Module 6: Emergency Response Preparation

Security guards are tasked with responding to emergency situations to reduce their impact at a work site. They might need to carry out various duties during such procedures and must grasp the significance of scene management. Many people around you rely on your protection during fire emergencies, police incidents, and medical crises, viewing you as a model to follow.

A security guard should never compromise their own safety, as entering dangerous areas and situations can lead to severe injury and potentially put others at risk. It is crucial to avoid jeopardizing the safety of others while responding to emergencies. During emergencies, the safety of individuals takes precedence over property.

Fire Safety

Security guards are expected to respond swiftly and effectively to unforeseen emergencies to minimize their negative impact at the work site. They may be required to perform a variety of duties during disaster or emergency operations. In their regular duties, security guards frequently encounter situations requiring the identification and elimination of fire hazards. Sometimes, security guards must take a leadership role during fire emergencies. This session will emphasize the organization's procedures and the security guard's responsibilities within those procedures. It will help candidates understand the causes of various types of fires and the fundamental principles of prevention and safety to better protect people and property associated with their assignment.

According to the Canadian General Standards Board Standard 13.310-99 Section A9, security guards may face emergency situations at a worksite. They need to accurately identify the risk factors related to fire threats, bomb threats, weapon emergencies, suspicious packages, and explosive devices, and learn how to respond appropriately.

Why are fires so dangerous?

If you have never experienced a fire firsthand, it's hard to comprehend its true danger. Real fires are far different from those depicted in movies, with much more smoke involved. In fact, more people die from smoke inhalation than from burns. Smoke spreads far ahead of flames and can fill a building in minutes. It is thick and black, obstructing your vision and causing your eyes to tear while burning your lungs. Smoke incapacitates before it kills because it lacks the oxygen you need to breathe. Inhaling smoke disrupts brain function, impairing muscle control, coordination, judgment, and reasoning. This can easily lead to disorientation and loss of consciousness.

When materials burn, they release transparent gases that are lighter than air, allowing them to quickly spread throughout a building. These gases are toxic and can be lethal in a short time. A fire in a room generates intense heat and can flash over into another room or space

instantaneously. This ball of fire can move through available spaces, such as rooms, elevators, vent shafts, and stairwells if doors are left open.

Fires are both fast and deadly. In a fire situation, there is no time to plan a response. Therefore, it is crucial to study your site's fire safety and emergency procedure plans beforehand. Familiarize yourself thoroughly with the plan and your role in it.

Security guards are often the first to detect a fire or arrive at the scene of a fire at the site they are protecting. As the initial responder, it is vital for a security guard to understand the chemistry of fire, the different classes or types of fires, and basic fire control and extinguishing methods.

Prevention and Detection of Fires

Security personnel are employed to safeguard individuals, property, and information from potential hazards, including fires. A fire can devastate a building worth millions of dollars, and more critically, it can result in the loss of life if not managed swiftly and effectively. Detecting and preventing fires is a crucial aspect of a security guard's duties.

Whether patrolling or stationed at a fixed point, a security guard must always be vigilant for fire hazards. This involves identifying common sources of fire, such as electrical equipment that generates heat or sparks unexpectedly, combustibles near heat sources, or any signs that a fire has started, such as activated alarms or the presence of smoke and heat in unusual places. These proactive measures help the security guard fulfill their role effectively.

Security guards should also assess the entire job site for particularly dangerous conditions in case of a fire or explosion. Understanding potential hazards along escape routes used during evacuations is especially important. Knowing which stairwells or emergency routes are blocked or restricted can be crucial information during an emergency. A security guard who can provide firefighters with guidance on the quickest access to the fire scene can significantly reduce the response time.

While a security guard can be invaluable during a crisis, they must also make appropriate decisions based on the situation. Before starting at a new site, supervisors should discuss potential actions a guard might need to take during an emergency.

Routine inspections are expected at most work sites to detect, identify, and mitigate fire hazards. These inspections might include checking fire suppression systems, identifying combustible materials near ignition sources, and ensuring escape routes are clear. Security personnel should be vigilant about ignition sources, flammable materials, and obstructions.

The appropriate reaction to a fire hazard varies by site. For instance, reporting the presence of gunpowder at a fireworks factory might be unnecessary unless it poses a new, unusual danger. Guards should report any unusual or dangerous conditions, such as flammables stored near

heat sources or blocked fire exits, to their supervisor or site management, following established policies.

Basic Things to Watch For:

- Explosives or flammables should not be stored near potential ignition sources.
- Corridors, especially those used for emergency evacuations, should always be free of obstructions and combustible or flammable materials.
- Exit doors and the floor area on both sides of these doors should remain clear and accessible at all times.
- Any damage or deterioration of fire suppression systems should be reported.
- Fire alarm systems should be functional and appear operative.

