A firefighter's jacket and helmet are hanging on a dark wooden wall. The jacket is brown with yellow reflective stripes and is hanging on the left. The helmet is red with a yellow stripe and is hanging on the right. The text is overlaid on the jacket.

INFORMING A NATIONAL FRAMEWORK ON CANCERS LINKED TO **FIREFIGHTING**

What We Heard Report



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Health Canada is the federal department responsible for helping the people of Canada maintain and improve their health. Health Canada is committed to improving the lives of all of Canada's people and to making this country's population among the healthiest in the world as measured by longevity, lifestyle and effective use of the public health care system.

Également disponible en français sous le titre :

Contribution à un cadre national sur les cancers liés à la lutte contre les incendies :

Rapport « Ce que nous avons entendu »

To obtain additional information, please contact:

Health Canada

Address Locator 0900C2

Ottawa, ON K1A 0K9

Tel.: 613-957-2991

Toll free: 1-866-225-0709

Fax: 613-941-5366

TTY: 1-800-465-7735

E-mail: publications-publications@hc-sc.gc.ca

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Many firefighters reported lacking access to practical information on how to protect themselves from occupational hazards linked to firefighting, including exposure to toxic chemicals.”

EXECUTIVE SUMMARY

In accordance with the *National Framework on Cancers Linked to Firefighting Act* (the Act), Health Canada conducted a targeted engagement process to inform the development of a national framework (the Framework). The Framework will raise awareness of cancers linked to firefighting with the goal of improving access for firefighters to cancer prevention and treatment. Firefighters and their organizations, healthcare professionals, cancer groups, researchers, Indigenous organizations, and various orders of government participated in the engagement process.

The diversity of participants provided valuable experiences and perspectives and helped to identify key priorities and strategies for tackling cancer risks among firefighters in Canada. Overall, stakeholders and partners expressed strong support for firefighters and willingness to address this issue.

Participants emphasized the need to understand the diverse needs of Canadian firefighters, including structural, wildland, volunteer, female, and Indigenous firefighters and the intersection between many of these groups. This diversity impacts their access to equipment, training, health and safety standards, and methods of safeguarding against hazards. According to participants, cancer prevention efforts must be inclusive and provide equitable recognition to all firefighters, including traditionally excluded populations.

Stakeholders and partners emphasized the need to raise awareness of firefighters' cancer risks across various groups. Firefighters voiced frustration with their experiences in the healthcare system, especially concerning what they perceived as a lack of awareness among physicians regarding their increased cancer risks.

Many firefighters reported lacking access to practical information on how to protect themselves from occupational hazards linked to firefighting, including exposure to toxic chemicals. Participants stressed the need to bridge the gap between academic research, and practical, on-the-ground realities.

A primary concern for firefighters across Canada is the inequity in presumptive workers' compensation coverage. Firefighters revealed the personal toll of receiving a cancer diagnosis, and how navigating the workers' compensation system compounds the financial and emotional stress faced by them and their families. Firefighters and their organizations advocated for shared information and a unified approach to address these disparities.

In keeping with the requirement stipulated under the Act, this engagement process has informed the development of the Framework, which will be tabled in Parliament within the first 15 sitting days following the one-year anniversary of the Act coming into force. Health Canada thanks all participants for their contributions. This What We Heard Report provides an overview of the key themes that emerged from the consultations that took place from June 2023 to January 2024.

A photograph of a large, two-story house with a dark roof and white siding, engulfed in flames. Thick black smoke billows from the roof and windows. Several firefighters in full protective gear, including helmets and oxygen tanks, are positioned in front of the house, using hoses to spray water on the fire. The scene is set in a residential area with bare trees in the background.

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In 2023, the World Health Organization’s International Agency for Research on Cancer concluded that firefighters’ occupational exposures are considered carcinogenic.”

OVERVIEW OF ENGAGEMENT

INTRODUCTION AND CONTEXT

The Government of Canada is developing a national framework to raise awareness of cancers linked to firefighting (the Framework). It sought feedback from representatives of the provincial and territorial governments responsible for health, municipal governments, Indigenous governing bodies, health care professionals, scientists and stakeholders in the firefighting community. Participants were invited to share their experiences and views through key informant interviews, workshops, bilateral engagements, and advisory groups. This engagement process follows from the requirement set out in the *National Framework on Cancers Linked to Firefighting Act* (the Act), which received Royal Assent on June 22, 2023.

In 2023, the World Health Organization's International Agency for Research on Cancer concluded that firefighters' occupational exposures are considered carcinogenic (International Agency for Research on Cancer, 2023). It is in this context that the Act aims to raise awareness of cancers linked to firefighting with the goal of improving access for firefighters to cancer prevention and treatment.

This report provides a description of the engagement process undertaken by Health Canada and a broad summary of the themes and concerns that participants shared. The views expressed herein do not necessarily represent the views of Health Canada or the Government of Canada.

ENGAGEMENT METHODOLOGY

Between June 2023 and January 2024, Health Canada carried out a targeted engagement process to inform the development of the Framework. Portions of this work were supported by Hill & Knowlton Strategies, a strategic communications consultancy firm. This engagement included firefighters and their organizations, healthcare professionals, cancer groups, researchers, unions, and representatives from Indigenous communities. Provincial and territorial governments, and other federal departments, provided input in the development of the Framework through Health Canada-led advisory groups that were created for this process. The inclusion of groups that have been historically overlooked and understudied, such as Indigenous and wildland firefighters, were an important component of the engagement process.

