This information sheet provides basic guidance on the prevention of falls from vehicles and mobile work equipment. The guidance gives a general overview of falls from vehicles and does not deal with any specific vehicle types. It is aimed at employers, self-employed people and employees. The main objective is to increase awareness about the risk of falls from vehicles.

Introduction

Every year falls from vehicles account for a significant number of workplace transport incidents. Frequently, a fall from a vehicle has been the initiating event for a fatal workplace transport incident whereby the person has fallen from the vehicle and then been run over and killed by the vehicle. Falls from vehicles, even from a relatively low height can result in serious injuries, yet most falls are easily preventable. The majority of falls from vehicles occur whilst people are:

- Accessing or egressing the vehicle, or
- Working at height on the vehicle.

Have certain work activities higher risks of falling from vehicles?

Employees are at increased risk of falling off vehicles when carrying out activities such as:

- Loading and unloading;
- Sheeting and unsheeting;
- Coupling and uncoupling trailer units;
- Cleaning, maintenance or repair;
- Checking and monitoring equipment such as refrigeration unit temperatures.

Are there certain factors which contribute to falls from vehicles?

Multiple factors may contribute to a fall from a vehicle. However, one of the most common contributory factors is slips and trips and often by reducing the risk of slips and trips on vehicles this will also help reduce the risk of falls. Employees may also lose track of the edge of the vehicle whilst concentrating on manoeuvring items and step back off the vehicle.

Other factors that may contribute to falls from vehicles are:

- Poor vehicle design: lack of edge protection, surfaces with no or low slip resistance, poorly designed or lack of proper access;
- Poor vehicle maintenance: poorly maintained steps, handholds, surfaces or ladders;
- Poor housekeeping: untidy or badly maintained work areas;
- Environmental conditions: icy or wet conditions and strong winds may cause people to slip and fall. Inadequate lighting or poorly positioned lighting causing glare or shadows can also increase the risk of falls;
Inappropriate footwear or footwear that is incompatible with the surface in use;

Human factors: failure to follow safe systems of work, tiredness, lack of concentration or horseplay;

Inadequate instruction, information and training: for instance, employees not aware of how to access and egress a vehicle safely;

Improper use of vehicles such as standing on the forks of a forklift truck or carrying passengers in vehicles, on loads or on trailers not designed to carry passengers;

Lack of management and supervision.

**Legal Provisions**

Under the Safety, Health and Welfare at Work Act 2005 (No. 10 of 2005) there is a legal requirement on the employer and any person who has control to any extent of the workplace, to carry out a written risk assessment. As part of your assessment of workplace transport, the risk of falls from vehicles must be evaluated and adequate control measures must be put in place to eliminate or reduce any risks found.

The Act also requires that employers provide safe access and egress to the workplace and as under the Act a vehicle is defined as a place of work, the employer must provide safe access and egress to vehicles.

Under the Safety, Health and Welfare at Work (General Application) Regulations 2007 (S.I. No. 299 of 2007), the Work at Height Regulations, require that employers assess, plan and appropriately supervise any work at height. The Regulations require that the employer considers falls from any height where someone could be injured and this includes falls from vehicles such as falls from trailers, tailboard goods lifts and the top of vehicles such as vans.

**As an employer what should I do?**

Identify and assess where falls from vehicles could occur in your work operations. Where a risk of a fall is identified, eliminate or control the risk taking account of the General Principles of Prevention (Schedule 3 of the 2005 Act):

**Avoid** the need to work at height on vehicles where possible:

- Provide systems of work and equipment that allow people to work at ground level. For instance if purchasing a vehicle request that gauges and controls are at ground level or use automated sheeting systems.

- Plan loading and unloading to avoid the need to work at height. Reorganise loading systems so that loads are palletised and can be lifted off using mechanical lifting aids. Ensure the position of loads on the vehicle matches the order of delivery.

If work at height on vehicles cannot be avoided:

- Restrict access onto vehicles. Only allow people who have to access the vehicle to do so.

- Ensure that the work is carried out in designated places, away from passing vehicles and pedestrians and sheltered from strong winds and bad weather.

- Ensure that any equipment used for lifting people is specifically designed for the task. For instance use integrated cages on forklift trucks. Remember that non-integrated cages on forklift trucks must only be used in exceptional circumstances such as emergencies. Regular planned activities such as stock taking are not regarded as exceptional circumstances.
Prevent falls from the vehicle:

- Provide **On-Vehicle Fall Protection Systems** such as collapsible guardrails. Such systems must be of sound construction, properly maintained and securely fixed.
- If on-vehicle systems cannot be provided, provide **On-Site Systems** such as platforms and gantries. Use drive through or drive past systems where possible. Ensure that there is adequate equipment for the number of vehicles and people using the systems.

If falls cannot be prevented, reduce the distance and effect of the fall by using collective protective fall measures such as soft landing systems or nets.

