

# WILDFIRE RESILIENCE GUIDE

## UNDERSTANDING YOUR RISK

### INTRODUCTION

Across Canada, the frequency and severity of extreme weather events are increasing, with more instances each year of wildfires, drought, heatwaves, and flooding. Increasing global temperatures, longer seasons, increased lightning activity, and drought collectively impact the severity of the wildfire season. An average of 8,000 wildfires burn about 2.5 million hectares of forest each year in Canada. 2023 was the most disastrous fire season, which burned 18.5 million hectares between May and October.

For Canadian businesses, extreme weather can cause significant damage — not only to buildings and property, but to operations through supply chain interruptions, displacement of labour force, and health and safety risks.

Implementing wildfire resilience measures is critical to reduce the risk of damage and costly losses. Wildfire mitigation, preparedness, response, and recovery can lessen the impact of a wildfire event. Taking the necessary steps before, during, and after a wildfire can be the difference between a minor disruption and a disaster your business can't easily recover from.

# KNOW YOUR RISK AND BE PREPARED

## Wildfire awareness

Wildfires can damage natural resources, destroy homes and businesses, and threaten the health and safety of the public and firefighters who protect forests and communities. Wildfires can happen anytime during the year, but they are more likely to happen during late spring to fall when there is little to no rainfall, and dry brush, grass, and trees can easily catch fire. High winds, low humidity and elevated temperatures can also contribute to the rapid spread of fire.

Although some parts of the country are more at risk than others, wildfires can occur anywhere in Canada, affecting federal and provincial public lands, private properties, and even businesses. As more Canadians live and recreate in less populated areas there's an increased risk of fires. While some wildfires may start due to natural causes, such as lightning, the majority are caused by humans, either accidentally or intentionally. Carelessly discarded cigarettes, off-highway vehicles (OHVs), or outdoor burning are common human activities that can lead to the outbreak of wildfires.

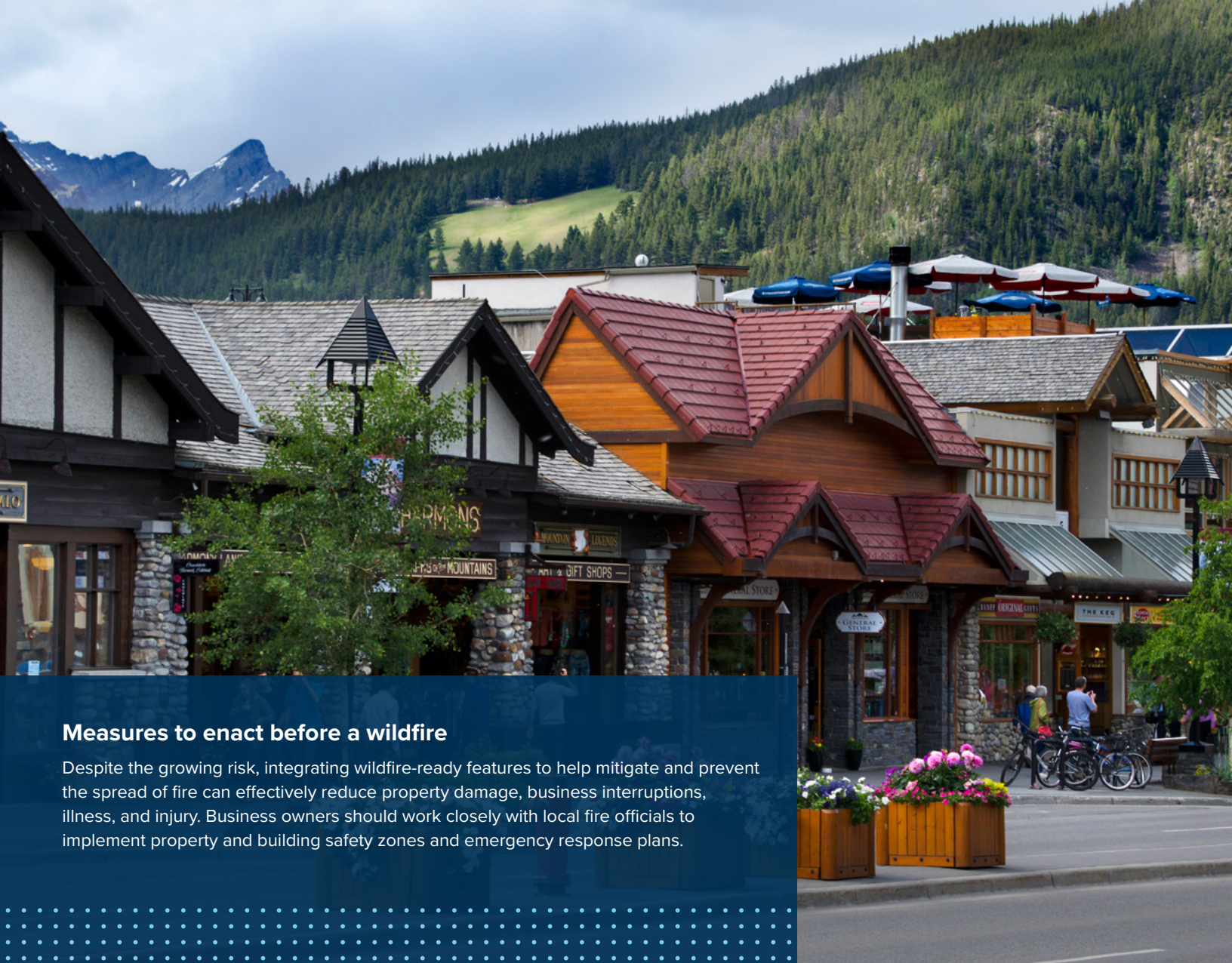
2023 was one of the largest loss years for Canada, with total insured losses exceeding \$3.1 billion. It was the second year in a row that the insured losses exceeded \$3 billion. Nationwide, the 2023 wildfires prompted evacuation orders for close to 200,000 people. Residents and business owners can be displaced for weeks with their home or business potentially destroyed upon return.

