

Crane Safety – Safety Precautions for Working Near Overhead Power Lines – Stats & Facts



FACTS

1. **Falling Loads:** When a load is being moved through the air it is possible that something could happen resulting in it falling. The worst-case option is that the line snaps and the entire load is dropped onto the area below. Much more common, however, is for one or more objects to be improperly secured so that they fall off.
2. **Overloading the Crane:** Every crane has a maximum load weight that it can handle. In some cases, that maximum load will vary based on things like how far out the crane is reaching, the foundation it is on, and more. If the load that is being moved is greater than the maximum rated amount, it could cause the crane to tip over, the load to sway too much, or other problems.
3. **Electrical Hazards:** Cranes typically operate at high heights, which means they may be in the same area as electrical lines and hazards. This could result in electrocution for the operator, or causing the line to break, exposing those on the ground to great risk.
4. **Pinch Points:** Most cranes will be able to move at the base in order to put the load where it needs to go. When this happens, anyone who is in the area surrounding the crane could get trapped in a pinch point and get crushed.

STATS

- Around 50% of accidents involving overhead cranes are a result of a metal part of a crane coming into contact with a power source (i.e., a high-voltage power line).
- Of the total 632 crane-related deaths, 157 were caused by overhead power line electrocutions (25%), 132 deaths were associated with workers being struck by crane loads, 125 deaths involved being struck by cranes, crane booms/jibs or other crane parts (20%), 89 deaths involved crane collapses (14%), 56 deaths involved falls (9%), and 30 deaths involved being caught in/between crane parts.

The causes of 79 incidents involving construction worker deaths and injuries

were:

- 26 crane collapses (33%), involving 24 deaths and 54 injuries
- 13 struck by crane load incidents (16%), involving 6 deaths and 10 injuries
- **12 overhead power line contacts (15%), involving 10 deaths and 8 injuries**
- 8 struck by other crane part incidents (10%), involving 6 deaths and 6 injuries
- 19 other causes (23%) – including 6 highway incidents, 4 falls, 3 caught in/between, 3 struck by non-crane falling objects, and 1 struck by lightning. These involved 6 deaths and 15 injuries