

# Operating Heavy Equipment Hazard Alert



More than 100 people each year are killed by mobile heavy equipment – including backhoes/excavators, mobile cranes, road grading and surfacing machinery, loaders, bulldozers, and tractors – on construction sites. These are the main causes of death:

- Workers on foot are struck by equipment, usually when it's backing up or changing direction.
- Equipment rolls over and kills the operator while on a slope or when equipment is loaded or unloaded from a flatbed/lowboy truck.
- Operators or mechanics are run over or caught in equipment when the brakes aren't set, equipment is left in gear, wheel chocks are not used, or the equipment and controls aren't locked out.
- Workers on foot or in a trench are crushed by falling equipment loads, backhoe buckets, or other moving parts.

## Protect Yourself

### Your employer should:

- Allow only **trained and experienced operators** to operate heavy equipment.
- Be sure operators and mechanics are trained by qualified persons\* experienced with the model of heavy equipment being used.
- Rent or buy only heavy equipment that has rollover protective structures (**ROPSs**) and seat belts.
- Use only flatbed/lowboy trucks and ramps that are suitable for **transporting** heavy equipment.
- Ensure that a copy of the **operating manual** is on all machinery or available to the operator.
- Identify the hazards of overhead and underground **power lines and utilities** and establish procedures for working around them. Before excavation begins, use the one-call system for utility cutoffs.
- Make sure the manufacturer's **safety features** work.
- Set a **limited access zone** and/or a swing radius for each piece of equipment.
- Provide training on equipment **hand signals**.
- Provide **trained spotters or signal persons** to alert operators to workers or pe1 Tf001 ns

## Protect Others

To protect other workers or pedestrians:

- **Do not back up** unless you are sure no one is behind you. Use mirrors, where appropriate.
- Do not depend only on backup alarms. They are not always heard on noisy construction sites.
- Use **barriers** to separate workers on foot, pedestrians, and vehicles from moving