the residents of Canada include smartphone alert systems, radio alerts, television broadcasts, and immediate evacuation when wildfires become a threat. If a wildfire is anticipated to spread, the Incident Commander must communicate an evacuation alert or order by the local government authority or provincial Fire Commissioner.¹⁵ Emergency alerts are issued by various organizations depending on the type of emergency.¹⁶ The Ministry of Emergency Management and Climate Readiness (EMCR) can issue emergency alerts at the request of the local government, First Nation partner agency, or the Province during (1) high-risk flood and wildfire evacuations, (2) extreme heat emergencies and (3) tsunami warnings.¹⁷

External Communications: Canada and the United States have partnered to improve air quality and tackle the issue of wildfires in Canada. By being in close communication, the Department of Defense has supported Canada's efforts with technological support (i.e., the FireGuard program) to detect and suppress new fires rapidly. The Department of Defense will analyze and share real-time data from U.S. satellites and sensors to convey information via a cooperative agreement between the U.S. National Interagency Fire Center and the Canadian Interagency Forest Fire Centre.¹⁸ Communication between the U.S. and the Government of Canada will ensure that future wildfires are detected early on and suppressed before resulting in catastrophic damage.

¹⁶Hirsch KG. Canadian wildland fire strategy. CFS. 2006. Accessed February 16, 2024. <https://cfs.nrcan.gc.ca/pubwarehouse/pdfs/26529.pdf>.

¹⁷ BC EM. How emergency alerting works. Province of British Columbia. November 14, 2023. Accessed February 16, 2024. <https://www2.gov.bc.ca/gov/content/safety/public-safety/emergency-alerts/how-alerts-work>.

¹⁸ Statement by NSC spokesperson Adam Hodge on assisting Canada in responding to wildfires. The White House. June 17, 2023. Accessed February 19, 2024. <https://www.whitehouse.gov/briefing-room/statements-releases/2023/06/16/statement-by-nsc-spokesperson-adam-hodge-on-assisting-canada-in-responding-to-wildfires/>.

Mutual Aid Agreement

Each province and territory responds to wildfires in cooperation with local, federal, and international authorities. Health Canada and the Public Health Agency of Canada work with federal departments and the U.S. under a mutual aid agreement to combat wildfires. This includes organizations that provide advice, health, and environmental resources to Indigenous peoples and communities. Indigenous Services Canada (ISC) partners with First Nations communities to prevent, prepare, respond, and recover from wildfire emergencies. Other organizations under a mutual agreement to help combat the impacts and risks of wildfires include:

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| <p>The Canadian Red Cross</p> | <p>Helps people and communities in Canada and around the world in times of need and supports them in strengthening their resilience.</p> |
| <p>First Nations Health Authority (FNHA)</p> | <p>FNHA's role is to support First Nations, communities, and individuals with wildfire response, evacuation, and recovery.</p> |
| <p>Public Safety Canada</p> | <p>Public Safety Canada was created in 2003 to ensure coordination across all federal departments and agencies responsible for national security and the safety of Canadians.</p> |
| <p>Environment & Climate Change Canada</p> | <p>Protecting and conserving our natural heritage, predicting weather and environmental conditions, preventing and managing pollution, and promoting clean growth and a sustainable environment for present and future generations.</p> |
| <p>CanadaHelps</p> | <p>A charity responding to wildfires by collecting donations and allocating them to provide help with much-needed emergency services, fire-fighting equipment, food, and shelter.</p> |
| <p>Southeast Resource Development Council (SRDC)</p> | <p>A tribal council that delivers programs and provides services to the eight-member First Nation communities.</p> |
| <p>Canadian Interagency Forest Fire Centre (CIFFC)</p> | <p>Non-profit corporation owned and operated by the federal, provincial, and territorial wildland fire management agencies to coordinate resource sharing, mutual aid, and information sharing. In addition, CIFFC also serves as a collective focus and facilitator of wildland fire cooperation and coordination nationally and internationally in long-range fire management planning, program delivery, and human resource strategies.</p> |

CONCEPT OF OPERATIONS

Assessing the Needs of the Indigenous Population in Canada

Unlike the rest of the population, Indigenous communities are disproportionately susceptible to and affected by wildfires due to their seclusion within regions prone to wildfires, their considerable distance from populated areas, and, as a result, their limited access to emergency management services.¹⁹ That being said, prevention efforts can make all the difference in the outcomes of emergency management within Canada's Indigenous population. Both representatives of the communities and the federal government are aware of the importance of and need for preventative measures like smoke detectors, fire extinguishers, fire drills, fire safety, awareness, and education, as well as fire disaster plans.²⁰ However, not all communities carry out or promote such measures.²¹

