

Loss Prevention News

Provided by the Texas Municipal League Intergovernmental Risk Pool

Backing Skills

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Texas Municipal League Intergovernmental Risk Pool recommends that all member cities and entities have established vehicle backing and hand signal procedures for their drivers and equipment operators. The main purpose for these recommendations is obvious: backing is extremely hazardous. An increasing number of accidents involving vehicles and/or equipment are backing related. When a driver or equipment operator backs a vehicle and/or equipment, there are four major areas of concern:

- Visibility
- Other Objects
- Backing Skills (the driver's ability to back the vehicle safely)
- Terrain

Visibility

Cars, trucks, and most equipment are designed primarily for forward visibility, and therefore backing situations create visibility problems for the driver. Some maintenance type equipment may have forward visibility problems also.

Large vehicles (trucks and some equipment) have extremely limited visibility. A large area behind the vehicle is invisible even with rear view mirrors properly adjusted. This invisible area is called the "cone of invisibility." The larger the vehicle, the larger this cone of invisibility becomes. The driver must become familiar with the cone of invisibility so that precautions can be taken to avoid backing accidents.



Other Objects

There are two kinds of objects that can cause problems:

1. **Stationary Objects** - The driver sees these objects in the rear view mirror before backing. However, as the vehicle backs, the objects may suddenly disappear as the driver turns, or as these objects enter into the cone of invisibility.
2. **Moving Objects** - No matter how careful a driver may be by checking behind before backing, a moving object such as a child, car, animal, or crewmember can move into the cone of invisibility unnoticed by the driver. **This is an extreme hazard.**

Backing Skills

Backing is a specialized skill and the driver must develop this skill by practicing safe backing habits. The rear view mirror is the most important aid in backing; but, the mirror distorts heights, widths and distances. A skilled driver knows from practicing backing how to judge such distorted measurements accurately and adjust properly while backing.

Never back without thinking. Backing alarms and sounding the horn before backing is recommended, but not foolproof. Noisy work areas promote the ability to ignore horns and alarms. Backing is a risky business and requires the full attention and skill of the driver. If a driver is unsure or does not know where crewmembers are or where objects are behind the truck, do not back. **STOP IMMEDIATELY!** Get out of the cab and physically check the area. Crewmembers should be completely clear and to the side of the truck.

Terrain

The terrain in many areas may be uneven, wet, and soft. This increases the already difficult task of backing large vehicles and/or equipment. Backing over soft or uneven ground can cause damage to property, vehicle and/or equipment. ***It can also be dangerous.***

Safe Backing Tips:

- Stay alert and concentrate 100% of the time while backing any vehicle.
- Always plan ahead to avoid backing situations wherever possible.
- Walk around the vehicle to check the clearances and search for hidden obstacles before backing. (Be aware of objects that appear above, in back and to the sides of the vehicle.)
- Stop the vehicle and/or equipment and physically check the area if in doubt of a safe clearance.
- Assign a spotter (if available) to guide and signal in backing situations. Always keep the spotter in view while backing to prevent hitting that person.
- Honk your vehicle's horn 2 times before backing. This signal will alert crewmembers to stay clear of your vehicle and/or equipment.
- Stop the backing immediately if the spotter and/or crewmembers cannot be seen or their whereabouts are unknown.
- Arrange any cargo so it does not block the view through the rear window, if possible.
- Always keep your mirrors, rear window and windshield clean for good visibility.
- Use both side mirrors when backing, glancing from one side to the other.
- Exercise caution when backing a vehicle that has restricted rear visibility.
- Always back slowly so that the vehicle can be stopped immediately, if necessary.
- Slow backing will minimize damage if a backing accident occurs.
- Avoid backing in traffic and around corners.



The TMLIRP Media Library includes #48 - *Basics of Spotter Safety*, #62 - *Transfer Stations*, and #57 - *Spotter Safety - Communicating with Drivers (Landfills)*. Refer to www.tmlirp.org or call 800-537-6655 and ask for the Loss Prevention Department.