Participants provided valuable insights, experiences, and perspectives on priorities and strategies for tackling cancer risks among firefighters in Canada. Health Canada thanks all participants for their contributions.

Key Informant Interviews with Field Experts

Twelve key informant interviews were conducted with a range of industry stakeholders and partners, including firefighter associations and unions, research organizations, Indigenous fire councils, and health professionals. The interviews were conducted using a semi-structured approach; interviews started with a baseline set of questions, which were then tailored as necessary to concentrate on the particular areas of expertise of each informant.

Key informants were identified using the following criteria: key firefighter organizations, subject matter experts on firefighter health, and leaders in firefighter cancer research and treatment. Interviewees were required to have had experience in the issues expected to be covered by the Framework, as set out under the Act. Invitations were sent to key informants and briefing materials were provided upon acceptance (Annex A).

Key informant interviews included representatives from the following organizations:

- International Association of Fire Fighters (IAFF)
- Canadian Association of Fire Chiefs (CAFC)
- Occupational Cancer Research Centre (OCRC)
- Canadian Interagency Forest Fire Centre (CIFFC)
- National Indigenous Fire Safety Council
- Public Service Alliance of Canada (PSAC)
- University of Alberta
- Firefighter Cancer Support Network
- Canadian Forces Fire Marshal
- Council of Canadian Fire Marshals and Fire Commissioners (CCFMFC)

Workshops

International Association of Fire Fighters (IAFF) and Health Canada Workshop—Fire Fighter Occupational Exposure Reduction: Best Practices and Intervention

The IAFF, in partnership with Health Canada, hosted a hybrid two-day workshop from October 26–27, 2023 that convened over 100 attendees to seek participants' perspectives on:

- Knowledge gaps with respect to exposure mitigation;
- Intervention research priorities; and
- Identifying Canadian priorities.

Canadian Association of Fire Chiefs (CAFC) and Health Canada Workshop – Building out the Firefighter Cancer Awareness, Prevention, and Access to Care Puzzle

The CAFC, in partnership with Health Canada, hosted a virtual workshop from December 7–8, 2023, focused on providing members of the fire service, as well as policy makers, with an opportunity to convene and learn from each other. Workshop topics included:

- Firefighter lived experience, including gaps and recommendations;
- Care of firefighters with cancers linked to firefighting;
- Application of industry and standards;
- Firefighter cancer coverage, workers compensation, prevention programs and presumptive legislation across the country; and
- How to raise physician and researcher awareness of firefighter cancer.

Full workshop session recordings can be found on the [CAFC Workshop webpage](#).

Provincial/Territorial Engagement on the Framework

On November 29, 2023, Health Canada facilitated a virtual Intergovernmental Consultative Forum that brought together representatives from Provincial and Territorial health and labour ministries to:

- Seek perspectives to inform development of the Framework;
- Share information between provinces, territories, and the federal government; and
- Explore opportunities to collaborate across jurisdictions to address measures in the framework.

Health Canada also engaged provincial and territorial partners through bilateral meetings.

Government of Canada Advisory Group

Health Canada engaged with federal departments implicated in this Framework, such as those who conduct firefighter research, employ federal firefighters, or deliver occupational and health programs related to firefighters. An interdepartmental Advisory Group was established to raise awareness of the Framework and consider measures set out under the Act. Furthermore, Health Canada conducted targeted discussions with the relevant departments to collect information on the concerns of federal firefighters.

Indigenous Engagement

Health Canada worked with its Office of Indigenous Affairs and Engagement and Indigenous Services Canada (ISC) to seek how Indigenous groups and Indigenous Governing Bodies, through their partnerships and networks, would like to be engaged, including outreach to the following groups:

- Assembly of First Nations (AFN)
- Métis National Council
- Les Femmes Michif Otipemisiwak
- Inuit Tapiriit Kanatami
- Pauktuutit Inuit Women of Canada
- Native Women's Association of Canada
- Dene Nation
- Council of Yukon First Nations
- Congress of Aboriginal Peoples
- National Indigenous Fire Safety Council (NIFSC)

Other Bilateral Engagements

Health Canada also facilitated bilateral engagements with other organizations with relevant expertise, including:

- Canadian Association of Provincial Cancer Agencies (CAPCA)
- Canadian Partnership Against Cancer (CPAC)
- Canadian Association of Fire Chiefs—Cancer Prevention Committee
- CAREX Canada
- Canadian Interagency Forest Fire Centre—Governing Board
- College of Family Physicians of Canada (CFPC)
- Federation of Canadian Municipalities (FCM)
- Council of Canadian Fire Marshals and Fire Commissioners (CCFMFC)
- Canadian Cancer Society (CCS)
- BC General Employees' Union (BCGEU) and the National Union of Public and General Employees (NUPGE)

“

Participants provided valuable insights, experiences, and perspectives on priorities and strategies for tackling cancer risks among firefighters in Canada.”