Regarding preparedness, communities lack adequate funding to develop, update, and implement emergency plans. It is one thing to be prepared and have such plans in place, but when communities need the wherewithal to do so, efforts to manage and mitigate threats on their own become futile. In collaboration with the Indigenous people of Canada, ISC needs to review its Emergency Management Assistance Program to ensure the provided funding is sufficient and allocated according to priorities such as preparedness levels.²² Another aspect of preparedness that needs to be improved is capacity building and training. There is a need for community members to be trained on how to respond during emergencies like wildfires and for Indigenous emergency management officials to be accredited and trained so they can effectively respond to such emergencies.²³

In terms of response, there needs to be better coordination between federal, provincial, and Indigenous powers. This is due to a history of Indigenous communities being excluded from coordination activities. These communities' expertise and culture need to be considered when planning and implementing response efforts because they offer perspectives and knowledge of

¹⁹ Parliament of Canada. Committee Report No. 15 - INAN (42-1) - House of Commons of Canada. Published June 2018. Accessed March 1, 2024. <https://www.ourcommons.ca/documentviewer/en/42-1/INAN/report-15>

²⁰ IBID

²¹ IBID

²² IBID

²³ IBID

the land that can serve as a valuable asset when combating wildfires.²⁴ Furthermore, Indigenous communities need a proactive rather than reactive response to wildfires. In most cases, small fires are not controlled on time: they are left to burn until they become bigger and threaten infrastructure before direct action is taken. At that point, response efforts become more about containing the fires rather than fighting to put them out.²⁵

Another aspect of response that needs to be changed is how evacuations of Indigenous communities are conducted. Community members have complained about the poor conditions in shelters and other accommodations, the uncertainty surrounding how long they will have to stay at these places, the lack of space to perform traditional practices, the lack of comfort for vulnerable groups such as pregnant women and the elderly, the lack of mental health resources, as well as the threats of having their families separated when these places have reached capacity.²⁶ Another need that should be addressed is the connectivity of cellular and broadband internet networks in Indigenous communities.²⁷ Due to their remoteness, such infrastructure is lacking, which can be the difference between life and death during emergencies like wildfires.

Concerning recovery, efforts to implement substantial and timely aid and assistance are essential to these communities, as their land is their source of livelihood. The impacts of wildfires can be long-lasting, ranging from loss of income to psychological trauma.²⁸ Indigenous communities need help from federal and provincial governments by receiving full reimbursements for their losses and creating social and health programs to help them rebuild.

Matching Available Resources to the Needs

The cascading effects of wildfires in Canada have negatively impacted many communities, especially Indigenous populations (i.e. First Nations, Inuit, and Metis). These underlying effects drastically impact the indigenous communities' health, cultural preservation, land, and resiliency. Moving forward, it is crucial to decentralise and empower Indigenous communities to pilot and engage in wildfire management. We can steer towards a future where Indigenous communities can build resilience in mitigation, preparedness, and response efforts against wildfires.²⁹

²⁴ IBID

²⁵ IBID

²⁶ Parliament of Canada. Committee Report No. 15 - INAN (42-1) - House of Commons of Canada. Published June 2018. Accessed March 1, 2024. <https://www.ourcommons.ca/documentviewer/en/42-1/INAN/report-15>

²⁷ IBID

²⁸ IBID

²⁹ Lee H. The impact of Canadian wildfires on Indigenous rights. Alberta Civil Liberties Research Centre. August 22, 2023. Accessed March 1, 2024. <https://www.aclrc.com/blog/2023/8/22/the-impact-of-canadian-wildfires-on->

Provincial and territorial emergency management organisations lead wildfire response and services. The Canadian federal government has agreements between these provincial and territorial emergency management organisations that agree to protect Indigenous communities. Hence, they are prepared and able to respond to the threats of wildfires. In addition, similar agreements are made with the National Defense and the provinces and territories to manage wildfires on federal lands owned by the National Defense.² Parks Canada is another organisation that helps address shared management of wildfires within their jurisdictions. If local responders cannot manage an incident, provincial and territorial emergency management organisations respond on behalf of the government with wildfire emergency response and recovery. Triggering a Provincial and Territorial response will typically alert the Canadian Federal government for assistance. This results in Public Safety Canada's activation of the Government Operations Centre (GOC) to monitor, share information, and coordinate federal response across various departments.³⁰

