

Workplace Transport Safety Reversing Vehicles

Information Sheet

This information sheet aims to raise awareness of the dangers caused by reversing vehicles in the workplace. It provides basic information, assistance and advice on the safety precautions to be taken when reversing vehicles or mobile equipment. The information is aimed primarily at vehicles in operation in permanent fixed places of work, however some of the information may also be applicable to transient, temporary and mobile workplaces such as construction sites. It is aimed at employers, people in control of places of work, self-employed people and employees.

What are the dangers associated with reversing vehicles?

In Ireland, a recent analysis of fatal accident statistics showed that reversing activities were involved in 11% of all fatal workplace transport accidents. Reversing incidents that do not result in injury can result in costly damage to vehicles, plant, equipment and premises. Most of these incidents can be avoided by taking simple safety precautions.

Why is reversing a problem?

The main problem with reversing is poor visibility. For instance, when articulated lorries are reversing into loading bays, the trailer often blocks the visibility of the back of the vehicle. The driver's awareness of people or objects may be hindered by the size of the vehicle, by equipment on the vehicle, by lack of functioning equipment on the vehicle such as badly positioned mirrors or non functioning CCTV cameras or even by other working vehicles in the vicinity. Environmental noise or the noise of the vehicle when it is reversing can also be a driver distraction. Environmental conditions such as poorly laid out sites or poor weather can also hinder the driver's visibility. The risk of a reversing incident may be further increased by the speed the vehicle is being driven at.

However, the majority of reversing accidents actually occur at low speed. On investigating reversing accidents, the main cause can usually be attributed to a failure to manage - the workplace, the vehicle, the driver or a combination of these three aspects of workplace transport management safety.

Legal Provisions:

Under the Safety, Health and Welfare at Work Act 2005, employers must assess the risks to the health and safety of their employees and anyone who may be affected by their work activity. As part of the risk assessment, workplace transport and the associated risk of reversing should be evaluated and adequate control measures put in place to eliminate or reduce the risk of injury or damage to assets by reversing vehicles. The Act also requires that safe systems of work are planned, organised, performed and maintained. Where reversing cannot be eliminated, safe systems of work of work must be put in place for reversing vehicles.

The Safety, Health and Welfare at Work (General Application) Regulations, 2007 (S.I. No. 299 of 2007) require that outdoor and indoor places of work are organised in such a way that pedestrian and vehicles can circulate in a safe manner and that pedestrian and traffic routes are clearly identified for the protection of employees.

Note: the above is not an exhaustive list of legislation that is applicable to reversing vehicles. Other relevant legislation for example, construction and quarries legislation may also be applicable to this activity. Construction and quarries legislation lays down legal requirements for certain visual aids and auxiliary devices on specific vehicles and mobile plant.

As an employer or person in control of a place of work what do I need to do?

- ▲ Identify what vehicle manoeuvres are necessary and avoid the need to reverse where possible. This will form part of your workplace transport risk assessment.
- ▲ Eliminate reversing where possible, by providing one way traffic systems, vehicle turning points, drive through loading and unloading systems or engineering systems such as vehicle turntables. Good design and layout of the workplace can eliminate reversing but this is not always feasible in older workplaces. Reorganise traffic routes and loading and unloading procedures or increase the space for storing materials where possible, to avoid reversing.
- ▲ If reversing cannot be eliminated, plan out the reversing area. Good all round vision is essential if reversing is to be carried out. Consult with staff, drivers and visiting drivers when planning the reversing area. Take account of any previous reversing incidents.
- ▲ Provide a documented safe system of work for reversing activities and ensure that all employees and visiting drivers are aware of how you operate and supervise the safe system of work.

If vehicles must reverse:

The most effective ways to improve safety during reversing operations are to:

1. Segregate pedestrians and vehicles **and**
2. Improve the driver's ability to see around the vehicle from the driving position.

The Reversing Area (The Workplace):

- ▲ Remove people from the reversing area, create a vehicle only area and keep the area free from obstructions.
- ▲ Ensure that there is adequate space for reversing. Provide large reversing areas where possible. If the workplace is small, you may have to restrict the size of vehicles allowed to access your site.
- ▲ Ensure that reversing areas are well laid out, clearly identified for both drivers and pedestrians, have adequate markings, signage and aids to increase visibility such as mirrors. The provision of longitudinal guides, lateral white lines on the ground or fixed mirrors can all be of assistance to the driver in positioning the vehicle correctly. Remember, if left hand drive vehicles visit your premises, they may have different lines of visibility.