WHAT WE HEARD

FIREFIGHTING IN CANADA

Diversity of Firefighters Across Canada

Insights from conversations with firefighters and their organizations across Canada reveal a complex picture. Although all firefighters have the common goal of protecting the health and safety of Canadians, their roles and experiences can be very different. Key factors include location (e.g., urban, rural), type of firefighter (e.g., structural, wildland, aviation, industrial), employment status (e.g., full-time, part-time, volunteer, seasonal, unionized), and demographic characteristics (e.g., female, racialized).

Many participants emphasized that the lived experiences of urban structural firefighters are quite different from those of other firefighter subpopulations, such as volunteer, wildland, and Indigenous firefighters. We heard that most research, programs, and policies focus on urban structural firefighters and their hazards.

Participants agreed that wildland firefighters have been historically overlooked and face many unique challenges, especially as wildfire seasons grow in severity and duration each year. Wildland firefighters are deployed for long stretches in camps without access to showers or laundry, have limited protective gear, and often work across several jurisdictions. We heard that despite the increase in the professionalization of wildland firefighting, wildland firefighters lack guidance on how to protect themselves from exposure to hazardous chemicals or how to access compensation in the event of a work-related injury, including cancer.

Similarly, participants shared that it is challenging for volunteer firefighters to protect themselves from hazardous exposures. Participants indicated that volunteers often do not have access to updated gear and decontamination facilities. This means many volunteer firefighters transport their soiled bunker gear in their own vehicle and launder it at home or in laundromats, thereby prolonging their contact with hazardous chemicals and potentially exposing others. We also heard that volunteer firefighters often have limited access to information and training resources for their specific needs.

Several partners pointed to the distinct needs of Indigenous firefighters, especially when it comes to occupational health and safety regulations. Participants expressed their view that First Nations operate in a regulatory grey area with respect to occupational health and safety associated with their fire departments, and often have limited resources for firefighting and fire protection. They expressed that Indigenous firefighters face inequities in accessing workers' compensation coverage.

Eleven percent of Canadian firefighters are women (Canadian Association of Fire Chiefs, 2023), yet very little is known about their specific cancer risks (International Agency for Research on Cancer, 2023). We heard that women may face higher exposures in the course of their work because personal protective equipment (PPE) for firefighters is traditionally designed for men and may not fit them correctly. Participants also said that their underlying risks may also differ from that of men, as the effects of firefighting exposures on female-specific cancers and reproductive health are not well known.

Participants expressed that despite the diversity within their ranks, what unites firefighters across all demographics and roles is their shared commitment to risking their lives to protect Canadians. They shared that this common purpose underscores the principle that “a firefighter is a firefighter,” deserving of equal treatment and support, regardless of their specific duties or the context in which they serve.

“A firefighter is a firefighter.”

—CONSULTATION PARTICIPANT

Stakeholders and partners suggested that going forward, they feel that it is important to understand and adapt to the needs of a wide variety of Canadian firefighters. They said that this diversity impacts their equipment, their specific training and standards, and the ways they keep safe from hazards. Participants expressed that efforts to prevent and treat cancers linked to firefighting must be inclusive of all firefighters and provide equal recognition for subpopulations of firefighters that have traditionally been excluded from research and guidance.

Shifting Firefighter Culture towards Health and Safety

Several participants noted that implementing change in health and safety practices can be challenging because of the culture within firefighting. It was highlighted that for many firefighters, a soot-covered uniform is seen as a “badge of honour,” symbolizing bravery and hard work. While this perspective is not universal, participants informed us that this traditional view can make it difficult to shift attitudes around the importance of avoiding exposure and effective decontamination; it was suggested that overcoming this cultural hurdle will require redefining what it means to be an effective firefighter and emphasizing that safeguarding health is an important part of their dedication to the profession.

“Firefighters hate two things: change and the way things are.”

—CONSULTATION PARTICIPANT

Participants proposed some ways to tackle this challenge of engrained culture, such as by providing additional resources and training, sensitizing leaders within the fire service on the issue of health and safety, and introducing changes incrementally. Participants expressed that this shift will require that firefighters and their employers work together to build systemic change and help make interventions more practical and inclusive. Participants felt that meaningful change demands commitment from leadership and early buy-in from “thought leaders” within fire departments.

Some consultation participants also highlighted the need for a holistic approach to cancer prevention, as firefighters have additional exposures on top of the cancer risks that exist for the broader public. These participants told us that it is important to encourage good health promotion practices among firefighters, including exercise, healthy eating, and avoiding exposures to other carcinogens outside of their role as a firefighter.

“Protect yourself at home as much as you protect yourself at work.”

—CONSULTATION PARTICIPANT

Challenges and Innovations in Firefighter Equipment

Through the engagement process, firefighter organizations shared their struggles with accessing adequate gear and equipment for their members. According to the Great Canadian Fire Census, 21% of Canadian fire departments do not have a washing machine and 24% use primary bunker gear beyond the 10-year suggested life span (Canadian Association of Fire Chiefs, 2023). Firefighters indicated that successful implementation of cancer prevention efforts relies on adequate equipment and protective gear.

Another concern raised by many structural firefighters was exposure to Per- and Polyfluoroalkyl Substances (PFAS) through their bunker gear. PFAS are human-made chemicals that repel oil, grease, water, and heat, which makes them extremely useful for firefighter protective gear. PFAS do not break down easily and remain in the environment for long periods of time; as a result, they are sometimes referred to as “forever chemicals.” Certain PFAS have been linked to human health impacts, including kidney and testicular cancer (Health Canada, 2023). Firefighters told us that they want to see the development of PFAS-free bunker gear, while acknowledging that this may mean reducing the performance requirements for bunker gear to make this possible, and that many fire departments may not be able to afford new gear in the short-term.

