



## Cranes Fact Sheet

### What is a crane?

A crane is a mechanized piece of equipment used to hoist loads for various reasons. A crane uses cable and pulley or hydraulic systems to lift, lower and swing the load into position. A crane may be stationary or mobile.

### What are the hazards associated with working with cranes?

Some common hazards associated with cranes include the following:

- Power line contact – crane structure contacts overhead lines
- Overloading – exceeding the rated capacity or tipping load
- Outrigger Failure – outriggers not extended, crane on soft ground, structural defects
- Two-blocking – contact of the hoist block or hook assembly with boom tip causing parting of hoist line and loss of load
- Pinch point – accessible areas within swing radius of rotating superstructure where employees become crushed or squeezed
- Unguarded moving parts – all parts within cab, engine compartment or service area that employees must enter or reach into
- Unsafe hooks – (when required) hooks without latches or damaged/defective latches
- Obstruction of vision – operator, rigger or signaler vision blocked by load or work environment
- Improper assembly/disassembly – failure to follow manufacturer's procedures

### What can I do to protect myself?

Employees operating, rigging and working on the ground around a crane all have responsibilities to ensure its safe operation. Always follow your employer's safety program for cranes and never operate, rig or work with a crane if you are not properly trained.

### Are there occupational safety and health standards for cranes?

Yes, the following are standards NCDOL has adopted for cranes:

- **29 CFR 1910 Subpart N** – general industry
- **29 CFR 1915.115** – shipyards
- **29 CFR 1917.45, 1917.46 & 1917.50** – marine terminals
- **29 CFR 1926 Subpart CC & Subpart DD** – construction

### Where can I find additional information about cranes?

Please review our [Cranes Subject Index Page](#).