Heavy Equipment (Two Major Hazards) Meeting Kit

Heavy Equipment Hazards Safety Talk

Heavy equipment such as cranes, dump trucks, excavators, bulldozers, and other large machines are used on construction sites every single day.

EMPLOYEES MUST BE VIGILANT OF THEIR SURROUNDINGS

Struck-By Accidents

A struck-by construction accident occurs when a worker comes into contact with a moving object or falls onto a stationary object. Some of these accidents occur between a vehicle or moving equipment and a worker:

- Equipment operator running into a worker on foot
- Failing to set a parking brake properly
- Striking a worker with a crane boom or load
- Failing to properly use wheel chocks

There are many other cases where workers are struck by objects and seriously injured. This type of accident includes any case where a tool, piece of a machine, debris or other projectile strikes a worker. Examples include:

- The head of a hammer flying off the handle
- Brick, concrete or other debris being projected
- A saw blade breaking or snapping off
- A cut piece of rebar, bolt or wood flying off after cutting

Caught – Between Accidents- These incidents are very similar to struck-by incidents, however there are differences. A struck-by incident is when an object striking a person causes the injury. A caught-in or between incident is when there is an injury due to crushing between two objects.

Caught-between accidents almost always cause injuries that lead to lost work time and, in some cases, can lead to permanent disability or death. A large percentage of caught-between workplace incidents are vehicle-worker accidents where the operator of a vehicle didn’t see a worker and pinned them. Some common examples are:

- Crushing a worker against a building or other piece of equipment
- A worker getting pinched in a moving machine
- Pinning a worker against a wall or fixed object

Once a worker is caught in a situation like this, simply reversing may not be enough to avoid serious injury. This type of accident can also occur in confined spaces, where workers become trapped in or between surfaces such as:

- Trapped in a container or room

- Caught in a narrow passage
- Pinned between piles of materials or debris
- Caught by fallen materials or equipment

Workers must observe their surroundings at all times and always have an exit planned in case of an accident. Teach them not to work between a piece of equipment and a fixed object (like a wall, fence or pile of material. **Workers** must perform tasks in groups of two or more so they can be on the lookout for each other instead of leaving isolated workers off by themselves.

SAFETY TIPS FOR WORKERS AND GROUND PERSONAL

Safely working in the areas of any heavy equipment requires that **shared responsibly of both the equipment operator and their coworkers.**

- Inspection of the equipment prior to operation to ensure that all lights and audile alarms are working properly

- A defined route and clear visual path for the operator when moving equipment from the point of origin to the work site
- Heavy equipment must have a rollover protective structure (ROPS)—ROPS is designed to protect the operator if the machine tips over
- Use 3-point mounting and dismounting technique off of heavy equipment—**NEVER JUMP OFF HEAVY EQUIPMENT**
- Establish communication before starting work—hand signals, whistles, radios, air horn, audible alarm, or other means of effective jobsite communication. Operators should always know exactly where all ground based workers are located
- Maintain a clear line of site between the operator and workers. Blind spots are common.
- Use a spotter when heavy equipment is in motion. This requires communication between the operator and workers to maintain safe movement
- Be aware of the swing radius on certain equipment. if possible, cordon off the area with barriers or caution tape
- Prevent unauthorized workers or bystanders from entering a danger zone. When appropriate, install barricades and signs around the danger zone
- **NO RIDERS!** Only equipment that is designed to carry multiple persons shall have more than one occupant!
- Wear high visibility clothing and Personal Protective Equipment
- Never work under a suspended or overhead load
- Watch for shifting or unstable loads and working surfaces
- The use of cell phones is prohibited except for job-related or emergency situations
- Always stay alert

FINAL WORD

Typical construction site is a dynamic place and that potential caught-between locations can change as equipment, vehicles and materials are moved about. Constant and careful vigilance must be maintained.