We heard that equipping wildland firefighters is a unique challenge. Wildland firefighters do physically demanding work, including hiking over rugged terrain with heavy tools, digging control lines, and clearing vegetation. Participants reported that heavy and insulated gear, including full respiratory protection, are not suitable for wildland environments because they limit mobility and increase heat stress. In parts of Canada, wildfire services are conducting research on options for respiratory protection. Many participants said that developing adequate gear to protect wildland firefighters is a priority.

Personal Impact of Cancer on Firefighters and Their Families

Through the engagement process, firefighters were candid about the profound personal toll of a cancer diagnosis. They highlighted how cancer disrupts their lives beyond the need for medical care. It challenges their identity and their livelihood, deeply affecting their families' security and well-being. The stories shared included the struggle of stepping away from their roles as active firefighters and how this meant losing a part of themselves, underscoring the deep connection they have to their work.

Participants also highlighted that this situation was further complicated by the difficulties they faced in obtaining workers' compensation coverage, and that this increases the stress and uncertainty faced by firefighters and their families. Based on their experience, firefighters identified that access to proper compensation, health care, and emotional support services is essential as they navigate the aftermath of a cancer diagnosis.

The compensation policies for firefighters vary across provinces and territories, as well as for different types of firefighters. Participants expressed that this inconsistency creates a process that they find difficult to navigate, potentially involving lawyers, medical exams, and appeals over many years. We were told that for many families, this has led to financial instability and emotional strain during vulnerable times. Firefighters suggested that system improvements are needed to help navigate these stresses.

AWARENESS AND INFORMATION SHARING

Awareness of Firefighter Cancer Risks

A key issue voiced by partners and stakeholders was the need to broadly raise awareness about firefighters' cancer risks across different groups. Firefighters argued that, despite decades of research in the field demonstrating their increased cancer risk, in their experience, many health professionals, policy makers, and the public remain unaware of the situation. They expressed frustration over their experiences within the healthcare system, particularly with physicians' unawareness of their elevated cancer risks.

Partners and stakeholders also expressed that awareness efforts should include the broader Canadian public. We heard that improving the general public's awareness of this issue is an opportunity to communicate the importance of basic fire prevention efforts, including having functional smoke detectors. Participants articulated that fire prevention is a significant contributor to firefighter cancer prevention. They suggested that Firefighter Cancer Awareness Month each January provides an opportunity to educate the public on this issue and their role in protecting firefighters.

Accessible and Collaborative Information Sharing

Many partners and stakeholders spoke about the challenges of finding simple and concise information on firefighter cancer. We were told that policies on best practices, workers' compensation coverage, and diagnostic testing all vary across the country, and firefighters did not understand why there are differences. Participants suggested that the information used to make decisions in one jurisdiction should be shared with other jurisdictions.

Firefighters and their organizations reported a lack of access to reliable and straightforward information about their cancer risks. Additionally, they pointed out that the available information is not distributed equally among firefighter groups. For instance, while some firefighters receive information from their employers or unions, other groups, such as volunteer firefighters, often lack access to relevant information.

To improve the situation, partners and stakeholders expressed that they need an easy place to access all the relevant information on this topic. They suggested that an information hub could be developed to compile and summarize the latest findings and best practices related to cancer in firefighters, serving as a comprehensive Canadian resource.

“Have a one-stop-shop portal available to everybody, so everything, from best practices to information on PFAS in gear [is there]. What to do, what not to do... Breaking it up for what [firefighters] actually do in a day.”

—CONSULTATION PARTICIPANT



RESEARCH AND DATA COLLECTION

Research Participation and Accessibility

During the engagement process, firefighters shared their concerns that research findings were not being used effectively. They suggested involving firefighters in the research process from the start to ensure that studies are relevant to their context and can inform their daily work. They believed that their unique perspectives could help identify research gaps, determine priority areas, and convey the practical realities of their work.

Canadian researchers who collaborate directly with firefighters and their organizations emphasized the importance of this partnership for conducting research under the challenging conditions firefighters face. For example, it was noted that getting access to the fire camps where wildland firefighters live while on duty is only possible with permission from their employers. This requires close collaboration between researchers and firefighter groups.

Firefighters also called for research outcomes to be communicated in clear, straightforward language that they can easily understand and apply. They communicated their view that research is not made easily accessible to them and has not been translated into actionable practices. They said that they would like to see concise guidelines and infographics on understanding their cancer risks and how to protect themselves at work, as they cannot afford to wait decades to learn about protective measures they should be implementing today.

Overall, participants underscored their view that work is needed to bridge the divide between academic studies and on-the-ground realities. They suggested that by more consistently involving firefighters directly in research and focusing on clear, practical advice, they will be better able to take care of their own health and safety.

“Developing infographics makes the information accessible to [firefighters]. A postcard can be more powerful than a pile of research.”

—CONSULTATION PARTICIPANT

Understanding Firefighter Exposures

One of the main gaps brought up by researchers was the limited data on firefighters' exposure to hazardous chemicals. In their view, understanding firefighters' exposures at various types of fires and work conditions is critical to understanding the link between firefighting and cancer and subsequently taking steps to prevent these cancers.

