



Government of
Western Australia

Safe Movement of Vehicles at Workplaces

WorkSafe
Western
Australia
COMMISSION



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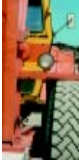
Safe movement of vehicles at workplaces

Vehicles and mobile plant moving in and around workplaces are a cause of occupational injuries and deaths in Western Australia.

Reversing, loading, unloading and pedestrian movement are the activities most frequently linked with workplace vehicle accidents.

Traffic and pedestrian movement at workplaces should be designed, planned and controlled so that pedestrians and vehicles can circulate safely.

Improving workplace traffic safety, in addition to reducing work-related injuries, can also improve workplace efficiency and productivity.





Hazards and Risks

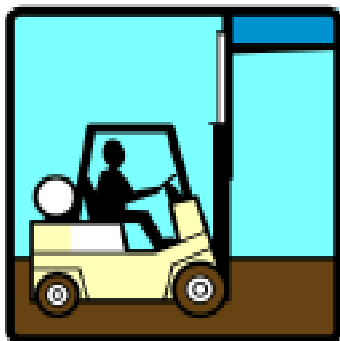
Where are the hazards?

Workplace vehicle hazards may occur during:

- pedestrian movement at workplaces;
- vehicles or plant reversing and manoeuvring;
- arrivals and departures;
- loading, unloading;
- hitching and unhitching of trailers;
- mounting or dismounting from vehicles;
- securing of loads; and
- maintenance work.

Who is at risk?

Most at risk from vehicles at workplaces are those who work with or near vehicles and mobile plant, such as cars, vans, forklifts, trucks, semi-trailers, trailers, tractors, loaders, buses and utilities.



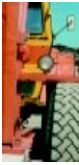
People also at risk may include other workers, management, self-employed people and customers or visitors at workplaces.

Controlling the risks

Employers are required by law to carry out regular risk assessments, identifying hazards, assessing the risk of injury or harm, and considering means of controlling or reducing the risks.

The preferred risk control sequence is:

- **Elimination** of vehicle movement where possible, or removing the need for reversing;
- **Substitution** of unsafe vehicles, loading facilities, road signage or road surfaces with safer ones;
- **Isolation** of vehicles from pedestrians or vice versa;
- **Engineering controls**, eg. pedestrian barriers, handrails, separate access doors for pedestrians and vehicles;
- **Administrative controls**, eg.:
 - providing education, training, supervision and safe procedures on vehicle movement at workplaces;
 - restricting pedestrian access in certain areas or at certain times;
 - preventing reversing in certain areas or at certain times;
 - providing designated parking for work and private vehicles;
 - monitoring risks to ensure they remain as low as possible.
- **Protective equipment** such as safety boots, helmets and reflective jackets are the last line of accident prevention;
- **Monitoring** the effectiveness of safety changes and safe work procedures through regular inspections, checks and record keeping.





Traffic routes

Safe design

Workplace routes should be:

- safe for both vehicles and pedestrians at the workplace;
- wide enough for the largest vehicle using them;
- one-way if possible, with adequate passing space around stationary vehicles;
- clearly sign-posted to indicate restricted parking, headroom, speed limits, vehicle movement and other route hazards;
- surfaced with bitumen, concrete or other suitable material and well drained; and
- free from excessive gradients, with steep gradients that cannot be avoided clearly sign-posted.



Lift trucks and similar plant should operate on gradients only if they are designed to do so.

Unsealed routes at temporary workplaces such as construction sites and forestry operations should be designed and controlled to ensure safe vehicle movement.



Safety maintenance

Workplace routes should be well maintained and:

- free from obstructions, grease or slippery substances;
- free from damage to surfaces;
- immediately cleaned or cleared following substance spills or items falling from vehicles.

Safe signs

Clear road markings and signage should alert vehicle operators to:

- speed limits;
- sharp bends;
- junctions;
- pedestrian crossings;
- vehicle crossings;
- blind corners;
- steep gradients;
and
- road works.



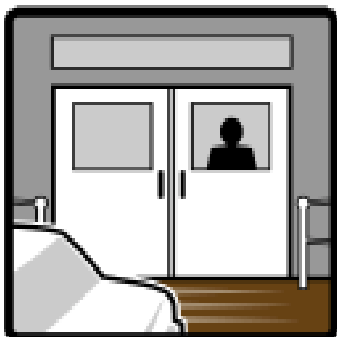


Pedestrians

Safe walkways

The safest way to protect pedestrians is to provide:

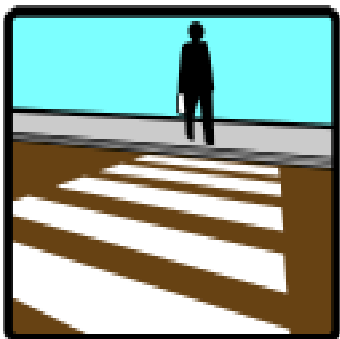
- separate footpaths or walkways;
- pedestrian barriers at building entrances and exits to prevent pedestrians walking in front of vehicles;
- traffic routes wide enough for safety where separation is not practicable;
- marked traffic routes, for example lines painted on the floor or ground;
- separate access ways for vehicles and pedestrians into buildings or enclosures; and
- vision panels in pedestrian doors entering vehicle areas.



Safe crossings

Workplaces where pedestrians have to cross vehicle routes should have:

- clearly visible ground markings and signs;
- clear pedestrian and vehicle visibility; and
- adequate lighting.



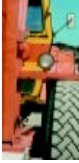
Safe parking

Onsite parking, if provided, should enable separation between work and private vehicles. Private vehicles should be parked away from busy work areas where practicable.