Security guards are not responsible for storing and managing materials and equipment, but they must report fire and safety hazards. Being aware of "hot spots" at your site and using all senses to detect problems is crucial. Patrolling is an ideal time to look for these issues. Here are some additional things to monitor:

Poor Housekeeping

Effective housekeeping is essential in preventing fires. Sometimes items are not properly stored, left lying around, or placed in incorrect locations, which can create hazardous conditions. Security guards should be alert to the following issues:

- **Flammable Materials:** Ensure flammable substances, like gasoline, are stored in approved airtight containers.
- **Combustibles Near Heat Sources:** Watch for items such as cardboard boxes and paper stored too close to heat sources, including furnaces, motors, stoves, space heaters, or boilers.
- **Oily Rags and Greasy Uniforms:** Be cautious of oily rags or greasy uniforms left near motors, as they can easily ignite.
- **Litter and Dust:** Accumulations of litter and dust around machinery can pose a significant fire risk.
- **Blocked Chutes:** Garbage or laundry chutes that are blocked can prevent proper waste disposal and increase fire hazards.
- **Escaping Vapors:** Be vigilant for vapors escaping from flammable materials such as alcohol, gas, acetone, naphtha, ether, and paint. These vapors can ignite and cause a fire.

Maintaining good housekeeping practices is a critical component of fire prevention. Security guards play a vital role in identifying and addressing these hazards to ensure a safe environment.

Poor Maintenance

Maintaining equipment and infrastructure in good repair is crucial for fire prevention. Security guards should pay close attention to the following maintenance issues:

- **Blocked or Poorly Constructed Chimneys and Flues:** Ensure chimneys and flues are clear and properly built to prevent fire hazards.
- **Worn Electrical Wiring:** Be alert for electrical wiring that shows signs of wear, which can lead to short circuits and fires.
- **Substandard Temporary Wiring:** Temporary wires that do not meet safety standards can pose significant fire risks.
- **Improperly Maintained Fuses or Circuit Breakers:** Regular maintenance of fuses and circuit breakers is essential to prevent electrical fires.
- **Defective Burners and Improper Fuel Adjustments in Oil Stoves, Heaters, Furnaces, or Boilers:** Check for any defects or improper adjustments that could lead to fire.
- **Damaged Electrical Equipment:** Ensure all electrical equipment is in good working condition and free of damage.
- **Heating Ducts and Pipes in Contact with Combustible Materials:** Heating ducts or pipes that touch combustible materials can easily ignite a fire.

Proper maintenance is a key aspect of fire prevention, and security guards play a critical role in identifying and reporting these issues to ensure a safe environment.

Improper Use

Improper use of equipment and materials can significantly increase fire risks. Security guards should be vigilant for the following issues:

- **Improper Disposal of Smoking Materials:** Ensure that cigarettes and other smoking materials are discarded safely to prevent accidental fires.
- **Overloaded Electrical Outlets or Power Bars:** Overloading can cause overheating and fires.
- **Equipment Left On After Hours:** Electrical, heating, or cooking equipment such as coffee makers, hot plates, irons, fans, soldering guns, and holiday lights should be turned off after working hours. Before turning off any equipment, ensure you have permission to do so.
- **Unsafe Holiday Decorations or Displays:** Decorations placed in unsafe locations can be fire hazards.
- **Sparks from Equipment:** Ensure sparks from equipment like welding torches do not land on flammable materials.
- **Overheated Equipment and Wiring:** Watch for signs of overheating in equipment, wiring, electrical outlets, fuse boxes, and motors. Overheating can also result from poor maintenance.
- **Inappropriate Light Bulbs:** Using light bulbs that are too powerful for their fixtures can cause overheating and fires.

- **Breakers Taped On:** Taping circuit breakers in the "on" position can prevent them from functioning correctly in an emergency.
- **Blocked or Tied Circuit Breakers:** Ensure circuit breakers are not blocked or tied to prevent proper operation.
- **Overuse of Extension Cords:** Excessive use of extension cords can lead to overheating and fire hazards.

If you unplug or move any equipment, always leave a note and record the action in your notebook and reports. Proper documentation ensures accountability and safety.

Arson

Arson, the deliberate act of setting a fire, is a serious threat that security guards must be vigilant against. Prevention is crucial in combating arson. To effectively prevent arson, consider what conditions an arsonist might exploit to start a fire and work to eliminate those opportunities.

Conduct thorough patrols to ensure there are no easy ways for someone to break into the site and start a fire. Ensure that nothing, inside or outside the premises, can be easily ignited. Empty all trash cans nightly to prevent potential fire hazards. During patrols, check for tree limbs or other combustible materials under the building eaves.

