

Workplace Transport Safety Safe Workplace

Information Sheet

This information sheet provides basic guidance on the layout of the workplace and traffic routes to enable the safe movement of vehicles and pedestrians. The information is aimed primarily at permanent fixed places of work, however some of the information may also be applicable to transient, temporary and mobile workplaces such as construction sites. The information is aimed at designers, employers, self-employed people and persons who have control of a place of work. It will also be of interest to employees who may be affected by workplace transport issues.

Introduction

A major cause of transport accidents is poor workplace design and layout. Careful examination and planning of the workplace and traffic routes will result in a lower risk of such accidents. 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 the risk assessment, transport hazards must be identified and assessed. In conducting the assessment, the workplace itself must be evaluated with respect to the movement of vehicles and pedestrians and adequate control measures must be put in place to eliminate or reduce any risks found.

Controls may be a combination of physical measures such as road signage or markings and formal traffic management procedures such as documented traffic plans and site rules. A well designed workplace will not only improve safety but will also improve work flow and productivity.

Assessing and Managing the Workplace

When assessing the workplace and planning traffic routes consider the work activities, the traffic type, the volume and circulation of vehicular and pedestrian traffic. Take account of commercial vehicles such as delivery vans, large goods vehicles, courier vehicles and tankers that visit the workplace.

Consider vehicles that may infrequently if ever visit the workplace for example emergency vehicles. Include internal vehicles such as forklift trucks, tugs, visitor and staff vehicles which may include cars, motorbikes and bicycles. Remember to include pedestrian traffic such as site employees, other people's employees, visitors and contractors.

All traffic entering the workplace must be directed and controlled as far as practicable. If the place of work is a shared site or you do not own the site, you may have to work with other employers or the landlord to ensure that workplace transport is adequately managed on site.

Outlined below are some of the features of the workplace which need to be evaluated during the risk assessment process.

1. Vehicular Traffic Routes

- ▲ Review access and entry into the site. Does traffic have to cross a major road to enter/exit your site? Is an alternative arrangement possible?
- ▲Control pedestrians and vehicles entering the site for example, by use of barriers or access gates. Ensure that equipment that has to be operated by drivers such as entrance barriers can be operated from a safe location. Ensure that if gates or barriers are to stay open that they are adequately secured.
- ▲Ensure that drivers have adequate visibility to enable them to see hazards. Check that landscaping does not affect visibility especially at junctions. In certain situations, boundary wire mesh fencing may be more appropriate in certain site areas where a wall may restrict vision. Take account of left hand drive vehicles which may visit your workplace. These vehicles may have different lines of visibility.
- ▲Eliminate the need for reversing, where possible. Consider one way systems and drive through loading and unloading areas, turning points or if space is limited consider engineering controls such as turntables.
- ▲Ensure that traffic routes are constructed of suitable material for the location, type of traffic and the size of the route. The route should be firm, have adequate drainage, a suitable driving surface, clearly defined edges and be wide enough for the movement of the largest vehicle and its load.
- Avoid traffic routes passing close to hazardous areas such as chemical storage tanks. Keep routes away from entrances or doorways used by pedestrians. Avoid sharp or blind bends and steep slopes on traffic routes. If blind spots or sharp bends cannot be avoided, provide mirrors to improve vision.
- ▲Look at areas where height clearance or height restriction may be an issue such as overhead electrical cables or pipelines. Remember visiting vehicles to your site may have varying height clearance.
- ▲ Keep routes free of obstructions, but where unavoidable ensure that they are clearly marked. Provide impact protection for vulnerable parts of the workplace such as lamp posts, pipe work and columns.

2. Pedestrians

- ▲ Segregate pedestrians from vehicles. Provide obvious separate footpaths or walkways for pedestrians. The width of the walkway should be wide enough for the number of people expected to use it. Wider walkways will be required where larger groups of people are expected to use the walkways at the same time. Where this is not feasible ensure that the traffic route is wide enough for both vehicles and pedestrians to use it safely.
- ▲ Provide pedestrian crossing points which have good visibility for both the driver and the pedestrian. If the road is wide, provide a central refuge for the crossing pedestrian. If there is heavy pedestrian traffic on site, consider traffic lights, subways or pedestrian bridges. Consider the provision of barriers, rails or pedestrian deterrent paving to direct pedestrians to designated crossing points and prevent pedestrians crossing at blind spots.
- ▲ Provide barriers at entrances and exits to buildings to prevent pedestrians walking directly into traffic. Provide separate vehicle and pedestrian entrances into buildings, with vision panels on all doors.
- At busy periods for example lunch time and the start and finish of the working day, consider prohibiting or limiting vehicular traffic in the areas that will encounter pedestrians.
- ▲Ensure that pedestrians wear High Visibility jackets or vests in areas where workplace vehicles are operating.
- ▲ Provide safe areas for drivers whilst vehicles are being loaded.