If it’s not feasible to use collective protective fall measures then use Personal Protective Equipment such as fall arrest equipment or restraint systems. If using such systems, you must ensure that employees have adequate instruction, information and training in their safe use. Also ensure that a rescue plan is in place.

Ensure that there is an inspection and maintenance system in place for all equipment and vehicles. A defect reporting system should be in place so that any vehicle defects or wear and tear can be reported and addressed promptly. Remember that certain equipment must be thoroughly examined under the General Application Regulations, 2007. For instance, vehicle tailboard goods lifts must be thoroughly examined every 12 months and examination reports must be available for inspection.

Consider using anti-slip coatings or finishings on critical areas or non-slip colour contrast on the edges of load areas, steps and tailboard goods lifts.

Provide proper on-vehicle storage for equipment such as tarpaulins and lashings. Supply appropriate waste disposal facilities for waste materials and packaging.

Establish documented safe systems of work. Provide appropriate equipment for vehicle cleaning, housekeeping and for dealing with spills or contamination such as diesel, oil or grease.

**What about drivers visiting other people’s premises?**

Vehicle drivers may operate in another company’s premises and in such cases, the law requires that employers must co-operate with one another and take all reasonable steps to ensure that safety measures are co-ordinated. Vehicles on which employees of more than one company are working are usually considered as shared workplaces. Liaise with other employers to ensure that your workers are safe when visiting other places of work. Liaison will ensure that your equipment is compatible with the other employer’s place of work and also that the necessary facilities to allow drivers safe access to the vehicle are available.

**As an employer what can I do to prevent falls whilst accessing and egressing vehicles?**

- Specify good access when purchasing vehicles.
- Provide and maintain safe vehicles with safe access to all parts of the vehicle such as the vehicle cab, load area or fifth wheel. If vehicle-based access is not feasible, then use a workplace based solution such as access steps with handrails. If retrofitting a vehicle, consult with the manufacturer and ensure that it is safe to do so and that the structural integrity will not be affected.
Ensure that vehicle steps are anti-slip and large enough for the foot. Where possible, specify materials that are slip resistant during wet and dry conditions.

Provide drivers with safety footwear which has compatible slip resistance with the surfaces they will be walking on. Remember that the slip resistance of shoes can vary greatly. In some cases, shoes that are compatible with the surface of the cab steps may not be compatible with the catwalk surface. Involve and consult with employees if purchasing vehicles and equipment including safety equipment such as safety footwear.

Provide employees with adequate instruction, information and training. People climbing onto vehicles or access equipment should be instructed to keep at least three points of contact (with their hands and feet) on the vehicle they are climbing.

Ensure that there is adequate lighting in depots and on vehicles.

Provide appropriate vehicle washing facilities and foot scrappers in order to remove mud, diesel or grease.

Do not tolerate unsafe practices, challenge anyone who jumps down from their vehicle. Appropriate action should be taken against those who work in an unsafe manner.

As an employee what should I do?

Always enter and exit the vehicle in a safe manner. Never jump down from the vehicle cab or climb onto a moving vehicle.

Always use the access steps or ladders provided,

- Open the door,
- Face the vehicle,
- Grab the handhold, and
- Step down backwards,

This will give you more control and if you become aware of another vehicle moving towards you, it is easier to get back into the cab or load area. Take your time and always check for uneven surfaces before stepping down from the vehicle. Avoid parking where there are obvious hazards such as uneven ground or puddles and check around steps for trip or slip hazards.

Never climb into the vehicle with anything in your hands, place items on the seat before entry. Use the proper handholds, do not use the steering wheel and maintain your three points of contact.

Do not use parts of the vehicle that are not designed as handholds or footholds to access the vehicle such as mudguards or bumpers which are not weight bearing parts. Do not rely on ropes, sheets or loads to support your weight as they can rip or tear.

Always wear any Personal Protective Equipment provided by your employer. Wear appropriate footwear that is in good condition and has good treads and ankle support. Keep footwear soles clean.

Never raise someone up on a pallet on the forks of a lift truck or travel on a vehicle load.

Maintain good housekeeping. Keep the vehicle load area and catwalk tidy and ensure that any lashings are safely stored. Clean up any spills and dirt on the vehicle such as oil or mud on the catwalk.
△ If you have to walk on a vehicle, always face the direction you are walking in. Do not walk backwards near the rear or side of the vehicle bed.
△ Reduce the time that refrigerated vehicle doors are left open in order to prevent ice build up on the floors.
△ Report any defective, worn or damaged equipment to your employer immediately such as damaged steps or handholds, slippery surfaces or broken trailer boards.
△ Always follow safe systems of work especially for loading and unloading activities.

Further Information
Further Workplace Transport Safety Information Sheets and information on occupational safety and health is available on our website at www.hsa.ie or by contacting the Workplace Contact Unit at 1890 289 389.