# Introduction

### Slide 1

Welcome to the *FireWise Facility Risk Manger Certification* course. As a building owner or their authorized representative, understanding the importance of effective fire prevention is crucial. This course explores the importance of a comprehensive risk-managed approach to maintaining your buildings in a fire-safe condition. At the same time, it develops your understanding of Canada's National Fire Code and the importance of your roles as owner or agent.

Fire inspections are a key component of the Fire Prevention Program managed by your local Fire Department and Fire Safety Authority. By prioritizing fire safety awareness and implementing a comprehensive inspection program, you can significantly reduce the risk of fires, prevent fire-related deaths, and minimize business disruptions, occupant inconvenience, and property damage caused by fires. It can also be essential to a risk and claims management program, vital to controlling insurance costs.

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It is important to note that a fire safety self-assessment is not a substitute for a formal fire safety inspection conducted by a trained and certified fire inspector. Your efforts in implementing the knowledge contained in this course will help reduce the potential for fire emergencies in your building, help you develop your analytical skills when evaluating building condition, and be an important resource to fire department officials. It also helps fire department personnel to better understand what to expect if an emergency does occur.

This course will equip you with the knowledge and tools needed to proactively manage fire risks and foster a culture of safety within your organization and community.

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The news media typically tells two types of fire stories:

# **Fire-Limited Stories**:

These stories focus solely on the fire itself—what happened, where, and why. These stories provide details about the event, such as the time, location, and extent of the damage. This type of story sticks to the basic facts without delving into any broader impacts on the community.

### Fire-Impacted Stories:

These stories start with the fire but then expand to explore how the incident affects the community. For instance, if a fire destroys a neighbourhood school, the report might not only cover the blaze but also raise important questions like:

# Where will the children go to school?

The destruction of the building could mean the community needs to find temporary or even permanent alternative education facilities.

# How will the children get to school?

With the usual route disrupted, transportation may become a serious concern.

# Will there be enough space?

If the remaining schools are overcrowded, the community might need to consider shifting schedules or temporary split shifts to accommodate all the students.

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A similar scenario could occur with an apartment building fire, where the story would shift from describing the incident to addressing how displaced or injured residents will be cared for and where they might find temporary housing.

These examples highlight why having a strong fire prevention plan is so important. With proper planning and safety measures, the risk of a fire occurring reduces the following cascading effects. An effective fire prevention plan helps protect lives and property during an incident and minimizes the long-term disruption to the community.

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We build fire inspection programs on the three "E's" of fire prevention: Education, Engineering, and Enforcement. Regular fire inspections focus primarily on Education and Engineering, while Enforcement is reserved as a last resort to achieve compliance.

# **Objective 1: Enhance Fire Safety Education**

This program aims to equip building owners, managers, property supervisors, and other interested parties with the knowledge they need to fulfill their responsibilities for fire safety. By understanding best practices and regulatory requirements, you can better protect both the occupants of your buildings and the surrounding community.

# Objective 2: Empower Through Knowledge of Codes and Standards

We also strive to provide you with a comprehensive understanding of fire codes and standards. This knowledge will help you make informed decisions and serve as a knowledgeable partner to local fire prevention officials and fire department personnel, ultimately creating safer buildings for everyone involved.

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### **Education**

Education plays a key role in changing behaviour by raising awareness, providing clear information, and encouraging safe practices. When people understand fire hazards and know how to reduce or eliminate them, everyone in the community benefits from a safer environment.

# **Engineering**

Engineering focuses on making physical changes to improve safety. Engineering can include modifications to a building's design during maintenance, repairs, renovations, and upgrades to safety systems like fire alarms, sprinklers, and fire separations. We'll cover these topics in more detail as we progress through the program.

#### **Enforcement**

Enforcement is typically used as a last resort when building owners are unable or unwilling to ensure an acceptable level of fire safety. If a fire department inspector discovers serious fire

hazards or violations, they may issue a corrective order, giving the owner a reasonable period to fix the unsafe condition. In some areas, fines may be imposed for severe violations, but penalties are generally enforced only after unsuccessful efforts to correct the issues. The potential impacts of enforcement actions can include increased insurance costs or availability.