We also heard that measuring exposure levels among firefighters while they are actively working is extremely challenging due to the nature of their job. Researchers conveyed that firefighters operate in demanding and hazardous environments, making it difficult to track the chemicals they're exposed to in real-time. They stated that measuring firefighters' exposures is complex in urban fire stations and even more so in rural and wildland settings. We were told that this is why exposures among wildland, volunteer, and rural firefighters remain poorly understood, complicating efforts to assess the impact on their health.

“One of the most important processes is creating actionable research. We don’t need to learn much more about cancer, but we do need research on policy that will prevent cancer.”

—CONSULTATION PARTICIPANT



Both researchers and firefighter organizations expressed that they are keen to gather data on exposure in these unique working conditions. They highlighted that understanding exposure lays the groundwork for getting proper compensation for cancer cases and informs efforts for preventing cancer cases in the future.

“If it’s on you, it’s in you.”

—CONSULTATION PARTICIPANT

Advancing Firefighter Cancer Research through a National Firefighter Registry

During research-focused discussions, several participants mentioned the importance of collecting better data on cancer among firefighters in Canada and that having a more accurate picture of firefighters’ health status will help identify research and intervention priorities.

As noted by researchers through the engagement process, the research linking firefighting to higher cancer risks has mainly concentrated on male career structural firefighters. According to researchers, this focus is due to the limited availability of data for other firefighter groups and the difficulty in obtaining large enough sample sizes to effectively study their cancer outcomes. However, they said that understanding the cancer risks among other groups, such as wildland and female firefighters, is important.

Some participants suggested that the development of a national firefighter registry would fill this data gap. We were told that establishing a registry would allow for larger research studies of firefighters, especially subgroups like wildland and female firefighters, and would make it possible to keep track of changes in firefighters’ health outcomes over time. To be most useful, participants stated the registry should include historical data on firefighters’ employment to allow for an understanding of cancer outcomes today and going forward. We heard that it should also be easily accessible for researchers across the country. Some researchers also stated that including exposure data in the registry would be highly informative and fill a major gap in understanding cancer among firefighters.

SCREENING AND DIAGNOSTIC TESTING

Challenges in Accessing Diagnostic Testing

Firefighters shared their frustration of knowing they are at higher risk of cancer but not feeling like their concerns are being heard by their physicians. Several firefighters shared personal stories about having to inform their physician about their increased cancer risks and not being able to access the cancer screening they felt was appropriate. They are concerned that this means their cancer could be detected at a later stage, leading to worse health outcomes.

Firefighters and their organizations feel that medical professionals need to be made more aware of the cancer risks they face and how to adjust care in response to these risks. Firefighter organizations indicated that they have created resources to improve communication between firefighters and their medical providers, including a [physician letter](#) that highlights the elevated cancer risks firefighters face and suggests specific diagnostic tests. Some firefighters shared that they found such letters useful in gaining their physician's support and fostering understanding between patient and doctor. Ultimately, partners and stakeholders agreed that a strong relationship between a patient and their physician is a key factor in helping to improve patient health and that educating both patients and healthcare professionals can play a role in further strengthening this relationship.

“There is a huge gap in medical care, especially with [General Practitioners] to make them aware of the connection between firefighters and cancer.”

—CONSULTATION PARTICIPANT

Participants also raised larger systemic issues that make it difficult for firefighters to access diagnostic testing. For example, we heard that it may be difficult and costly for firefighters in remote communities to access certain diagnostic tests as the facilities are located outside of their community. We were told that many firefighters also do not have a primary care physician, making it difficult for them to access regular health monitoring.

Diagnostic Limitations for Firefighter-Related Cancers

Physicians and cancer associations we spoke with pointed out that population level screening programs only exist for breast, cervical, colorectal, and lung cancers. This means that many of the cancers most strongly linked to firefighting (e.g., mesothelioma, bladder cancer, prostate cancer, testicular cancer, melanoma, and non-Hodgkin lymphoma) do not have population level screening programs (International Agency for Research on Cancer, 2023). Physicians noted that early detection of these cancers relies on a strong patient-doctor relationship and regular health monitoring.

Cancer associations and researchers also expressed concern about the potential for over screening, stating that diagnostic tests are not perfect and have risks associated with them. For example, we were told that there is always some number of people who will get a false positive test result from a diagnostic test, leading to unnecessary medical treatment and emotional distress. Participants said tests that expose the person to radiation (such as CT scans) must also be used carefully to minimize exposure. Healthcare-focused partners and stakeholders cautioned that diagnostic testing must be weighed with the potential risks.

Physicians also shared that their ability to order tests can be limited by the guidelines and policies of their provincial health care plan. They said that ordering specific tests, such as low-dose CT scans, can be challenging unless they are explicitly indicated for the patient under medical guidelines. They suggested that having clinical guidance on diagnostic testing for firefighters would help them justify ordering these tests. They also indicated that it would be helpful to have access to concise, evidence-based summaries on the cancer risks faced by firefighters and the best ways to monitor their health.



OCCUPATIONAL HEALTH AND SAFETY STANDARDS

Participants articulated that occupational health and safety (OHS) regulations lay the groundwork for protecting firefighters from cancer by setting the standards for PPE, decontamination procedures, facility and equipment design, and training. They expressed that in Canada, these regulations vary between the federal government, provinces and territories, and for different firefighter groups. Partners and stakeholders voiced concerns that this inconsistency leads to differences in the level of protection for firefighters across the country.