Wildfire smoke contains tiny particles that can easily enter the lungs and bloodstream, causing breathing problems and heart issues. In addition to air pollution, the smoke and ash from fires can contaminate surface waters and increase the risk of cancer if the local drinking water is affected.

It's important to note that climate change can lead to weather conditions that support wildfires in areas without past incidents. The rising temperatures and prolonged seasons will continue to affect areas that have not encountered wildfires previously, making them more susceptible to wildfires in the future.







## Measures to enact before a wildfire

Despite the growing risk, integrating wildfire-ready features to help mitigate and prevent the spread of fire can effectively reduce property damage, business interruptions, illness, and injury. Business owners should work closely with local fire officials to implement property and building safety zones and emergency response plans.

## Wildfire preparedness plan

- Make sure emergency preparedness and response plans are in place and include wildfire event procedures. Keep plans well-documented, updated, and readily available in an emergency.
- Provide training to all building operations staff on wildfire event procedures. Perform annual review and practice drills with staff and familiarize staff with planned evacuation routes.
- Support your public fire service by clearly marking site entrances and identifying water sources, such as fire hydrants, water storage tanks, wells, and ponds.
- Allocate dedicated funds for wildfire events. Designated staff should also have access to credit cards and enough cash for emergency operations.
- Establish tenant, stakeholder, and customer communication channels (such as mass notification systems and social media channels) for wildfire events. Regularly update contact details for tenants or stakeholders.
- Agree on an alternate space to continue operations, away from known wildfire zones, during a wildfire event. Perform regular computer system data backups to enable remote access to data.
- Establish documented procedures to shut down equipment that may be affected by a wildfire.
- Maintain and regularly review the contact information of risk management personnel, insurance adjusters, and insurance brokers.



## Prevention and mitigation

Depending on their property's potential vulnerability to wildfire, business owners should consider building updates, following safety practices, and creating a fuel reduction area to minimize the risk of ember ignition and wildfire spread.