Walkways leading to and from parking areas should be safely surfaced, clearly marked, adequately lit, unobstructed, sign-posted and separated from vehicle routes.

Employees and customers who bring private vehicles to workplaces should be provided with - and required to comply with:

- specified safe routes;
- clear safety signs at parking areas;
- clear speed limit signs; and
- information and instruction on safe driving on workplace routes.





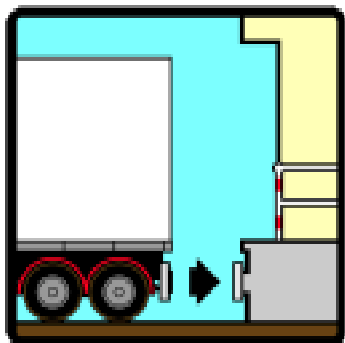
Safe loading bays

Loading bays should be situated in safe and suitable locations where vehicles can be manoeuvred easily, and near tarping areas.

Where practicable, they should be protected from adverse weather conditions, and should be subject to risk assessment and safe work procedures.

Raised loading platforms should be:

- provided with safe access, egress and safe bays for people working at ground level;
- clearly marked along the edges;
- if necessary, fitted with rails on the non-loading side, to reduce the risk of someone falling off the edge; and
- fitted with raised wheel stop edges to prevent vehicles such as forklifts and trolleys rolling over the edge.



Safe lighting

All routes, manoeuvring areas and yards should be:

- adequately lit, with particular attention to junctions, buildings, plant, walkways and vehicles routes; and
- designed to avoid extreme light variation. eg. drivers moving from bright sunlight into dull light or vice versa.

Where practicable, operators exposed to hazardous sun glare should be provided with suitable protection, eg. sun visors or screens.



Safe reversing

Reversing accidents are a major cause of workplace injury and damage to vehicles, equipment and premises.

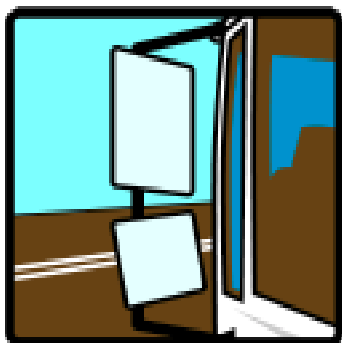
Most reversing accidents can be avoided by:

- removing the need for reversing, eg. with drive-through loading and unloading systems;
- minimising the need for reversing, eg. by reorganising loading and unloading procedures;
- providing clearly marked reversing areas visible to drivers and pedestrians;
- excluding non-essential personnel from the area;
- ensuring signallers wear high-visibility clothing and their signals can be clearly seen;
- using radios and other communication systems;
- ensuring drivers have another person to direct them if they cannot see clearly behind before reversing;
- ensuring visiting drivers are familiar with workplace routes and reversing areas;
- providing larger reversing areas;



- placing fixed mirrors at blind corners;
- fitting refractive lenses on rear windows to help drivers see “blind spots”;
- using flashing reversing lights on vehicles if workplace noise is too loud for reversing alarms to be heard.

To reduce risks when reversing, rear vision mirrors, fixed safety mirrors and windscreens should be kept clean and in good repair, and reversing alarms kept in working order, loud enough to be heard above other work noises.



Safe trailer practices

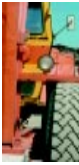
Injuries can occur when people at ground level assist in the hitching of trailers or trailed implements to semi-trailer cabs, tractors and other prime movers.

Safe procedures should ensure there is a clear form of communication between the operator and the hitcher.

To prevent parked prime movers and trailers rolling, they should be parked:

- on level ground, preferably in a designated parking area;
- with brake firmly applied and in gear; and
- if necessary with wheels chocked.

Any raised attachments - such as slashers or rotary hoes on tractors - should be lowered to the ground, and the engine stopped and starter key removed to prevent unauthorised use.





Safety laws

Western Australia's work safety and health laws cover all individuals at workplaces, and all workplace vehicles including mobile plant and equipment.

What does the Act say?

The *Occupational Safety and Health Act 1984* requires employers, as far as practicable, to provide and maintain a working environment in which employees are not exposed to hazards.

Employers' duties include:

- providing and maintaining safe workplaces, plant and systems of work;
- providing safety information, instruction, training and supervision;
- consulting and cooperating with safety and health representatives and employees; and
- where it is impracticable to eliminate hazards, providing protective clothing and equipment.

Employees are required to:

- take reasonable care of their own safety and health; and
- avoid adversely affecting the safety or health of others.

What do the Regulations say?

The *Occupational Safety and Health Regulations 1996* include a number of sections relevant to the movement of vehicles at workplaces.

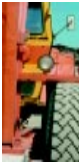
The first and most important of these is *Regulation 3.1* which requires employers, main contractors, self-employed persons and those in control of workplaces or access to workplaces to:

- identify each hazard to which a person at the workplace is likely to be exposed;
- assess the risk of injury or harm to a person resulting from each identified hazard; and
- consider the means by which risk may be reduced.

Regulation 3.6, 'Movement around workplaces', says employers, main contractors, self employed persons or those in control of workplaces must ensure workplaces are arranged so that:

- persons are able to move safely within the workplace; and
- passages for the purpose of enabling persons to move within the workplace are at all times kept free of obstructions.

Regulation 3.22 requires employers, main contractors and those in control of workplaces to ensure the movement and speed of vehicles and plant at the workplace are managed in a way that minimises the risk of injury to pedestrians and persons operating vehicles.



FURTHER INFORMATION

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