We heard that Canadian firefighting groups often use the regulations and practices developed by the National Fire Protection Association (NFPA), an American-based organization. Firefighters told us that the NFPA standards may not always work in the Canadian context, considering differences in operational environments and resource availability. Participants also noted that NFPA standards are heavily focused on structural firefighting and do not necessarily include standards and procedures for other firefighter groups.

Some participants said that wildland firefighters may be especially vulnerable due to limited OHS regulations and enforcement for this group. Wildfire organizations described that wildland firefighters most often work in remote areas with very limited access to showers or other decontamination facilities, making it very challenging to implement OHS standards for cancer prevention. They felt that addressing these limitations would require targeted research, innovation in equipment and tactics, and a commitment to adapting OHS standards to the specific needs and challenges of wildland firefighting.

There was a call from some participants to build a more unified Canadian approach to firefighting standards and practices. Suggested priorities included harmonizing standards where feasible, ensuring all types of firefighters are adequately covered, and creating Canadian-specific standards where necessary. Some stakeholders also highlighted that standards and practices need to be enforced, while noting that this can be costly.



WORKERS' COMPENSATION COVERAGE

A primary concern raised by firefighters was inequity in presumptive workers' compensation coverage across the country, and even between firefighter groups. Presumptive clauses are important to firefighters because they eliminate the need for extensive documentation to prove their condition is work related and thus streamlines the claim process. They expressed that it can be very time consuming to fight for worker's compensation coverage for cancer that does not have presumptive coverage. They shared how a structural firefighter working in Ontario may receive workers' compensation for their cancer while a firefighter just across the river in Quebec may not, even though they may work side by side at the same fires. Firefighters argued that this patchwork system is not only confusing, but unjust.

Firefighters highlighted that each province and territory establishes its own policies, regulations, and coverage criteria, but noted that the basis for these decisions is not always clear. They felt their exposures to hazardous chemicals are mostly the same across the country, that evidence of this is consistent, and yet their coverage depends on their postal code. Stakeholders called for a unified approach wherein provinces and territories share information and use a common standard of presumptive coverage.

“I want to make sure the coverage and presumptive coverage gets equal fair share for everyone working across the country.”

—CONSULTATION PARTICIPANT

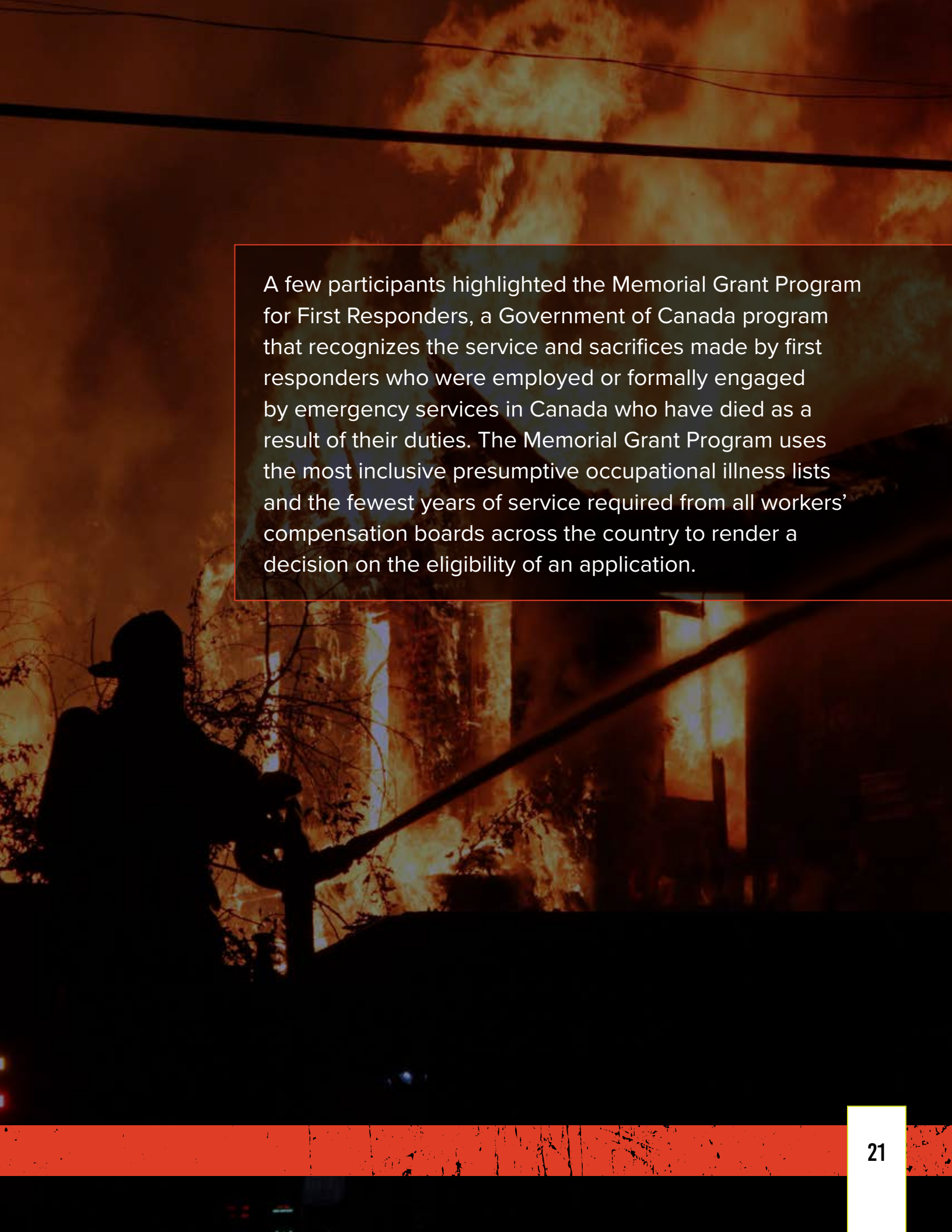
Participants indicated that federal firefighters are covered under the *Government Employees Compensation Act* (GECA), which is administered in partnership with provincial workers' compensation boards. However, they noted that federal firefighters do not always benefit from provincial presumption clauses because of the narrow definition of occupational groups that are covered, despite recent efforts to address these gaps.