If you notice suspicious individuals loitering around the site, approach them cautiously and inquire about their purpose for being there. This proactive approach can help deter potential arsonists.

In the event of a fire where arson is suspected, take special care not to touch anything at the scene to preserve all evidence. Preserving the scene can aid investigators in determining the cause and identifying the perpetrator.

By remaining alert and proactive, security guards can significantly reduce the risk of arson and protect the property and individuals they are responsible for.

Spontaneous Combustion

Spontaneous combustion is another cause of fires. This occurs when chemical changes within certain materials generate enough heat to ignite them without an external heat source. Materials such as oily rags, flammable liquids, floor oils, hay, grain, charcoal, soft coal, and foam rubber are particularly susceptible to spontaneous combustion if not stored properly.

While you may not be responsible for storing volatile substances, it is essential to be aware of hazardous materials present at your site. Familiarize yourself with the WHMIS (Workplace

Hazardous Materials Information System) symbols and read the WHMIS labels on materials at your site.

If a security guard discovers an unplanned fire, the first step is to activate any available alarm system and contact the fire department, either directly or through someone else on site. Security guards may assist in suppressing the fire and evacuating the premises if circumstances allow and if site emergency policy requires it.

Once emergency personnel arrive, security guards should be ready to provide any necessary advice and direction. A guard familiar with the area will know the best routes for emergency personnel to navigate the site.

A vigilant security guard will also know the locations of hazardous materials, obstacles to safe passage, evacuation routes, and possibly where people might be trapped. This information is invaluable to emergency responders, helping them avoid danger zones and effectively manage the fire or injured individuals. Security guards can also assist by directing vehicular and pedestrian traffic on the site.

It is crucial for security guards to consider the appropriateness of their actions in light of potential risks to life, as well as the policies and instructions of their employer and the site owner.

The Chemistry of Fire

The Concise Oxford Dictionary defines combustion as:

1. Burning.
2. Chemically, the development of light and heat from the chemical combination of a substance with oxygen.

Fire is essentially a chemical reaction between a substance (known as fuel, which can include paper, wood, gasoline, or certain metals like sodium and magnesium) and oxygen, producing light and heat of such intensity that a fire is sustained.

Oxygen and fuel can coexist in the same environment without spontaneous combustion. For instance, the wood for a campfire does not ignite on its own after being split. For combustion to occur, an initial source of energy is required to overcome the "activation" barrier. Once initiated, the energy released by the fire continues to supply the activation energy, allowing the fire to persist as long as fuel and oxygen are available. This initiating energy is often heat from a spark or flame. For fuels with a low flash point, such as rags soaked in paint and solvent, even sunlight can provide enough energy to start a fire.

For a fire to exist, three elements must be present: fuel, oxygen, and a catalyst (heat). These elements must continue to be available for the fire to sustain itself. If any one of these

elements is removed or reduced, the fire cannot start or will extinguish. Fire suppression devices aim to eliminate or reduce one or more of these essential elements to control or extinguish fires.

Understanding the chemistry of fire is fundamental to effective fire prevention and suppression. Security guards must be aware of these principles to respond appropriately to fire hazards and emergencies.

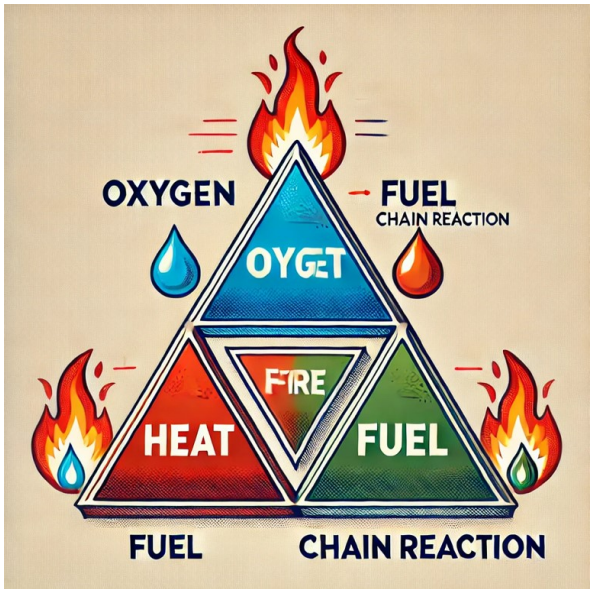

Figure 1.1: fire element triangle

Fuel

Fuel, whether in solid, liquid, or gaseous form, is essential for fire production. As fuel is heated to its ignition point, it undergoes a transformation. Solid and liquid fuels at normal room temperatures are converted to a gaseous state just before combustion, thanks to the heat from a catalyst, known as the "activation" source. For instance, a candle is solid at room temperature. When the wick is lit, the heat from the ignition source (such as a match or lighter) melts some of the nearby wax. This liquid wax is then drawn up the wick towards the flame, where the intense heat turns it into a gas just before it reaches the flame, igniting upon contact. This ignition releases more heat, melting more wax, and sustaining the process.

