CrewSigned

Heavy Equipment Safety Toolbox Talk

5-minute read-aloud · Last reviewed November 24, 2026

Heavy equipment moves a lot of dirt and a lot of weight, and it does not stop quickly. Every year workers on foot are run over or backed over by loaders, dozers, dump trucks and rollers, and operators are killed when machines roll over. Today we will cover what operators and ground crew each need to do.

The big problem is visibility. Every machine has blind areas where the operator cannot see a person standing, sometimes for many feet behind and beside it. NIOSH has mapped these for common machines, and some of them are bigger than you would guess. If you cannot see the operator's eyes, assume they cannot see you.

Ground crew, stay out of the danger zones. Do not walk behind a machine or truck that might back up. Stay out of the swing radius of an excavator, and do not stand between equipment and a wall, trench or another machine. Before you approach, get the operator's attention, make eye contact and wait for a signal that they have stopped. Wear your high-visibility gear. Never ride on equipment unless there is a seat for you.

Operators, walk around your machine before you start it. Check for people, damage, leaks and the condition of lights, horn and backup alarm. Equipment with an obstructed view to the rear needs a working backup alarm, or a spotter who signals that it is safe. Use your mirrors and cameras, but do not trust them completely. If you lose sight of your spotter, stop.

Wear your seat belt every time on equipment with a rollover protective structure. The cab is designed to protect you only if you stay inside it. Most operators killed in rollovers were thrown out. Know your machine's limits on slopes, and stay back from trench edges and soft ground.

When you park, lower the bucket or blade to the ground, set the brake, shut it off, and chock the wheels if you are on a slope. Use three points of contact getting on and off.

Agree on hand signals before work starts, and use one designated spotter. Mixed signals from several people cause accidents. Operator and ground crew both own this. If you are unsure, stop the machine and talk.

Discussion questions

1. Where are the blind spots on the machines we are running this week?
2. What hand signals are we using today, and who is the spotter?
3. What should an operator do before climbing off a machine on a slope?

OSHA standard

29 CFR 1926.602, Material handling equipment
https://www.osha.gov/laws-regs/regulations/standardnumber/1926/1926.602

SOURCES

NIOSH, Construction Equipment Visibility: https://www.cdc.gov/niosh/motor-vehicle/constructionequipmentvisibilitydiagram/index.html
NIOSH, Highway Work Zone Safety: https://www.cdc.gov/niosh/motor-vehicle/highway/index.html
29 CFR 1926.601, Motor vehicles: https://www.osha.gov/laws-regs/regulations/standardnumber/1926/1926.601

This talk does not replace training that an OSHA standard requires. Scripts are based on OSHA and NIOSH publications and rewritten in plain language.

Safety Meeting Sign-In Sheet

TOPIC

Heavy Equipment Safety Toolbox Talk

COMPANY

JOB / SITE

DATE

TIME

PRESENTER

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