

Safety Facts: Cranes*

A crane is a machine used for raising, shifting, and lowering heavy weight by means of a projected swinging arm or with the hoisting apparatus supported on an overhead track. The different types of cranes can include overhead cranes (bridge and monorail styles), jib cranes, gantry cranes, mobile cranes (folding boom and boom truck styles), tower cranes, etc.

Why is it important?

A crane makes lifting a lot easier for workers. But like any machine, it can introduce new hazards into the workplace. We must be qualified to operate a crane, demonstrate competency in the use of hand signals, and be qualified to rig the load we are lifting.



Associated risks/hazards

The following are some hazards associated with crane usage:

- Workers can be struck by moving or falling loads
- Inadequate or no inspection can lead to crane failure or loss of load
- The crane could contact power lines or other cranes causing what the Occupational Health and Safety Regulation (OHSR) calls a misadventure
- Exceeding a crane's capacity could cause a structural failure or upset the crane

Preventive next steps

1. Ensure any crane used meets the standard requirements as outlined in OHSR section 14.2.
2. Ensure you are trained, qualified and have demonstrated competency to operate a crane. In some models of cranes, you must also hold an operator's certificate. See OHSR section 14.34 and the BC Crane Safety Association for more details.
3. Never exceed the rated capacity of the crane and if equipped, ensure you know how to read and interpret the load chart for the crane before lifting the load.

4. Ensure you inspect, maintain and repair the crane as per OHSR section 14.13 requirements and the related standard. For example, CSA standard B167-96 outlines the inspection requirements for operators and crane inspectors based on the service class for overhead cranes, gantry cranes, monorails, hoists, and trolleys.
5. If you are rigging your own load, be qualified to rig a load and inspect all rigging equipment before using it.
6. Confirm with the rigger and any other helper that we are using the same hand signals (legally referred to as code of signals). See OHSR section 15.20 for more details.
7. Before lifting and moving a load, lift it up slightly to ensure that the load is properly balanced.
8. When moving a load, use a tag line to help control hazardous movement of a load or to assist with positioning a load. See OHSR section 14.38.
9. Never fly a load over any person.



For additional resources visit:

[Crane operator course](#) | BC Crane Safety Association

[Cranes and Hoists](#) | WorkSafeBC

[Standards](#) | WorkSafeBC

[Hand signals](#) | WorkSafeBC

Cranes Toolbox Talk

Name of Facilitator: _____ Date: _____

Supervisor Signature: _____ Date: _____

Employee feedback/questions/recommendations

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_____	_____
_____	_____
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Workers who attended

Name	Initial	Name	Initial
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Key Talking Points (Facilitator Notes)