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Fire safety inspections are conducted at various levels to ensure your building is secure. A robust fire safety program starts with a thorough **facility risk assessment**. The risk assessment identifies potential hazards by examining occupancy levels, occupant needs, building design, historical compliance, and specific fire risks.

Based on the risk assessment findings, you can develop a tailored fire safety plan that aligns with local standards. Additionally, fire prevention training for owners and managers is often recommended to ensure everyone understands the requirements and effective strategies for mitigating fire risks.

Ultimately, the facility risk assessment informs your initial safety efforts and guides future inspections and necessary corrective actions, ensuring that your building complies with fire safety regulations.

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Other fire inspection programs include those conducted directly by the fire department. In many cases, firefighters perform routine inspections—often called Company Inspections—on low occupant load, low-risk commercial, multi-residential, and some assembly occupancy buildings. Firefighters receive training to deliver these inspections, guide building owners and operators, and recognize complex situations requiring more qualified guidance. These inspections help building owners and occupants maintain fire safety equipment and life safety conditions.

For more technical and complex assessments, qualified fire prevention professionals carry out Fire and Building Code Compliance Inspections. Their specialized expertise is essential for navigating the detailed requirements and ensuring that higher-risk buildings meet all fire safety standards.

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When voluntary compliance isn't achieved through firefighter inspections and education, the matter is referred to a fire prevention specialist for further review. This may lead to enforcement actions, including licensing requirements, tickets, orders to remedy unsafe conditions, or even legal action. In some areas, there is a fee for having a fire inspector from the fire department perform an inspection and any subsequent re-inspections.

Additionally, some jurisdictions allow or require third-party contracted fire inspection programs or partnerships with the building owner's loss prevention agents. This option is often used when the facility involves highly technical or hazardous processes requiring specialized expertise.

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After successfully completing this training program, you can perform a comprehensive facility risk assessment on the building you own or manage. You'll better understand fire prevention and the critical systems that keep your building and its occupants safe. This assessment is most effective for buildings with a history of compliance or only minor fire safety issues that are quickly resolved. Still, it can also support a building that wants to improve its fire safety performance.

By conducting your facility risk assessment and submitting the completed forms to the local monitoring agency, you'll help ensure that fire prevention specialists can focus their efforts on higher-risk properties. Your proactive approach plays a crucial role in maintaining community safety.

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# Why Have Fire Safety Inspections?

Law or local policy requires many jurisdictions to conduct regular fire safety inspections on public buildings. Typically, the fire department is responsible for these inspections, but as the costs of this service rise, local governments are exploring more sustainable alternatives.

Recent legislative changes place the responsibility for meeting fire safety standards on building owners, regardless of the level of risk. As a result, there is a move toward having qualified personnel conduct facility risk assessments and submit fire safety assessment forms for low-risk, low-occupancy buildings. Fees may be applied in some jurisdictions where fire department inspectors perform inspections.

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# What Are Public Buildings?

**Residential Buildings:** These include hotels, apartments, condominiums, and any place where lodging is provided.

**Other Occupancies:** This category covers warehouses, factories, stores, mills, schools, hospitals, theatres, churches, community halls, office buildings, and any building that is not a private residence.

By shifting some of the responsibility to building owners and qualified inspectors, communities can better allocate resources and ensure fire safety efforts focus on higher-risk properties.

Fire inspections and facility risk assessments ensure buildings remain safe for occupants, employees, and the public. These assessments offer an opportunity to educate owners and managers on protecting their property, staff, and customers.

Investing in fire prevention is far more cost-effective than responding to emergencies. Regular facility risk assessments increase awareness of potential hazards, which can help prevent many fires before they occur.

Additionally, inspections and risk assessments provide a chance to update critical information about the building, such as after-hours emergency contacts, changes in building use, and any unique hazards that may be present.

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Fire inspections and facility risk assessments ensure buildings meet fire safety standards and protect occupants, employees, and the public. Regular facility risk assessments not only help identify potential hazards but also serve as an opportunity to educate owners and managers on maintaining and enhancing fire safety.

Recent National Fire Protection Association (NFPA) research shows that approximately 90% of fire-inspected buildings comply with relevant codes and standards. This high level of compliance highlights the effectiveness of consistent inspections and proactive risk assessments in reducing fire hazards.

