

## Fires and fire extinguishers

For a fire to start and spread, three components are needed: fuel, oxygen, and heat. These components are known as the “fire triangle.” Fire extinguishers work by removing one or more of these components.

Fuel can be anything (paper, wood, clothing, flammable liquids, etc.). Oxygen is in the air. Heat comes from an ignition source (sparks, electrical energy, friction, etc.).

### Classes of fires

There are five classes of fires: A, B, C, D, and K. The classes indicate what kind of fuel is burning. Class A fires involve items such as wood, paper, and cloth. Class B fires involve flammable liquids or gases. Class C fires involve energized electrical equipment. Class D fires involve combustible metals. Class K fires involve cooking oils, fat, or grease.

As a crane operator, you may encounter Class A or B fires depending on the types of loads you lift. Crane fuel tanks are another potential fuel source for fires.

If a crane contacts overhead power lines, electric current could flow through the crane or a malfunction can occur within the crane electrical system. This contact can result in a Class C fire.

### Types of fire extinguishers

Different types of fire extinguishers (A, B, C, D, and K) are available to fight different classes of fires. For crane operations, a fire extinguisher with at least a 10 BC rating must be immediately available in the crane cab.

Employers must ensure fire extinguishers are inspected regularly to ensure they are ready to use and workers are



The fire triangle

trained.

### Using fire extinguishers safely

As a crane operator, you must know the location and types of fire extinguishers on the crane.

Only use a fire extinguisher if:

- You know what fuel is burning and what type of extinguisher you need to use.
- You know how to use the extinguisher safely. (Focus on the base of the fire. Sweep the extinguisher side to side.)
- The fire is small and contained.
- The fire department is being called.
- You can fight the fire with your back to an exit.

If any of these conditions are not met, leave the area immediately.

**OHSR Reference: Part 31.**

**Project:** ..... **Address:** .....

**Employer:** ..... **Supervisor:** .....

**Date:** ..... **Time:** ..... **Shift:** .....

**Number in crew:** ..... **Number attending:** .....

**Other safety concerns or suggestions:** .....

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**Record of those attending:**

Name: (please print)	Signature:	Company:
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		

**Manager's remarks:** .....

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**Manager:** ..... **Supervisor:** .....

(Signature)

(Signature)

For more information on health and safety requirements for crane operations in B.C., refer to the *Workers Compensation Act* and the OHS Regulation on [worksafebc.com](http://worksafebc.com).