



Lift Zone Safety: Planning a Lift

Before a lift, it is important for everyone involved to understand their roles, the hazards associated with rigging and hoisting, and how to safely execute the lift to prevent any injuries or fatalities.

Laura's Story

Laura and her coworkers were rigging a concrete slab before being lifted by a crane. When they were finished, the operator of the crane lifted the slab without testing it first. The rigging was inappropriate for the load, causing it to break and the slab to fall, striking Laura and one of her coworkers. They were both killed instantly.

- ✘ **How could this incident have been prevented?**
- ✘ **Have you known or heard of anyone who was injured or killed when hoisting or rigging a load? If so, what happened?**

Remember This

- Any personnel involved in the lift should be licensed/certified and trained, if appropriate.
- Check the lifting points, methods of attachment, sling angles, center of gravity, boom and swing angles, and crane orientation.
- Establish the load swing path and ensure all personnel are positioned clear of the path.
- Discuss the crane's movements and associated signals:
 1. Cable up/Boom up
 2. Swing right 90°
 3. Boom down
 4. Cable down

- Set up barricades and post warning signs around the lift zone.
- Confirm all other field personnel not involved in the lift are aware and clear of the lift.
- Inspect the crane and rigging before use for wear or damage.
- Check to make sure the crane's outriggers are properly extended and supported.
- Verify the soil and/or mats under the crane and outriggers are of sufficient bearing capacity.
- Monitor the weather (e.g., wind speeds), ground conditions, and other environmental factors and **DO NOT** operate the crane if it is unsafe to do so.
- Test the load by raising it a few inches and holding, verifying the capacity and balance, and test the brake system.
- **DO NOT** lift a load that exceeds the lifting capacity of the crane or rigging.
- **DO NOT** stand within the swing radius of the crane or under the swing path of the load at any time.
- Keep the crane clear of obstructions, including overhead power lines, and maintain a safe working clearance from them.
- Keep the load under control at all times. Use tag lines and push sticks to prevent uncontrolled motion.
- Follow the load and avoid being in front of the intended movement.
- Communicate using clear hand signals or via radio.

How can we stay safe today?

What will we do at the worksite to prevent injuries while working in a lift zone?

1. _____

2. _____

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- ✘ Hold a lift planning meeting before any work begins and ensure all personnel involved are aware of the plan.
- ✘ **DO NOT** lift a load that exceeds the lifting capacity of the crane or rigging.
- ✘ Monitor the weather (e.g., wind speeds), ground conditions, and other environmental factors and **DO NOT** operate the crane if it is unsafe to do so.
- ✘ Keep the crane clear of obstructions, including overhead power lines, and maintain a safe working clearance from them.