Additionally, these inspections and facility risk assessments provide an opportunity to update essential building information, such as after-hours emergency contacts, building use changes, and identifying any special hazards. This ongoing process is key to maintaining a safe environment and ensuring that fire safety practices evolve with the building's needs.

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This fire safety facility risk assessment training program is designed for low-hazard commercial, assembly, and residential buildings that contain minimal combustible materials—such as furnishings, decorations, and other contents. It applies to a range of occupancies, including:

- Commercial and Professional Spaces: Business offices, professional offices, retail shops and stores, and personal service establishments like barber shops, beauty salons, and medical offices.
- **Residential Buildings:** Structures with six stories or less, although it is highly applicable to some emergency planning elements of higher buildings.
- Assembly Occupancies: Certain facilities such as churches, schools, and restaurants.

If your building or occupancy fits these criteria and you complete this training, you will have the skills and knowledge to conduct a fire safety facility risk assessment and inspection and submit the corresponding information to your local fire department.

Regular facility risk assessments help create a safer, year-round environment for your building, its occupants, and the public.

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We all share a moral and legal obligation to be aware of and practice fire safety. According to the current National Fire Code of Canada and applicable Provincial Fire Codes, unless specified otherwise, the building owner or their authorized agent is responsible for implementing and maintaining the fire safety measures outlined in these codes. In other words, as an owner, you are ultimately responsible for ensuring that your building and its occupants are protected.

This course is designed to help you understand your statutory obligations under these current fire safety codes and to empower you to maintain a safe environment for everyone.

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The current Building Code assigns every building an Occupancy Classification from A to G based on its intended use, as outlined in the latest edition of the National Building Code of Canada (NBCC) and similar standards worldwide. These classifications help determine the appropriate fire safety and design requirements for each type of building. For example:

# Group A (Assembly):

Designed for public gathering spaces, Group A includes buildings such as theatres, art galleries, pubs, restaurants, and nightclubs. This group is subdivided into Divisions 1, 2, 3, and 4 to account for different occupancy types and risks.

# **Group B (Institutional):**

This category covers institutional buildings with contained-use areas, such as prisons and secure wards, as well as hospitals and care facilities where occupants might have difficulty evacuating independently. Group B is divided into Divisions 1, 2, and 3.

### Group C (Residential):

Buildings in this group are intended for living purposes, such as apartments, hotels, and other types of lodging.

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### **Group D (Business and Personal Services):**

This group includes doctors' offices, banks, insurance companies, and beauty salons.

### **Group E (Mercantile):**

Mercantile occupancies cover retail environments, including shops, supermarkets, and department stores.

# **Group F (Industrial):**

Industrial occupancies include bulk plants, fueling stations, repair garages, and warehouses.

### **Group G (Agricultural):**

Agriculturial occupancies include large farm buildings, like feed mills and storage bins, grain elevators, and greenhouses.

Building use and the Building and Fire Code requirements under Canadian National Codes vary. For example, a three-story residential apartment building is designed, built, and maintained to different standards than a high-rise apartment building.

Building occupancy classifications play a key role in enforcing these codes. Many buildings feature multiple occupancies—"mixed occupancies"—with different sections required to meet other parts of the Codes. For instance, consider a multi-story building with retail space on the ground floor, office space on the second floor, and residential suites above. In this scenario:

The retail area is classified as **Group E** (Mercantile).

The office space is classified as Group D (Business and Personal Services).

The residential area is classified as Group C (Residential).

In mixed occupancy buildings, the strictest applicable code requirements are enforced across the entire building to ensure the highest level of safety. This approach aligns with the current Canadian National Building Code and National Fire Code, ensuring that all parts of the building are adequately protected.

### Slide 20

Building codes usually have specific rules for different types of buildings, but sometimes there are exceptions. For example, rules for assembly spaces (Group A Division 2) are generally stricter than for business spaces (Group D). However, if an assembly space has a very low number of people (an occupant load of 30 or less), it can be treated like a business space—unless it's a daycare for young children.

