

HEAVY EQUIPMENT OPERATIONS (PWD)

OBJECTIVES

- Staff will learn safe work practices when operating heavy equipment
- Staff will review organizational policies for equipment operation
- Upon completion staff will inspect equipment

To prevent injuries and deaths during operations of heavy equipment, OSHA has established a number of standards in 29 CFR Part 1926. These regulations are useless unless each of you are familiar with the standards and understand safe work practices. OSHA states, "Employer shall permit only those employees qualified by training or experience to operate equipment or machinery." More than 100 people are killed and many more injured each year by heavy equipment (including backhoes/excavators, cranes, graders, loaders bulldozers, and tractors) on construction sites or while maintaining roads. The following are the main causes of death:

- Worker or other pedestrian on foot are struck by equipment, usually when it is backing or changing direction.
- Equipment rolls while on a slope or when being loaded or unloaded from a trailer.
- Operator or other pedestrian are run over or caught in equipment when the brakes are not set, equipment is left in gear, wheel chocks are not used, or equipment or controls are not used. (In fact recently, an organization recently experienced an accident where the operator failed to properly park a piece of equipment. The equipment rolled crashing another employee between the equipment and a parked vehicle.)
- Coworker or other pedestrian are struck by boom or bucket.
- Coworker riding as a passenger on equipment.

SUPERVISOR

Supervisor responsibilities include:

- Allow only trained and experienced operators to operate heavy equipment.
- Be sure operators are trained by qualified persons experienced with the model and type of equipment being used.
- Lease or buy only heavy equipment equipped with rollover protective structures and seat belts.
- Use only flatbed/lowboy trucks/trailers and ramps that are suitable for transporting heavy equipment.

- Ensure that a copy of the operating manual is on all equipment or is available to the operator.
- Identify overhead and underground utility line hazards and establish procedures for working around them. Before excavating begins, use the one-call system for locating underground utility lines.
- Make sure all safety features on the equipment are working, including backup warning devices.
- Provide training on equipment hand signals.
- Provide trained spotters or signal persons to alert operators of workers or pedestrians in the blind spots of the equipment. Do not allow pedestrians or vehicles into a work area.
- Ensure operators and ground crew wear appropriate personal protective equipment as required.

OPERATOR

Heavy equipment operators should:

- A review operating, safety, and shutdown procedure in the operator's manual before operating new equipment.
- Check/inspect the equipment, safety features, and controls daily before beginning work.
- Only use equipment for its intended purpose and don't exceed manufacturer recommendations.
- Always follow required shutdown or lockout/tagout procedures before performing any work on or around the equipment.
- Do not back up unless you are sure no one is behind you.
- Do not depend only on back-up alarms, they are not always heard at noisy construction sites.
- Use barriers to separate workers on foot, pedestrians, and vehicles from moving equipment when possible.
- Use proper personal protective equipment as required by OSHA while operating heavy equipment, e.g., (hard hat, hearing protection, & safety goggles; reflective vests for ground crew.)
- Wear seat belts when operating heavy equipment (unless equipment is not equipped with rollover protective structures.)
- Do not allow passengers on heavy equipment.
- Keep windows and windshields clean.
- Do not use heavy equipment if horn or back-up alarm is not functional.
- To prevent slips and falls, keep grease, fluids, and mud off the walking/working surfaces and use 3 points of contact when ascending and descending equipment, and do not jump off of or onto any heavy equipment.
- Display the "Slow Moving Vehicle" sign and/or "Caution" light when operating heavy equipment on roads.
- Do not speed; be extra careful around other traffic, hills, obstacles, curves, and in inclement weather.

POLICY

Discuss all policies related to operation of heavy equipment and when working in or around heavy equipment.

CLOSING

- *Discuss recent or past events where an employee or member of the public was adversely affected by our heavy equipment.*
- *Upon completion of this presentation each operator should inspect their equipment ensuring all safety devices are operating properly.*