The ignition point of a substance is commonly referred to as its flash point. According to the Macmillan Encyclopedia of Chemistry, "The flash point is that temperature at which enough vapour is generated to form an ignitable mixture with air." Different fuels have different flash points. For example, gasoline has a lower flash point (40°F) compared to kerosene (138°F). Atmospheric pressure also significantly impacts the flash point of a substance.

Understanding the properties of various fuels and their flash points is crucial for fire prevention and safety. Security guards should be aware of the different types of fuel present at their site

and the specific risks associated with each. This knowledge allows for better anticipation of potential fire hazards and more effective response strategies.

Oxygen

A fire cannot ignite or sustain itself without oxygen. Unfortunately, most fires have abundant access to oxygen, as the air we breathe naturally contains about 21 percent oxygen. The primary factor limiting fire growth and duration is typically the availability of fuel.

Fire Extinguishing Methods:

- **Carbon Dioxide (CO2) Fire Extinguishers:** These extinguishers work by introducing carbon dioxide, an inert gas, into the environment, thereby preventing atmospheric oxygen from reaching the fuel. This interruption in the chemical reaction of fire effectively smothers the flames.
- **Dry Chemical Fire Extinguishers:** These extinguishers use a non-reactive powder to create a barrier between the fuel and the oxygen, effectively smothering the fire.

Caution with Limited Oxygen Environments:

In certain situations, such as a room in a house that is somewhat sealed, the oxygen level can become limited. When the oxygen level drops from the usual 21 percent to around 15 percent, the fire will smolder without producing flames. This can create a hazardous condition known as a backdraft explosion. If a door or window is inadvertently opened, fresh oxygen can rush in, causing the fire to flare up explosively.

Firefighters and those involved in fire safety must be aware of this condition to avoid accidentally introducing fresh oxygen into a smoldering fire, which can lead to a dangerous backdraft explosion.

Understanding the role of oxygen in fire behavior is crucial for effective fire prevention and suppression. Security guards should be aware of the potential hazards associated with limited oxygen environments and the proper use of fire extinguishers to ensure safety and prevent fire escalation.

Heat

The ignition of a fire requires a heat source, which acts as a catalyst to initiate the chemical reaction between oxygen and a secondary substance (fuel). A flame is the visible result of this highly exothermic chemical reaction, which releases a significant amount of energy rapidly, primarily as heat and also as light.

Heat involves the transfer of energy from a substance to the surrounding atoms, causing them to vibrate and move faster. Fires release substantial energy, transferring much of it to the

surrounding atoms and molecules as heat. Once the chemical reaction of fire starts, it will continue to burn until deprived of one or more essential elements (fuel, oxygen, or heat).

Heat Reduction as a Fire Suppression Method:

One method of suppressing a fire is by reducing heat, which slows down the movement of molecules and atoms below the ignition point. Water is commonly used for this purpose. When sprayed on a fire, water molecules adhere to the fuel source and absorb some of the heat energy from the burning portion.

If enough water is applied, the temperature of the fire is reduced below the ignition point of the fuel, ceasing the chemical reaction between oxygen and fuel. However, water has a low boiling point, meaning it converts to a gaseous form at relatively low temperatures. If insufficient water is applied to a large fire, the water will absorb as much heat as possible and then evaporate. The remaining heat, generated by the ongoing chemical reaction between oxygen and the unaffected fuel, will soon replenish the lost heat, and the fire will continue to burn.

Understanding the role of heat in fire dynamics is crucial for effective fire suppression. Security guards should be aware of the methods to reduce heat and the proper use of water or other extinguishing agents to ensure effective fire control and prevention.

Categories of Fire

Fires are universally classified into the following categories (refer to Figure 1.2, Fire Classification Symbols):

- **Class A:** Fires involving ordinary solid combustibles such as wood, paper, cloth, plastic, charcoal, etc.
- **Class B:** Fires involving flammable liquids and gases, such as gasoline, propane, diesel fuel, tar, cooking oil, and similar substances.
- **Class C:** Fires involving electrical equipment such as appliances, wiring, breaker panels, etc. These fires become Class A, B, or D fires when the electrical equipment that caused the fire is no longer receiving electricity.
- **Class D:** Fires involving combustible metals such as magnesium, titanium, and sodium. These fires burn at extremely high temperatures and require special suppression agents.