To qualify for this exception, the small assembly space must be separated from the rest of the building by a wall rated for at least 1 hour of fire resistance. Also, a sign showing that the space holds fewer than 30 people must be prominently posted near its main entrance.

A simple example is a pizza restaurant that primarily offers take-out. If the dining area holds fewer than 30 people, it can be classified as a business space (Group D) rather than an assembly space (Group A Division 2), which means it may have less strict requirements.

This exception helps ensure that fire safety rules match the actual risk of the space while keeping everyone safe.

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Another example is a small gym that offers personal training services. If the number of people using the gym at any time is fewer than 30, it can be classified as a Group "D" occupancy. This classification means that the gym will follow the building code requirements for business spaces, which are generally less strict than those for larger assembly spaces.

Completing a facility fire risk assessment takes careful planning, thorough preparation, and proper training. To perform a high-quality evaluation, you need training on what hazards to look for, how to identify them, and how to verify that engineered fire prevention devices are correctly installed and functioning. You should also have a reliable system to record and report deficiencies and a method to notify a fire prevention specialist if you identify significant issues. Additionally, your facility risk assessment process should include follow-up procedures with a compliance monitoring entity—typically the local fire prevention division of the fire department—to ensure that any deficiencies are promptly corrected.

**Step 1:** Understand your local fire department's requirements for conducting a facility risk assessment and the process for sharing your findings.

**Step 2:** Review all existing records and files for the building you assess. Familiarize yourself with historical non-compliance issues that might need special attention during your assessment. Be sure to check with your local fire department's Fire Prevention Division to confirm their required information and the preferred submission method.

This comprehensive approach not only enhances the safety of the building but also ensures that you meet all necessary compliance standards.

### Slide 23

A facility fire risk assessment app or template, used on a tablet or smartphone, is an effective and accepted method for performing and recording your assessments. This specially designed app guides you through every step of the process, ensuring you thoroughly inspect all applicable items before submitting your report to the local fire prevention office. It can also highlight deficiencies, allowing you to address issues before finalizing your report.

Many fire prevention divisions now use electronic submissions, although some still rely on printed checklists. Whether you use an electronic app or a printed form, these tools ensure a systematic, step-by-step inspection process. They are readily available if your local fire department doesn't provide printed forms. You can find a sample report in the resources section of this course for further guidance.

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Conducting a fire safety facility risk assessment will deepen your understanding of fire safety and offer you the flexibility to schedule assessments at your convenience. Regular assessments can uncover maintenance, custodial, or tenant concerns within your facility, and they provide an excellent opportunity to educate building occupants and foster positive relationships with them.

### Slide 25

You'll find a Unit Review and a Unit Quiz at the end of each Unit. These tools reinforce the material and help you identify any areas that need further clarification. They also serve as excellent preparation for the final exam, which you must pass to qualify for conducting fire safety facility risk assessments in your building.

In the introduction, we covered several key topics:

# The Importance of a Fire Prevention Plan:

Understanding how an effective plan can protect lives and property.

# Media Coverage of Fires:

Recognizing the difference between fire-limited stories, which focus solely on the incident, and fire-implicated stories, which explore the broader impact on the community.

### The Three "E's" of Fire Prevention:

Education, Engineering, and Enforcement—and how each plays a role in keeping buildings safe.

# Facility Risk Assessments vs. Full Compliance Inspections:

Learning the differences between conducting a facility risk assessment and undergoing comprehensive fire and building code compliance inspections.

# **Suitability for Facility Risk Assessment Programs:**

Identifying low occupant load, low-risk buildings that are ideal candidates for facility risk assessment programs.

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# **Building Code Occupancy Classifications:**

Reviewing classifications from Group A through Group G, and understanding how these categories affect fire safety requirements.

### **Owner Responsibility:**

Emphasizing that building owners are ultimately responsible for ensuring compliance with fire and building codes and maintaining their buildings' overall fire safety.

# Flexibility and Benefits of Facility Risk Assessments:

Appreciating the flexibility in scheduling assessments and the advantages of increased awareness regarding the building and its occupants.

These points lay the foundation for understanding how to manage and assess fire safety within your building effectively.

This concludes the Chapter. Before moving on to the next one, please complete the Chapter Quiz.