Wildland firefighters pointed to a gap in the current system where they lack presumptive cancer coverage in nearly all provinces and territories. Their work is seasonal and cross-jurisdictional, which they report also complicates workers' compensation claims. Several stakeholders articulated that they found this to be particularly concerning given the increasing frequency and intensity of wildfires in Canada and the need to recruit more wildland firefighters.

“Presumptive laws should not be dictated based on where someone lives. If you’re exposed, you’re exposed.”

—CONSULTATION PARTICIPANT

A number of firefighters shared how fighting for workers' compensation coverage can lead to significant financial and emotional strain for themselves and their families during an already difficult time. Firefighters and their organizations said there is a pressing need for national guidance and a unified approach to address the disparities in presumptive coverage across Canada. They said that all firefighters should receive equitable and comprehensive coverage for health issues related to their service.

A firefighter is silhouetted against a large, intense fire at night. The firefighter is in the foreground, holding a hose that extends towards the fire. The fire is a large, bright orange and yellow mass, with thick smoke rising from it. The scene is dark, with the fire providing the primary light source. The firefighter's helmet and gear are visible in silhouette.

A few participants highlighted the Memorial Grant Program for First Responders, a Government of Canada program that recognizes the service and sacrifices made by first responders who were employed or formally engaged by emergency services in Canada who have died as a result of their duties. The Memorial Grant Program uses the most inclusive presumptive occupational illness lists and the fewest years of service required from all workers' compensation boards across the country to render a decision on the eligibility of an application.

GLOSSARY OF TERMS

Cancer: A disease caused by the uncontrolled growth and spread of abnormal cells in the body. Firefighters are disproportionately exposed to a higher level of harmful chemicals, smoke, soot, hazardous materials, and carcinogens present in firefighting environments, which fundamentally increases their risk of developing and dying from cancer.

Carcinogen: A substance or agent that has the potential to cause cancer in living tissues or cells.

CIFFC: The Canadian Interagency Forest Fire Centre—a not-for-profit coordinating body that facilitates cooperation and information sharing among various governmental agencies involved in wildland fire management (at both the federal and PT levels).

Diagnostic Tests: A diagnostic test is performed when a person is showing symptoms of a particular condition, whereas screening is used in asymptomatic individuals who do not have any signs or symptoms of a particular condition.

Draft State of PFAS Report: A preliminary document that provides an assessment of the current situation regarding per- and polyfluoroalkyl substances (PFAS), which are a group of man-made chemicals that have been widely used in firefighting textiles and equipment (among other applications). This report was published for public comment on May 20, 2023; it includes information on the sources of PFAS contamination for firefighters, the extent of PFAS contamination in a firefighting environment, potential human health and environmental impacts, regulatory actions, ongoing research and monitoring efforts, and recommendations for mitigating PFAS contamination in a firefighting setting. The draft status indicates the report is not yet finalized.

IARC: International Agency of Research on Cancer (IARC) is an intergovernmental agency forming part of the World Health Organization. Its mission is to conduct research on the causes of cancer. In June 2022, the IARC updated firefighting classification from Group 2A ‘possibly carcinogenic to humans’ to Group 1 ‘carcinogenic to humans.’

Firefighter: A trained individual whose primary responsibility is to respond to fires, emergencies, and other incidents to protect life, property, and the environment. Firefighters work in various settings, such as municipal fire departments, industrial facilities, airports, military bases, naval ships, and wildland areas, to extinguish fires, conduct rescues, provide emergency medical care, and perform other critical tasks to ensure public safety.

Fire Inspector: A trained individual responsible for inspecting building, structures, and properties to ensure compliance with fire codes, regulations, safety standards, and investigating fire incidents.

Fire Chief: The highest-ranking officer in a fire department or firefighting organization, responsible for overseeing and managing all aspects of fire protection, emergency response, and fire department operations.

Fire Commissioner: In Canada, the role of a fire commissioner can vary depending on the province or territory. Generally, a fire commissioner in Canada is a senior official responsible for overseeing and regulating fire departments within a specific jurisdiction. The fire commissioner may have various duties, including setting safety standards, conducting inspections, issuing permits, and providing guidance on fire prevention and emergency response. The specific responsibilities and authorities of a fire commissioner in Canada may differ based on the province or territory in which they operate. Some provinces have a designated Office of the Fire Commissioner that provides oversight and support to fire departments throughout the region.