3. Signage and Road Markings

- ▲ Mark and signpost all vehicular and pedestrian traffic routes both internally and externally. Mark or signpost information such as any restricted/no parking areas, pedestrian crossings, traffic lanes, directions, junctions, stop lines, changes in gradient, kerbs, bollards, route edges, limited head space areas, speed limits and sharp bends.
- ▲ All road signage should comply with the Department of Transport Traffic Signs Manual.
- ▲ All safety signage and markings must comply with the Safety, Health and Welfare at Work (General Application) Regulations, 2007 (S.I. No. 299 of 2007) Safety Signs at Places of Work Part 7, Chapter 1.

- ▲ All signage must be clearly understood. Use pictograms where possible.
- ▲Use reflective or illuminated signage where work is carried out outside of daylight hours.
- ▲ Place signage in appropriate locations so that people have time to see and understand the signs and take appropriate action. Place appropriate signage at the workplace entrance to indicate the main site rules for example, traffic routes, speed limits. For large places of work, such as factories, industrial estates and docks, maps placed at prominent locations may also be of assistance.
- ▲Ensure that signage and markings are not obstructed by objects or shrubbery.

 Check that signs and markings are clearly visible at both day and night, when wet or dry and that artificial lighting does not affect visibility.

4. Lighting

- ▲ Provide appropriate lighting on all traffic routes and yard areas. Ensure that the lighting is positioned correctly. Remember in loading bays, large goods vehicles may restrict the lighting if it is centrally positioned.
- ▲Ensure that the lighting does not cause a risk of glare to vehicle drivers. Check that drivers are not subjected to extreme light variations especially if driving from a dark warehouse out into a bright yard.

5. Traffic Control/Speed

- ▲ Put in place appropriate speed limits for the site. The limit set should be based on risk assessment and take account of the route layout, the vehicles using the route and the loads being carried. Different areas of the site may require different speed limits. Remember that many vehicle speedometers are ineffective at low speeds and some transport vehicles do not have speedometers.
- ▲ Monitor and enforce the speed limit once in place. For example, CCTV can assist in measuring speed between two fixed points.
- ▲ Consider limiting vehicle speed using traffic calming measures for example, rumble strips, speed humps, narrowing roads using bollards, raised curbs. However, ensure that the correct calming measure is selected for the traffic type as inappropriate use may create an additional hazard. Ensure that any traffic calming measures are clearly visible and if appropriate well lit and/or reflective.
- ▲ Consider traffic lights, speed sensors, flashing warning signs and electronic speed zoning to assist in controlling traffic flow and speed.

6. Parking

- Adequate numbers of safe, well lit and suitably designed parking spaces should be provided for all parking needs and vehicles using the workplace. On site parking should enable separation between work and private vehicles.
- ▲ Parking should be easy to find, clearly marked and ideally as close as possible to where people need to go once they leave their vehicles.
- ▲Ensure that employees and drivers park in their designated area.
- ▲Ensure that parking areas do not obstruct key access routes or fire hydrants.
- ▲Where possible provide drive through parking spaces. If this isn't feasible, encourage staff to reverse into parking spaces as this reduces the number of vehicles reversing out into a flow of traffic and improves visibility for departing vehicles.

7. Housekeeping and Maintenance

- ARegularly clean and maintain all vehicular and pedestrian traffic routes, lighting, mirrors, signage and route markings. Check that all signage is clearly legible and visible. Ensure that safe systems of work are in place for employees carrying out maintenance activities and that the work is carried out when vehicles are not in operation in the area.
- ▲Ensure that all surfaces have a good grip. Ensure that pedestrian footpaths are kept clear of obstructions like shrubbery and materials that may cause slips, trips or falls such as mud or ice. Provide foot scrappers for employees and scrubbers for vehicle tyres where required.
- ▲ Provide emergency spill kits and documented procedures in the event of spillages.

8. Safe Systems of Work

- ▲Following the site assessment, prepare a traffic management plan. The plan will form part of the overall traffic management system. As part of the plan, include a site map which identifies the traffic routes for vehicles and pedestrians. The level of detail of the plan will depend on the complexity and size of the site and the volume of vehicular and pedestrian traffic operating in the workplace.
- ▲Ensure visiting drivers know the site rules and traffic management plan, who and where to report to, the layout of the workplace and the traffic route to be taken.

Where reasonably practicable send this information to the driver in advance of their arrival at the workplace.

AReview the site layout periodically to take account of changes in work activities, traffic volume, type and circulation.

Further Information

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