### Building design

- Protect your building exterior by installing fire-resistant or non-combustible materials, like roof coverings, siding, overhangs, and eaves. Class A-rated materials such as metal, fibrous cement, and asphalt shingles are ideal for roofing. Consider using metal siding, stucco, concrete block, and brick walls that, depending on thickness, would exceed a one-hour fire rating.
- Install roof vents with fire and corrosion-resistant screens.
- Have a 20-minute fire-resistance rating on exterior openings, windows, doors, and glazed openings. Operational windows should have screens installed that can open.
- Install spark arrestors on chimneys and vents to prevent sparks and embers from entering the building through these openings.
- Keep fire protection systems in proper working order, conduct semi-annual and annual inspections, and complete necessary repairs to fire alarm systems, sprinkler systems, and fire extinguishers.

### Fire reduction zone

- Create a fire reduction safe zone and follow National Fire Protection Association 80A (NFPA) Standards by maintaining a minimum of 10 metres (32 feet) separation between buildings (including vehicles, fuel tanks, and outside storage areas) and high grass or wooded areas. If trees in this area are primarily coniferous (such as pine and fir), expand this zone to at least 30 metres (197 feet).
- Trim trees so branches are at least two metres (six feet) off the ground and routinely remove deadfall and trimmings from the open space.
- Consider non-combustible landscaping materials like stone, rock, brick, and concrete pavers.
- Make sure driveways and access roads are well maintained, adequately sized, and properly graded.
- Store combustible and flammable materials in approved containers at an acceptable distance from buildings, fences, and vehicles.
- Store garbage in fire-resistant waste containers with tight-fitting lids.
- Establish a safe outdoor smoking zone, such as a paved area, where dropped smoking materials cannot start a fire. Provide appropriate containers for discarding smoking materials.
- Avoid burning fires outdoors in dry weather or during wildfire season.



## Measures to enact during the wildfire

During a wildfire event, it is crucial to stay safe, prioritize the health and safety of all onsite personnel, and follow the local authority's emergency procedures and instructions.

- If evacuation orders are issued, make sure all onsite personnel, including employees, tenants, customers, visitors, and vendors leave the premises immediately.
- Keep windows and doors closed and shut down building air intakes to limit exposure to smoke and dust.
- Monitor air quality reports in your area and follow necessary precautions if it's safe.
- Follow the documented procedures to shut down any equipment that may be affected, including backup generators and flammable liquid lines at the source (except fixed fire protection). Do not energize until a licensed electrician inspects this equipment for damage.
- Cover vents, windows, and other openings with duct tape and plywood if it's safe.
- Consider using a sprinkler to wet the roof and property. Confirm with local authorities if there are water restrictions.
- Provide regular updates to personnel who are regularly onsite, including guidance on whether it is safe to return to the site.
- Once safe, contact customers and suppliers to inform them of possible interruptions.
- Monitor local radio, news outlets, or government websites for updates.

## Measures to enact immediately after the wildfire

Before you return to your business premises, it is important to consider the following steps:

- Continue to take precautions and listen to and follow directions from local authorities. Only reenter the area and your business if authorized to do so.
- When safe to return, wear protective gear, including boots, safety glasses, a mask, and rubber gloves when cleaning. Keep supplies on hand, such as a first aid kit, garbage bags, flashlights, smartphones and chargers, and portable water.
- Perform a visual perimeter inspection of the building before entering the building. Inspect for hazards, like out-of-place electrical wiring, gas smells, or loose debris. Call the hydro company before entering the building if you smell gas or see any downed power lines.
- Assess the damage, take inventory and photos of goods, equipment, and materials, and contact your insurance broker.
- Test electrical, mechanical, fire protection, alarms, and other building systems; and repair or replace systems as required. In some cases, experts such as electricians, gas fitters, and fire contractors may need to review the site.
- Clean air intake units before turning them on.
- Call an environmental consultant to check for contamination and determine the required level of cleaning and sanitation.
- Initiate repairs and collect any goods that are salvageable.
- Remove and dispose of any damaged contents and furniture.





## DID YOU KNOW?

Our experienced Risk Services consultants can assist in understanding your operation's specific wildfire risk and providing reasonable actions to manage wildfire exposures and hazards. Our Risk Services team can offer proven strategies and share industry best practices to help you protect your business and minimize the potential for a wildfire-related loss.

[Contact a licensed insurance broker today](#) to make sure you have the right wildfire coverage for your business.

Special thank you to the [Institute for Catastrophic Loss Reduction](#) and [FireSmart Canada](#) for the research and insight required in creating this resource.