Addressing the needs of Indigenous communities requires a different approach. The decentralised collaboration will provide a more flexible, responsive, and innovative system for indigenous populations' mitigation, preparedness, and response efforts. In 2010, Indigenous Services Canada developed the Joint Nations Fire Protections Strategy in collaboration with Indigenous and Northern Affairs Canada and the Aboriginal Firefighters Association of Canada (AFAC) to promote fire protection on reserve.³¹ Nonetheless, a vital aspect of collaboration requires that Canada's federal government work with First Nation and Indigenous organisations to effectively manage future wildfires. Following the Joint Nations Fire Protection strategies includes essential priorities so that Indigenous communities are included in Fire management and education efforts: (1) Partnership for First Nations fire protections, (2) Fire prevention education, (3) Community standards, (4) Fire service operational standards, (5) Climate change, and (6) Critical infrastructure.³² Improving partnerships and wildfire emergency response efforts takes time but is not impossible. By allocating the necessary resources where they are needed the most, Canada can effectively manage future catastrophes and protect indigenous communities.

indigenous-
rights#:~:text=By%20decentralizing%20efforts%20and%20empowering,manageable%20aspect%20of%20our%20ec
osystem.

³⁰ Tymstra C, Stocks BJ. Wildfire Management in Canada: Review, Challenges and Opportunities. *Progress in Disaster Science*. October 31, 2019. Accessed March 3, 2024. <https://www.sciencedirect.com/science/article/pii/S2590061719300456>.

³¹ Government of Canada; Indigenous Services Canada. First Nations Fire Protection Strategy, 2023 to 2028. Government of Canada; Indigenous Services Canada. February 14, 2024. Accessed March 4, 2024. <https://www.sac-isc.gc.ca/eng/1683892947884/1683892982915>.

³² IBID

Evaluating the Effectiveness of the Response

The evaluation process is critical to determining the response's success. This process will create lessons learned from which future improvements can be made. The response can be evaluated through quantitative and qualitative data collection. Yet, there may be challenges, as Indigenous Populations do have a unique set of challenges.

Most reservations do have emergency services available. However, the capacity to respond depends on the financial capacity of the reserve. Hence, the first part of the evaluation will involve the response of the emergency services on the reserve. The following are the areas for evaluation:

Reserve Level:

1. The length of time taken to identify the wildfire risk
2. The time to alert or request provincial partners for assistance for wildfire fighting and/or evacuation.
3. How effective was the emergency alert system? Number of people who received the wildfire alert
4. Length of time taken to activate an evacuation alert.
5. Number of people who received an evaluation alert
6. Population response to warnings, notifications and alerts to the wildfire event.
7. Number of evacuees
8. Mortality Rate

Provincial Level:

1. Length of time taken to fulfil provincial request for assistance.
2. Number of personnel sent to manage the wildfire event.
3. Number of trained personnel available to manage the emergency response.
4. Length of time taken to provide emergency funding and resources to assist with the response and recovery.
5. Resource capacity: Services, such as health and social, provided to the community were appropriate for their needs. (The Metric will be Focus groups and connecting directly with individuals in the community.
6. Interagency response to the wildfire fire: aspects of communication, including cultural sensitivity, between the agencies and the affected Indigenous community.

Federal Level:

-
1. Length of time taken to fulfil request for assistance.
 2. Length of time taken to provide emergency funding and resources to assist with the response and recovery.
 3. Resource capacity: services, such as health and social services, provided to the community were appropriate for their needs.

The emergency response will determine if the emergency plan effectively manages the wildfire response. The goal of the evaluation is to identify developmental areas to decrease adverse consequences in a population that is highly susceptible to wildfires.

ANNEX 1:

Threat and Hazards Assessment Table: Ministry of Health

| Natural | Technological | Human-caused |
|---|---|--|
| Resulting from acts of nature | Involves accidents or the failures of systems and structures | Caused by the intentional actions of an adversary |
| <p>Wildfires¹: In Canada, the seasons have been longer and more frequent with extreme fire behaviour. The season usually falls from early April to late October. Lightning strikes are the most common natural occurrence.</p> <p>Extreme Weather Events¹: These can also contribute to wildfires and pose individual threats.</p> <ul style="list-style-type: none"> - Increased and unpredictable precipitation - Storms with lightning strikes - Increased temperature <p>Flooding and Landslides</p> <p>Winter Weather: Impedes access to sites, and temperatures will require alternative firefighting methods, or fires continue to burn.</p> <p>Heat Waves and Droughts²: Hot temperatures and droughts create dry conditions that are conducive to compounding wildfire risk.</p> <p>Natural Environment Impact¹:</p> <ul style="list-style-type: none"> -Diseases and pests that kill or weaken trees. -Fuels: Exposed peat and broken trees from other disasters, such as derecho. | <p>Power Outages: Depending on wildfires and other events such as extreme heat, snowstorms, and freezing rain, power outages may occur. Many rely on medical equipment and other electrically powered resources. For example, lifesaving equipment in health care facilities, cooling systems and ability to use air purifiers.</p> <p>Utility Failures: Natural or human-made disasters can impact utilities such as water supply, gas, communications, electricity, sanitation, and other medical systems, increasing exposure to disease and posing a safety hazard to the population.</p> <p>Technological Systems: The inability to access information or perform actions. For example, Hospitals rely on electronic medical records, imaging, surgery equipment, and ventilation systems to sanitise the air.</p> <p>Transportation Systems: The destruction of roads and transportation systems makes it challenging to evacuate and rescue areas and populations that are difficult to access. For example, Indigenous populations.</p> | <p>Climate Change: Increase in anthropogenic activity that affects the frequency, duration, length, and severity of wildfires.</p> <p>Arson</p> <p>Deforestation</p> <ul style="list-style-type: none"> - Indigenous populations - Fire Management Control - Timber industry <p>Urbanisation of rural areas²: Encroachment into heavily forested areas heightens the population's risk of wildfires. Other risks include the environment, property, and livestock.</p> <p>Climate Change and Equity²: Inequitable access to health care and facilities. Everyone can experience this, but underserved populations and other populations, e.g. Indigenous, Immigrants and Refugees, are particularly impacted by this.</p> <p>-Financial Capacity</p> |

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| <p>-Topography</p> <p>Wildfire Smoke Exposure^{1,2}: -The smoke consists of a mixture of PM_{2.5} that significantly threatens public health. The population in the immediate vicinity of the wildfire has the highest exposure. However, the smoke plumes can travel long distances, impacting the air quality in different geographic areas.</p> <p>Human Health Impacts¹: All individuals are at risk from the physical impact of wildfires. However, vulnerable populations do have a higher risk. Furthermore, exposure to wildfires can increase Respiratory infections, Chronic Obstructive Pulmonary Disease (COPD), Asthma exacerbations, and Premature deaths. In addition, there is potential for cardiovascular health impacts, mental health issues, and poor birth outcomes.</p> <p>Communicable Diseases: For example, COVID-19. Any pandemic-like disease can place an additional burden on the healthcare system and its employees and increase the risk at shelters.</p> <p>Physical (Burns, injuries, and smoke inhalation) and Mental Health of the affected populations, Firefighters and Emergency Response workers.</p> | <p>Health Care and Emergency Capacity during an Event</p> <p>-Lack of trained personnel -Event outweighs human resource capacity: Emergency personnel and first responders may not be able to manage the volume of the event, especially if there is a simultaneous event, such as Extreme Heat. -Healthcare facility capacity for emergencies and current patient population.</p> <p>Spill Incidents: Oil, diesel, or chemical spills, gas leaks, and hazardous material release.⁴ Such events can cause harm to both residents and the environment and impede daily activities.</p> <p>Infrastructure damages due to landslides/rockfalls:</p> <p>Increased precipitation and storms increase flooding, leading to slope instability.</p> <p>Landslides have damaged homes and roadways that are essential for transportation and the safety of residents. Especially in areas with limited access</p> | <p>-Culturally Competent Healthcare</p> <p>-Language and Literacy Barriers</p> <p>Violent Crimes</p> |
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Annex 2: Exercises and Drills

| Wildfire Emergency and Disaster Management for Indigenous Peoples and Communities | |
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| Objectives of your Training Seminar (What mitigation strategy are you advocating?) | To create awareness of Disaster Cycle and Emergency Preparedness and Management Procedures in Indigenous Communities to mitigate the impact of Wildfires in the |
| Estimated Length of Training | 1 day for Theoretical Training 1 – 2 months for development of Initial Plan but will be an ongoing process of updates |
| Target Audience and max size of audience | Target Audience: Indigenous Community: Chiefs and Emergency Preparedness Personnel of the Reserves Size of Audience: The training will be conducted for each reserve community due to the unique nature of each reserve. Therefore, the size of the audience is dependent on the personnel available for each reserve. |
| Who would be a good candidate (e.g., structural engineer, health dept. official, first responder?) as Facilitator of this session? Why? | 1. Local and Provincial Emergency Preparedness Personnel from the Offices of Emergency Management 2. Indigenous Services Organisation responsible for the specific reserve. |
| What do you want community members to do as a result of their attending this session? | 1. Understand and apply the steps of Emergency and Disaster Management: Mitigation, Preparedness, Response, and Recovery Cycle for Wildfires 2. Develop an Emergency Plan for the Reserve for Wildfires 3. Create awareness for the Cycle within their communities. 4. Encourage members of their communities to understand and comply with the Emergency Plan Procedures established for the communities. |

