RISK Transportation & Warehousing INSIGHTS



Ramp Safety: Unloading Product

Employees can use all different types of equipment to unload product from dry vans or box trucks. Some employers equip their trucks with lift gates, while others use a ramp and a cart to unload product. All methods pose particular safety risks, so safety awareness and training for employees is essential.

Ramp safety risks are something employers should be concerned about. If a ramp is not set up properly, it can lead to serious injuries and loss of product. There are several risks that an employer should be aware of when employees are working with ramps and things to keep in mind when designing new ramp systems or replacing old ramps.

Design Considerations

Ramps are used for unloading materials from a trailer to a designated location. Employers assess the needs of the ramp and have ramps designed for those needs. A few safety considerations to make when designing a ramp or when switching out the type of ramp are:

- Is the ramp wide enough for the side door on the trailer?
- Would a wider ramp in the back of the truck work better at certain drop locations?
- What type of tread should the ramp have on it?
- What weight capacity should the ramp be rated for?
- What type of material should the ramp be made of for easier handling.

When considering a type of ramp to use, employers are limited to the dimensions of the doors on their trailers. If the ramp is used for a side door, the ramp should be the width of the side door so there is no potential of falling out the sides of the door. Wider ramps may be a better set up for the back of the trailer, especially if the ramp needs to accommodate wider product, so there are no problems with it hitting the ramp's siderails.

Working together with employees to understand their needs can prevent injuries and reduce product damage.

Fall Hazards

Most dry van trailers sit at a height at or above 4 feet. According to the Occupational Health and Safety Administration (OSHA), this is a height at which employers are required to comply with fall protection standards. Although fall protection isn't required in a trailer, it is necessary to understand that the height is significant enough that, if an employee were to fall off the top of a ramp, they could be seriously injured.

To avoid falls while unloading, employees should ensure:

- The ramp is attached and secured to the proper place after setting it up and prior to using it.
- When moving product out of the truck and down the ramp, the employee should slow down to position the cart in line with the ramp guides before they begin to move down the ramp.

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- Employees should never load the cart over capacity or move at a pace that makes it difficult for the cart to be controlled.
- Employees should always make sure to check the manufacturer's maximum load capacity rating to know what weight the cart can safely hold.
- When stacking product, the employee should stack just enough on the cart so they can still see over the product. Over stacking is a method employees use to reduce the number of trips made, but this can cause serious safety issues. For example, an employee can fall and be hit with product or injure their backs.
- Employees should have the cart in front of them
 when going down the ramp. This allows for better
 control and reduces the risk of an employee being
 struck by the cart and product if a trip or fall were to
 occur.

Weather also plays a role in fall hazards on ramps. Make sure the ramps being used have traction on them to help with navigating the ramp in inclement weather. This will reduce risk of slips, trips and falls if the ramp is wet, or if it has snow or ice on it. Depending on the type of ramp being used in the fleet, determine what boot would best work for the type of ramp tread. This will help with employees' traction on the ramp.

Back Injuries

Unloading activities are common sources of back injuries for employees. This is especially true for drivers, since they sit for long periods of time and then start lifting heavy product to unload their trailers at stops. Other issues that can potentially give rise to back injuries are ramp awkwardness and improper lifting.

If the ramp is too heavy, awkward or hard to position, it could increase the opportunity for back injuries. A driver needs tools that are easy to use and maneuver, especially after sitting for prolonged periods of time. Getting out of the truck and having to start unloading

without warming up their muscles can increase their risk of muscle injuries.

Employees should make sure to lift properly by using their legs and not their lower backs. Practicing proper posture when driving, stacking product on the cart and lifting the ramp is essential to preventing a back injury. Employers should identify and address potential ergonomic issues employees could face to reduce their risk of injury. A ramp system should be set up (if feasible) to slide out easily from under the trailer. The ramp should be easy to move and attach to the truck quickly and securely. The ramp should be made out of a lighter metal such as aluminum, so it is easier to handle.

Employee Fatigue

If an employee is struggling with moving the ramp to set it up at every delivery site, that could create unnecessary fatigue that affects their driving.

Having tools on a job that create more work should be avoided, as it consumes time, and employees may rush to get their jobs done to compensate for that lost time. Specifically, commercial motor vehicle drivers who have to unload their own product have only so much time to complete their shifts under the Federal Motor Carrier Safety Administration's hours-of-service rules, so adding time to an already full schedule encourages unsafe behaviors to develop.

Product Damage

Lastly, an employer will have more risk of damaged product if a ramp is not user-friendly. If the ramp is too short and steep, it may cause issues controlling the cart since the steeper the decline, the faster it will go. Make sure the set up of a ramp is appropriate for the delivery stops to be made and for employees to work with.

What Employers Can Do

Train employees on how to use the ramps and carts that are provided to them for their job tasks. Train them on proper ergonomics to help them understand the



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importance of following proper lifting procedures. Allow employees to give you feedback on what is working and what needs improvement. By working together to understand the needs of the employees, it can prevent injuries and reduce product damage.

