



Cranes:

Stability and Tipping



Studies show that one crane accident occurs for every 10,000 hours of use in the United States.

Ed's Story

Ed was in charge of receiving materials and having them safely unloaded at the construction site. The delivery was late and, to speed things up, he did not fully extend the outriggers on his truck crane. As a result, the load caused the crane to tip over. The falling materials nearly crushed two other workers, and Ed was injured when the crane tipped. He was hospitalized for 3 days and missed 2 weeks of work while recovering.

- ✘ What caused this incident?**
- ✘ How could this have been prevented?**
- ✘ Have you known or heard of anyone who was injured by a crane collapsing or tipping? If so, what happened?**

Remember This

- Always use the manufacturer's load chart provided for each crane.
- Be sure you know or can calculate the weight of each load.
- Never use visual signs of tipping as an indicator of lift capacity.
- Before beginning a lift, follow the manufacturer's procedures for outrigger deployment. Make sure the outrigger pads are supported on firm, stable surfaces so the crane is properly set up and level.
- Check the brakes when multiple heavy lifts are made from one location, such as during duty cycle operations.
- Avoid moving suspended loads over workers and others within the crane's swing radius.
- Check the manufacturer's maximum wind speed for the crane to ensure that it can lift the load in windy weather.

How can we stay safe today?

What will we do at the worksite to prevent injuries while working with cranes?

1. _____

2. _____

OSHA Standard: 1926.1402; 1926.1417

Cranes: Stability and Tipping



- ✘ Always use the manufacturer's load chart provided for each crane.
- ✘ Be sure you know or can calculate the weight of each load.
- ✘ Never use visual signs of tipping as an indicator of lift capacity.