The classification of a fire extinguisher indicates which type of fire it is designed to suppress. The classification symbols (Figure 1.2) are often the only indication, so it is essential to understand what these symbols represent.

Understanding the classification of fires helps in determining the best suppression method. However, fires often involve multiple classifications due to the heat generated by one fuel igniting other substances, complicating extinguishing efforts. For instance, if electrical wires

short out in an older wooden building, sparks could ignite paper on the floor, which then causes the wooden walls to catch fire. The excessive heat could also melt tar on the roof, causing it to ignite. This scenario involves several fire classifications simultaneously. Firefighters must develop strategies to address all types of fires present, often without full knowledge of the situation until they arrive on the scene.

This complexity is why untrained individuals should exercise extreme caution when dealing with fires. Proper training and understanding of fire classifications are critical for effective fire suppression and safety.

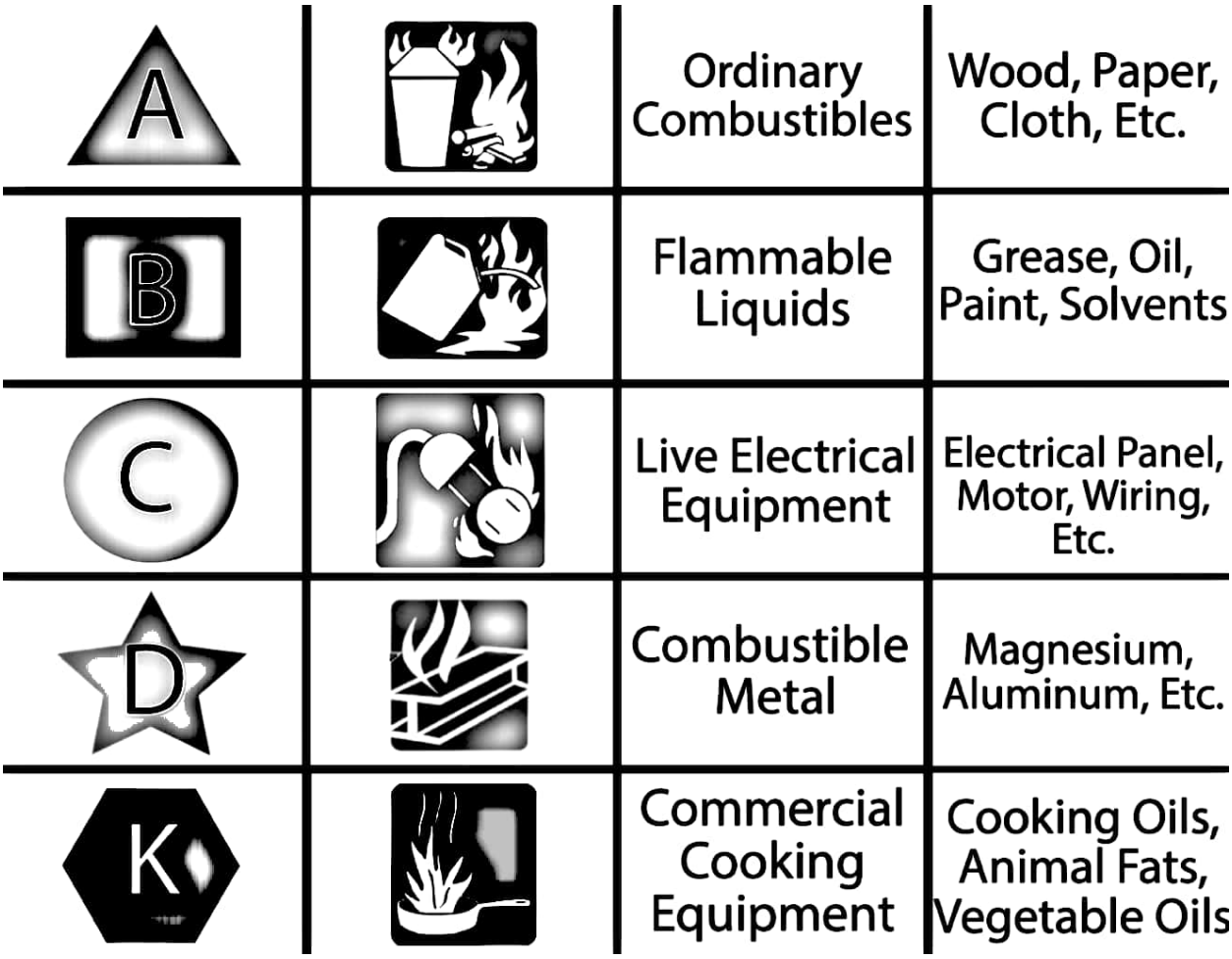

figure 1.2: fire classification symbols

Types of Fire Extinguishers

Fire suppression works by eliminating one or more sides of the fire element triangle (fuel, oxygen, heat), thus preventing the chemical reaction between oxygen and fuel. No single

suppression substance can handle all fire classes effectively. Here are the different types of fire extinguishers and their uses:

Water

- **Function:** Water reduces the temperature of combustible substances. When heated into steam, water also disperses into the atmosphere, potentially diluting the oxygen available to the fire. This process helps cool the burning material below its ignition temperature.
- **Use:** Water extinguishers are primarily for Class A fires, which involve ordinary combustibles like wood, paper, and cloth. These fires are most effectively suppressed by cooling the burning materials.
- **Limitations:** Water should not be used on Class B fires involving flammable liquids like gasoline or oil, as it can cause the flames to spread. It is also unsuitable for Class C fires involving electrical equipment due to the risk of electrical shock. Additionally, water is ineffective against Class D fires involving combustible metals because of the extreme heat generated by these fires.
- **Additional Use:** Firefighters often use water to spray potential sources of fuel, such as neighboring houses or walls that have not yet caught fire, to absorb heat and prevent these areas from igniting. The water must evaporate before the secondary fuel can catch fire, providing a preventative measure.

Carbon Dioxide (CO2)

- **Function:** CO2 extinguishers eject carbon dioxide gas under pressure, creating a blanket over the fire. This gas displaces the oxygen around the fire, preventing it from contacting the fuel source, effectively smothering the flames.
- **Use:** CO2 extinguishers are most effective on Class B fires involving flammable liquids and Class C fires involving electrical equipment.
- **Limitations:** CO2 extinguishers are less effective on Class A fires because the fuel's temperature may remain high enough to reignite once the CO2 has dissipated. Additionally, CO2 is very cold and can cause frostbite if it comes into contact with skin. It should be used cautiously in confined spaces as it can displace oxygen, posing a risk of suffocation.

Halon Gas

- **Function:** Halon is a heavier-than-air compressed gas used to suppress Class A, B, and C fires. It works by cooling the burning material and smothering the fire, interrupting the chemical reaction between oxygen and fuel. Halon extinguishers leave little residue, making them particularly useful in environments where clean-up costs from suppressant use would be high.
- **Use:** Effective on Class A, B, and C fires, Halon is especially suitable for use in computer rooms, aircraft, and other sensitive environments.

- **Limitations:** Like CO2, Halon displaces oxygen and should be used cautiously in confined spaces to prevent suffocation.

Aqueous Film Forming Foam (AFFF)

- **Function:** AFFF extinguishers add a detergent-like substance to water, creating foam that clings to vertical surfaces like trees and walls. The foam forms a thermal barrier that blocks the transfer of heat from the burning material to other objects, smothering the fire by creating a barrier between the fuel and oxygen.
- **Use:** Designed for Class A and B fires, AFFF is effective in dealing with ordinary combustibles and flammable liquids.
- **Limitations:** Because AFFF is water-based, it is not suitable for Class C fires involving electrical equipment due to the risk of electrical shock.

Dry Chemicals

- **Function:** Dry chemical extinguishers work by interrupting the chemical reaction between oxygen and fuel. They cover the burning material with a non-reactive powder, cutting off the supply of oxygen.
- **Types:**
    - **Regular Dry Chemicals:** Made from substances like sodium bicarbonate, these extinguishers are effective against Class B and C fires.
    - **Tri-Class Dry Chemicals:** Containing monoammonium phosphate, these extinguishers can handle Class A, B, and C fires, making them versatile for multiple fire types.

Metal Fire Suppressors

- **Function:** These dry powders are specifically designed to suppress metal fires (Class D).
- **Types:** Commonly available suppressants include Met-L-X, Lith-X, and Pyrene G-1, each tailored for specific types of metal fires.

Understanding the different types of fire extinguishers and their appropriate uses is crucial for effective fire suppression. Security guards must be familiar with fire classifications and the corresponding extinguishers to respond properly during a fire emergency.

FIRE EXTINGUISHER	CLASS A	CLASS B	CLASS C	CLASS D	CLASS K
 Water & Foam	✓				
 Carbon Dioxide		✓	✓		
 Dry Chemical	✓	✓	✓		
 Wet Chemical					✓
 Dry Powder				✓	
 Water Mist	✓		✓		
 Clean Agent		✓	✓		
 Cartridge-Operated Dry Chemical	✓	✓	✓		

figure 1.3: Types of fire extinguishers

Deterioration of Fire Extinguishers

A security guard should be vigilant about the condition of fire extinguishers on site, ensuring they are always in proper working order. Over time, fire extinguishers can deteriorate, and it is essential to report any irregularities to a supervisor, who will notify the client. Here are key aspects to monitor:

- **Appropriateness for the Job Site:** Ensure the fire extinguishers are suitable for the specific risks present. For example, if the site manufactures magnesium-based roadside flares, an appropriate metal fire suppressor should be available.