Fire Marshall: A senior official who is the technical authority on fire protection.

GOC: Government of Canada

Occupational Exposures: Contact or interactions that occur while on duty; for firefighters, these can include various physical, chemical, biological, or psychosocial hazards that may pose a risk to their health and safety. These exposures can occur through inhalation, ingestion, skin contact, or other means while performing firefighting duties.

PFAS: Per- and Polyfluoroalkyl Substances (PFAS) are a group of chemicals used to make fluoropolymer coatings that resist heat, oil, stains, grease and water. PFAS have been classified as a Group 2B carcinogen, *possibly carcinogenic to humans*.

PT: Provinces and Territories

Presumptive Legislation for firefighters: A legal measure that establishes a presumption that certain conditions, illnesses, or injuries are work-related for a specific group of individuals, typically for the purpose of workers' compensation benefits. In the context of presumptive legislation for firefighters, certain laws or regulations may establish a presumption that certain types of cancer or other health conditions are considered to have been caused by the inherent risks of firefighting. This means that if a firefighter is diagnosed with a specified condition that it is covered under the presumptive legislation, it is presumed that the condition is work-related unless proven otherwise. This can simplify the process for firefighters to access compensation, benefits, and/or medical care for specific conditions.

PPE: Personal protective equipment (PPE) refers to any equipment worn by an individual to protect themselves from potential hazard or environmental risks. It is designed to minimize exposure to chemicals, biological, and airborne risks. PPE may refer to gloves, goggles, masks, face shields, and/or safety footwear.

Workers' Compensation: A form of insurance that provides wage replacement and medical benefits to employees who are injured or become ill as a result of their job. Workers' compensation boards (WCBs) operate independently from direct government control or interference, maintaining a certain degree of autonomy in its decision-making and operations. This independence allows WCBs to make decisions based on established rules, regulations, and guidelines, without undue influence from government officials and political considerations. By being arm's-length, the intent of WCBs is to promote accountability, efficiency, and fair treatment of injured workers while upholding the principles of justice and equity in providing compensation for work-related injuries, illnesses, or disabilities.

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ANNEX A—BRIEFING MATERIALS FOR KEY INFORMANT INTERVIEWS

The following information was provided to participants prior to their Key Informant Interviews (which took place from June 2023 to January 2024) to help them prepare.

In preparation for your Key Informant Interview with Health Canada, please find the following information:

Objective: Through a series of Key Informant Interviews, Health Canada aims to gather a wide range of perspectives from key stakeholders and experts to inform the development of a National Framework on Cancers linked to Firefighting. We seek your advice and insights on what actions are most needed to advance efforts to raise awareness and support improve access for cancer prevention and treatment for firefighters.

Context: Health Canada is developing a National Framework on Cancers linked to Firefighting, in response to the recent *Royal Assent of Bill C-224—National Framework on Cancers Linked to Firefighting Act*.

The National Framework will be designed to raise awareness of cancers linked to firefighting and to support improved access for firefighters to cancer prevention and treatment and will aim to provide a common direction for stakeholders to address cancer among firefighters, such as actions to:

- Identify training, education, and guidance needs for health professionals
- Make recommend regarding regular screenings for cancers linked to firefighting
- Support research on links between certain cancers and firefighting,
- Promote research, data collection, and knowledge sharing
- Summarize standards that recognize cancers linked to firefighting
- Actively promote “Firefighter Cancer Awareness Month” each January

Discussion Questions: Our discussion questions are designed to elicit your feedback on each measure of the framework to understand: How would you describe the current status of this measure? What does meaningful action or success look like? Are there international entities or leaders in this space that you think we should either emulate or consider partnering with?

1. **Mandate:** What is your mandate and the group or stakeholders you represent?
2. **Impact and priorities:** How might this National Framework help firefighters? Which elements are the most important? What would success look like?
3. **Training needs for health professionals:** What areas do medical professionals need further training in with respect to firefighter cancer?

4. **Screening:** What do you think are the main barriers for firefighters to undergo regular cancer screenings?
5. **Research:** What should be the top priorities for future research on the connection between firefighting and cancer? What can researchers do to make their findings more accessible and actionable?
6. **Information and knowledge sharing:** How can we improve awareness of this issue? Are there any existing international resources or websites that you believe serve as a benchmark or best practice in this area? What types of initiatives do you believe would be most impactful during Firefighter Cancer Awareness Month? Who should lead these initiatives?
7. **National Standards:** What do you perceive as the primary barriers to achieving greater harmonization in coverage across provinces? What does meaningful action or success look like in this area? How would you like to see firefighters and their representative organizations involved in the process?
8. **Diversity:** How can we ensure that the needs of all firefighters are met, especially considering groups such as female, Indigenous, and volunteer firefighters?
9. **Consultation:** What other organizations, experts or stakeholders would you recommend we consult in developing the National Framework?
10. **Additional Feedback:** Do you have other insights or advice that you wish to share?

Note: We anticipate having several team members observe your interview to help inform the development of the Framework and we would like to record the interview for future reference. We will seek your permission before we initiate recording.

Thank you for agreeing to participate in a key informant interview.