| | |
|---|--|
| | <ul style="list-style-type: none"> 4. Know how to adequately allocate Federal funding destined for Emergency Preparedness for Wildfires 5. Know when it is important to contact the Local and Provincial assistance with Wildfire 6. Establish an Emergency Alert System (Cell Phone, Door to Door, Phone Chain) for the community. |
| <p>Strategies to increase community uptake of your mitigation.</p> | <ul style="list-style-type: none"> 1. Practice Wildfire evacuation procedures: 2. Assist community members with setting up Emergency plans for households and Community Emergency Response 3. Give out complete emergency lists with how to prepare for wildfires, deal with wildfire smoke and the evacuation process |

ANNEX 3

Table for Emergency Operations Plan: Short-term Strategies

| NECESSITIES | POSSIBLE RESOURCES | DISTRIBUTION STRATEGIES |
|--------------------------------|---|---|
| <p>FOOD & WATER</p> | <ul style="list-style-type: none"> - The Canadian Red Cross -Salvation Army -Food banks/pantries, charities, and other local NGOs/CBOs inventories - Donations from mutual aid agreements and international entities like FEMA and USAID -Water supply companies | <ul style="list-style-type: none"> - With technical support & supplies from the Canadian Red Cross and Salvation Army, food banks, charities, and other local NGOs/CBOS would share their food and water supplies. The Canadian Red Cross & Salvation Army would gather all the supplies and with the assistance of law enforcement, ensure that it is safely delivered to the shelters, hotels, hospitals, and other buildings being used to house the Indigenous people. - The Canadian govt, along with the Public Health Agency of Canada, ISC & other relevant stakeholders, would ensure donations from int. agencies and mutual aid agreements are up to par before they are delivered to the people |

| NECESSITIES | POSSIBLE RESOURCES | DISTRIBUTION STRATEGIES |
|----------------------------|---|--|
| | | <p>- Companies approved by the Canadian Bottled Water Association (CBWA) would use their delivery trucks to deliver cases of water to the people, with the help of law enforcement, volunteers, & other relevant stakeholders</p> |
| <p>HOUSING</p> | <p>Canadian Red Cross: Atlantic Canada - Wildfire Responses</p> | <p>The CRC provides personalized recovery and Interim Housing support, Housing repair, and reconstruction program financial assistance. Indigenous communities impacted by wildfires can receive support for temporary housing if needed and ensure that families or individuals are a part of the planning and decision making processes.</p> |
| <p>N-95 MASKS</p> | <p>Canada's National Emergency Strategic Stockpile.</p> | <p>Provinces and territories will request supplies from NESS who will then coordinate with local law enforcement, EOCs, and other relevant stakeholders to be delivered to the people</p> |
| <p>MINI-CLINICS</p> | <p>Canada's National Emergency Strategic Stockpile.</p> | <p>With provincial or territorial approval, mini clinics with medical supplies,</p> |

| NECESSITIES | POSSIBLE RESOURCES | DISTRIBUTION STRATEGIES |
|------------------------------|--|--|
| | | pharmaceuticals and social services can be set up at shelters, hospitals, and other places housing people. |
| MENTAL HEALTH SUPPORT | Wellbeing and Coping with Crisis | After a disaster, a person may experience a variety of thoughts, feelings, grief, and loss. It is important to provide mental health services for individuals impacted by wildfires and need support during this difficult time. The Coping with crisis gives these individuals mental health services that include the Canadian Mental Health Association, First Nations and Inuit Hope for Wellness helpline, Kids Help Phone, and many other resources. |
| CLOTHING | The Salvation Army and Canadian Red Cross, thrift stores, and local NGOs/CBOs that have clothing donations | The Salvation Army and Canadian Red Cross could coordinate and work together to distribute the clothes once they've gathered them from donations or partnerships. |

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