- **Condition of the Extinguisher Container:** Look for signs of corrosion, cuts, or other damage to the container. Any such damage could compromise the extinguisher's effectiveness.
- **Nameplate or Instruction Guide Plate:** Check that the nameplate or instruction guide plate is firmly attached and legible. These guides provide critical information on how to use the extinguisher properly.
- **Hose and Nozzle Condition:** Inspect the hose and nozzle for any signs of damage, blockage, or breakage. Rubber hoses are particularly prone to cracking and dry rot, which can render the extinguisher unusable when needed.
- **Pressure Head Assembly:** Ensure the pressure gauge shows the correct pressure, the safety pin is in place, and the tamper seal is intact. These components are crucial for the extinguisher to function correctly.
- **Inspection and Test Dates:** Verify that the inspection and test dates are current. Fire extinguishers should be inspected regularly, and any expired dates indicate that maintenance is overdue.

Regular checks and prompt reporting of any issues will help maintain the reliability of fire extinguishers, ensuring they are ready for use in an emergency.

Delivery Systems

There are three primary types of hand-operated devices for delivering fire suppressants:

Hand Pump: This device uses a hand-operated pump to apply the suppressant, typically water, onto the fire.

Pressurized Storage Container: These cylindrical containers are filled with water, AFFF (foam), Halon, or dry chemicals. They are pressurized either by the substance itself or with the aid of an inert gas. When the safety pin is pulled, and the trigger is squeezed, the suppressant is expelled under high pressure. Systems like fire hydrants and standpipes also rely on pressure to deliver the suppressant. Operators must be aware of the significant back-pressure generated when using these systems.

Gas Cartridge: These extinguishers operate similarly to pressurized storage containers. The larger cylinder holds the suppressant without pressure, and when the trigger is engaged, a propellant in a smaller attached cylinder forces the suppressant out. Gas cartridge extinguishers are typically used for dry chemical and metal fire suppressants.

When to Use a Fire Extinguisher

Fire-fighting is generally the responsibility of the local fire department. However, individuals may attempt to extinguish small fires if there is no risk to life, health, or safety.

Untrained individuals should exercise caution when using a fire extinguisher. Incorrect usage can exacerbate the situation. For instance, using water on a grease fire can cause the fire to spread, worsening the danger.

PASS Technique

The process for using a hand-held fire extinguisher can be summarized with the acronym PASS:

- **Pull** the safety release pin.
- **Aim** the extinguisher at the base of the flames.
- **Squeeze** the trigger.
- **Sweep** the base of the fire from side to side until the fire appears to be out.

