

Backing Up Hazards Safety Meeting Kit

WHAT'S AT STAKE

Operating heavy equipment or a motor vehicle is inherently a hazardous task, however, backing up creates more risk for incidents to occur. According to the National Safety Council, backing accidents cause 500 deaths and 15,000 injuries per year. All too often unnecessary backing is responsible for injuries or property damage incidents. It is important to consider the hazards of backing and what can be done to mitigate these hazards.

WHAT'S THE DANGER

With increased blind spots, backing leaves drivers and operators at more risk for error resulting in damage or injury. The most serious incident occurring due to backing is fatalities of ground personnel. Dump trucks followed by semi-trucks and ordinary pickups are responsible for the majority of back over incidents in the past 10 years on the job. Outside of struck-by incidents involving ground personnel, there are many other hazards to consider. A few hazards include:

- Less visibility/ more blind spots
- Fixed objects
- Moving equipment or vehicles
- Uneven terrain (construction sites)

DANGERS

A driver's field of vision is very limited when backing up a vehicle. Blind spots are the areas around the vehicle that cannot be seen by either looking directly with your eyes or by using your mirrors. Blind spots will vary from vehicle to vehicle, but generally they are to the:

- Rear – directly behind the vehicle.
- Side – the side of the vehicle that the mirrors do not see.
- Front – directly in front of the vehicle that is hidden from the driver by the hood and fenders.

The field of vision may also be blocked or obstructed by part of the vehicle (e.g., a structural post, the hood or back/trunk, or the overall height of the vehicle), the load (e.g., gravel, dirt, boxes, or cargo), poorly placed or damaged mirrors, or poor visibility due to weather (e.g., fog, rain, darkness).

HOW TO PROTECT YOURSELF

BEST PRACTICES AND SAFEGUARDS TO MITIGATE THE HAZARDS OF BACKING UP

- The single best way to prevent backing-related incidents is to eliminate backing as much as possible. Most work areas and tasks can be setup in such a way that backing up is not necessary. Preplanning of movements is another way to eliminate unnecessary backing.
- Look for pull through parking before choosing to park where your first move is backing up. Always try to position yourself so that you can easily pull forward out of a parking spot.
- If you need to back up after being in a fixed position, complete a walk around of your vehicle. This allows you to be aware of what is in your blind spots prior to making a move.
- Install backup cameras on equipment and vehicles.
- Use a spotter when appropriate. If backing is necessary and there are hazards such as other ground personnel or fixed objects in the area then a spotter may be necessary. Always consider the additional hazards created when a spotter is used in a work area with moving equipment or vehicles.
- Mark fixed objects so they are more visible to those operating a motor vehicle or heavy equipment in a work area.
- Place protective barricades to protect critical or expensive equipment from struck-by incidents.

Spotters: Using a spotter has been proven to keep workers safe. However, spotters also are in danger of being hit by a backing vehicle. Several steps can be taken to help keep workers safe.

- Before work begins, drivers and spotters should agree on hand signals.
- Ensure spotters always have visual contact with the driver when a vehicle is in motion.
- Ensure drivers know to stop immediately if they lose sight of a spotter.
- Do not give additional duties to spotters.
- Do not allow spotters to use mobile devices or personal headphones when working.

FINAL WORD

Backing up can almost always be eliminated or greatly reduced when proper preplanning is used. Elimination should always be the first choice before relying on less effective safeguards such as backup cameras or a spotter.