- ▲ Place fixed mirrors in reversing areas, if required.
- ▲ Where vehicles have to reverse up to structures, services or edges, provide physical stops such as barriers, bollards, buffers or wheel stops to warn drivers that they need to stop and to prevent vehicles from overrunning edges. All physical stops should be highly visible, appropriately positioned and well maintained.
- ▲ Ensure that there is adequate lighting in the reversing area.

The Vehicle:

- ▲ Ensure that vehicles use the most suitable route when reversing and minimise the distance vehicles have to reverse.
- ▲ Ensure that the driver has good all round visibility. Provide extra visibility aids if necessary such as CCTV, convex internal rear view mirrors or convex segment wing mirrors. Certain legislation such as construction and quarries legislation lays down specific legal requirements for certain auxiliary devices and visibility aids on specific vehicles. Ensure that all visibility aids and vehicle windscreens are kept clean and well maintained.
- ▲ Consider reversing aids or safety devices if appropriate, for example "sensing" or "trip" systems can assist in the detection of people or obstacles behind the reversing vehicle. Such systems must be correctly installed, set up and maintained. It is important to remember that these systems are an aid and are no substitute for good all round visibility and driver awareness.
- ▲ Audible reversing alarms which warn people of the danger can be of assistance in certain situations however, they may not be heard by all people and can become part of the background noise on a busy site. Where multiple vehicles operate on a site, distinguishing the reversing vehicle can be difficult and in such cases a flashing warning light may be more appropriate. If using reversing alarms remember that they must be loud enough to be heard over other noises yet should not cause an environmental nuisance. All alarms must be kept in good working order. Alarms should not be considered fail safe and should be used in conjunction with a combination of control measures.
- ▲ Consider installing a speed limiting device to the vehicle when reversing.
- ▲ Fix guard, where required, the rear wheels / hazardous vehicle access points to prevent people from being dragged under the vehicle.
- ▲ Select conspicuous vehicle colours and markings to assist the vehicle in standing out.

The Driver & Other People:

- ▲ Identify all the people likely to be affected by reversing on your site and ensure that employees and drivers have adequate instruction, information and training.
- ▲ Ensure that any visiting drivers are familiar with the workplace, the site rules regarding reversing and the reversing areas. Ensure that all employees understand everyone's task.

Can I use a reversing assistant?

Reversing assistants are a last resort and should only be used where there is no other way to control the risks associated with reversing vehicles. If used, ensure that there is a safe system of work in place and that the reversing assistant is:

- ▲ Competent and adequately trained. Remember, new employees will need to be trained with respect to the system at your place of work as they may have used a different system before.
- ▲ Authorised to be a reversing assistant.
- ▲ Wearing appropriate high visibility personal protective equipment.
- ▲ In full view of the driver at all times during vehicle movements. Drivers must stop immediately if the guide goes out of view at all.
- ▲ In a safe position where they can guide the vehicle and be a safe distance from the vehicle. The reversing assistant should never stand directly behind the vehicle.
- ▲ Using recognisable hand signals, which must be obeyed and enforced if not obeyed. A clear signalling system should be agreed in advance with the driver prior to any reversing activities being carried out. Portable radios or other communication devices may also be of assistance.

As a driver what should I do?

- ▲ Always be aware of pedestrians.
- ▲ Use the safe systems of work provided and follow the traffic management system that is in operation.
- ▲ If you have to reverse, reverse slowly, checking mirrors at all times.
- ▲ Avoid reversing over long distances.
- ▲ Use the relevant auxiliary devices and visibility aids provided. Keep your vehicle mirrors and windscreen clean and in good repair. Ensure that your mirrors are correctly aligned.
- ▲ Report any defects in equipment, such as faulty CCTV cameras or reversing sirens, or systems of work or any accidents, incidents or near misses to your employer. If there are particular sites where reversing is unsafe notify your employer and the site management.
- ▲ Where possible, reverse into parking spaces rather than out of them.

As an employee what should I do?

- ▲ Look out for reversing vehicles.
- ▲ Use the safe systems of work provided and follow the traffic management system that is in place by using the safe pedestrian routes provided.
- ▲ Clearly understand everyone's task.
- ▲ Never stand or walk behind a reversing vehicle.
- ▲ Remember that vehicle drivers cannot always see pedestrians as vehicles have blind spots.
- ▲ Do not enter restricted areas or designated reversing areas.
- ▲ Always wear High Visibility clothing if working in the vicinity of vehicles.
- ▲ Report any defects in systems of work or any reversing accidents, incidents or near misses to your employer.

Further Information

Further information on workplace transport safety and occupational safety and health is available on our website at www.hsa.ie or by contacting the Workplace Contact Unit at **1890 289 389**.