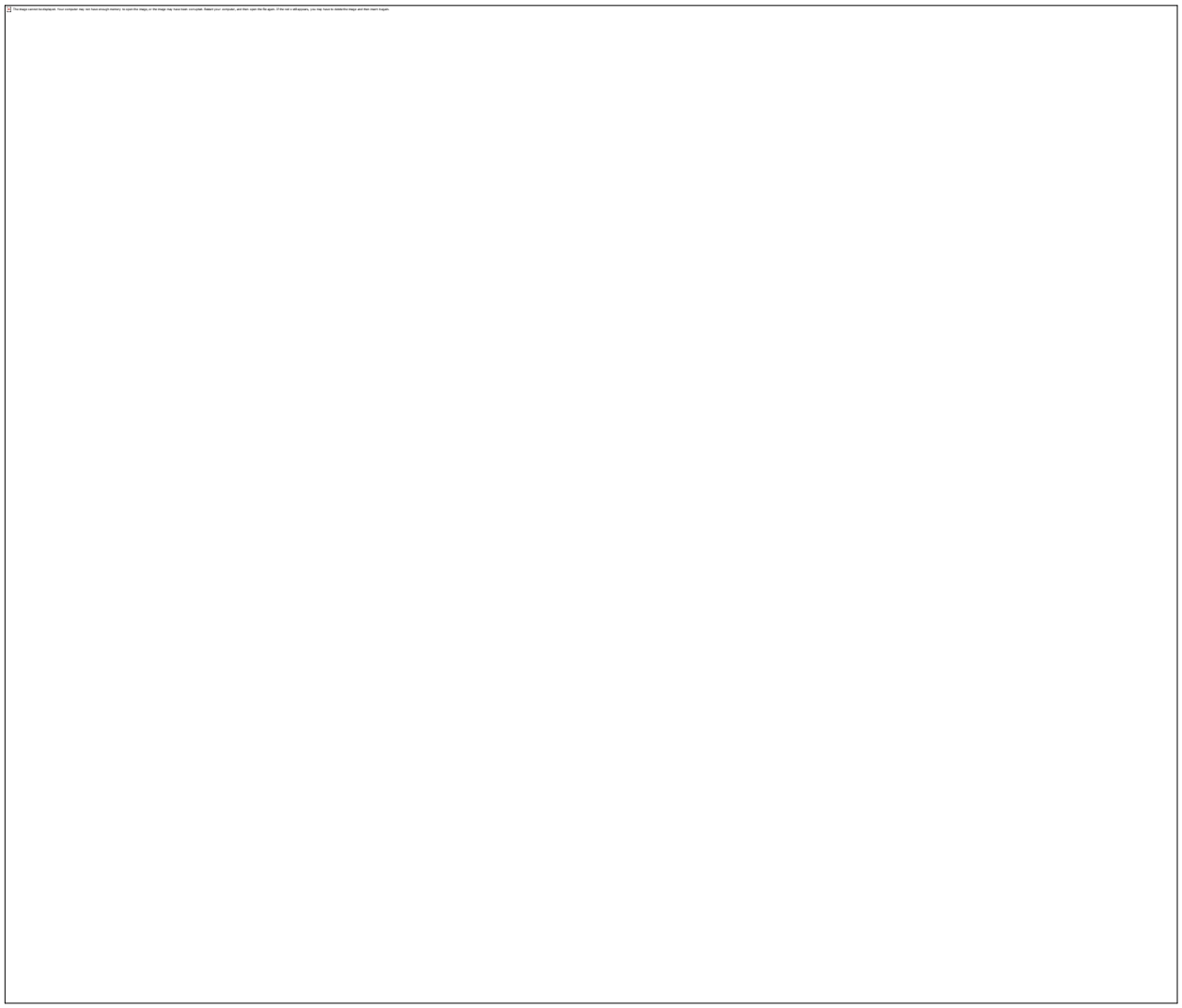

Figure 1.4 - Illustration of the PASS Technique for Using a Fire Extinguisher.

Not all fire extinguishers operate in the same way. If special instructions are required, the security guard should seek guidance from their supervisor.

Before attempting to fight a fire, activate the fire alarm or ensure that everyone in the vicinity is aware of the fire. Evacuate the area if necessary, and notify the fire department. If the fire cannot be extinguished, the fire department will take over. Even if the fire is extinguished, the fire department should inspect the site to ensure the fire is completely out and investigate the cause.

Important Considerations

- Only use a fire extinguisher if it can be reached without obstructing your escape route.
- Assume you will not be able to extinguish the fire. If the situation becomes dangerous, evacuate immediately.
- Use the correct fire extinguisher for the type of fire.
- Limit your efforts to small, contained fires, as extinguishers are designed for short use, typically lasting seconds.
- Ensure your back is to an unobstructed exit, and if there is wind, position yourself accordingly to avoid being cut off.
- Avoid attempting to extinguish fires in smoke-filled rooms, as you lack the protective equipment firefighters have.
- Adjust for the size and location of the fire. For example, stand 8-10 feet away for a dry powder extinguisher and 5-6 feet away for a CO_2 extinguisher to avoid spreading the fire.
- Test the fire extinguisher before approaching the fire to ensure it works correctly.

Rank Structure of Fire Departments

When responding to incidents such as fires, explosions, or accidents, Security Guards often need to collaborate with fire department personnel. Understanding the rank structure within fire departments can facilitate more efficient communication and coordination. Engaging with the right individual according to their rank and job function can significantly streamline emergency responses. However, during emergencies, immediate communication is crucial. If you need to report a dangerous situation or trapped individuals, speak to the first available firefighter and ask if you should relay the information to someone of a different rank.

It's important to note that the helmet color scheme outlined in Table 1.1 – Fire Department Rank Structure – is a general guide used across Canada. Some fire departments may have variations in their color-coding. Security companies should verify the specific rank and color structures with local fire department officials where their guards will be stationed. Additionally, individual officers should be aware that helmets might be replaced due to damage or defects, and the color might not always indicate an individual's rank accurately.

Table 1.1: Fire Department Rank Structure

Helmet Color	Rank and Title
White	Chief
White	Deputy or Assistant Chief
Red	Captain
Red	Lieutenant
Yellow	Firefighter
Blue	Safety Officer

By familiarizing themselves with the rank structure, Security Guards can ensure effective communication and support during emergencies.