

# Mobile Equipment

## WHAT'S AT STAKE?

You may work around construction sites or encounter backhoes, loaders, compactors and cranes in your neighborhood or along highways. Staying safe near heavy mobile machines takes attention and effort, even if you don't operate equipment.

## WHAT'S THE DANGER?

Encounters with heavy equipment have killed many pedestrians and motorists. Collisions often happen because most heavy equipment has a blind spot where the operator cannot see part of the surroundings. The person on foot or driver assumes the operator knows he or she is there, then the machine moves or turns unexpectedly and the passerby doesn't stand a chance.

When an unauthorized person approaches heavy machinery, there's also the chance of being struck by the load. Many fatalities have occurred when the load fell from a crane or loader onto a person. A swinging hook on a hoist, or debris falling, can cause a fatal head injury. There's also the chance of getting caught between two pieces of heavy equipment or in a pinchpoint created when an articulated loader turns.

## EXAMPLE

A laborer was steam-cleaning a scraper used in street paving. The hydraulically controlled bowl apron of the scraper, weighing more than a ton, had been left in the raised position and hadn't been blocked to prevent it from falling. The apron fell, and the employee was caught between the apron and cutting edge of the scraper bowl, and killed.

## HOW TO PROTECT YOURSELF

- Never hitch a ride on heavy equipment. Authorized passengers ride only if there's a seat and seatbelt for them. Never ride on any part of the equipment not designed for human occupancy. A loader bucket or a hoist on a crane is not a safe substitute for a proper person-lift.

- Never walk under an elevated load, and always wear the required hardhat if you work nearby.
- If you work around heavy equipment, know the correct hand signals. The operator takes direction only from the designated signalperson, but must respond to an emergency stop signal from any worker on the ground.
- During refueling of heavy equipment, stop all engines in the vicinity and don't smoke. Don't do any work which could ignite fuel vapors, such as welding, cutting or grinding.
- Be alert to backup alarms, but don't rely on them.

## FINAL WORD

*Operators and bystanders should remember: the danger zone of heavy equipment includes the area reached by any attachment and by the load.*

**QUIZ**

1. Equipment operators have all the responsibility for safety of people on the ground.
  - True
  - False
2. You should never hitch a ride on heavy equipment.
  - True
  - False
3. You can safely walk under an elevated load if you're wearing a hardhat.
  - True
  - False
4. If you listen for backup alarms you won't have to worry about being run over.
  - True
  - False
5. The danger zone includes the area reached by any heavy-equipment attachment and load.
  - True
  - False

## **BEFORE THE TALK - TIPS**

1. Prepare to use visuals such as a sketch on a flip chart to illustrate the blind spot situation - the zone where the mobile equipment operator cannot see some part of the surrounding area.
2. Lead a discussion on some of the injury-or-death-causing scenarios that occur on sites where heavy mobile equipment is being used.
3. Have two or three employees take part in a mime to demonstrate to the group proper hand signals.
4. If it is appropriate in your workplace, give some basic safety reminders for those who operate mobile equipment, such as the circle check and the rule that operators do not move the equipment if there is any person in the danger zone.
5. Remind your workers that large mobile equipment must keep a safe distance from power lines. It bears repeating, because electrocution is a leading cause of death for heavy-equipment operators and those employees who are on the ground nearby.
6. Invite a knowledgeable sales representative from a hardhat distributor to discuss the need to wear personal protective headgear even in the heat and what features provide more comfort in the heat than others.

## **AFTER THE TALK- *CHECKLIST***

#### **PROVIDED FOLLOW-UP TO WORKERS THAT DID**

## POORLY ON THE QUIZ

NAME: \_\_\_\_\_

DATE:

## OBSERVED WORKERS

### TASK(S):

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DATE:

## REFRESHER TRAINING

## TOPIC(S):

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DATE:

**OTHER (DESCRIBE):**

MEETING DATE:

**LOCATION:** \_\_\_\_\_

## NOTES

1. False	4. False
2. True	5. true
3. False	

## ATTENDANCE

**INSTRUCTOR:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

**SAFETY TALK:** \_\_\_\_\_