

# **TRAFFIC MANAGEMENT IN WORKPLACES**

*Draft*

**Code of Practice**

---

**TABLE OF CONTENTS**

**FOREWORD .....3**

**SCOPE AND APPLICATION.....3**

**1. INTRODUCTION .....5**

    1.1 Who has responsibility for managing traffic hazards?.....5

    1.2 What is involved in managing traffic hazards? .....5

**2. RISK MANAGEMENT .....7**

    2.1 Identifying traffic hazards .....7

    2.2 Assessing the risks .....8

    2.3 Controlling the risks .....9

    2.4 Reviewing control measures.....10

**3. TRAFFIC CONTROL MEASURES .....11**

    3.1 Pedestrian routes.....11

    3.2 Vehicle routes .....12

    3.3 Safe crossings .....12

    3.4 Safe parking.....12

    3.5 Safe loading and unloading .....12

    3.6 Safe reversing.....14

    3.7 Signs.....14

    3.8 Lighting .....15

    3.9 Forklifts and other powered mobile plant .....15

    3.10 Information, instruction, training and supervision .....17

    3.11 Traffic management plans .....17

    3.12 Specific requirements for construction work .....17

**APPENDIX A: TRAFFIC CONTROL CHECKLIST .....19**

## FOREWORD

---

This Code of Practice on traffic management in workplaces is an approved code of practice under section 274 of the *Work Health and Safety Act* (the WHS Act).

An approved code of practice is a practical guide to achieving the standards of health, safety and welfare required under the WHS Act and the Work Health and Safety Regulations (the WHS Regulations).

A code of practice applies to anyone who has a duty of care in the circumstances described in the code. In most cases, following an approved code of practice would achieve compliance with the health and safety duties in the WHS Act, in relation to the subject matter of the code. Like regulations, codes of practice deal with particular issues and do not cover all hazards or risks that may arise. The health and safety duties require duty holders to consider all risks associated with work, not only those for which regulations and codes of practice exist.

Codes of practice are admissible in court proceedings under the WHS Act and Regulations. Courts may regard a code of practice as evidence of what is known about a hazard, risk or control and may rely on the code in determining what is reasonably practicable in the circumstances to which the code relates.

Compliance with the WHS Act and Regulations may be achieved by following another method, such as a technical or an industry standard, if it provides an equivalent or higher standard of work health and safety than the code.

An inspector may refer to an approved code of practice when issuing an improvement or prohibition notice.

This Code of Practice has been developed by Safe Work Australia as a model code of practice under the Council of Australian Governments' *Inter-Governmental Agreement for Regulatory and Operational Reform in Occupational Health and Safety* for adoption by the Commonwealth, state and territory governments.

A draft of this Code of Practice was released for public consultation on 2 April 2012 and was endorsed by the Select Council on Workplace Relations on [to be completed].

## SCOPE AND APPLICATION

---

This Code provides practical guidance for persons conducting a business or undertaking on how to manage the risks associated with traffic within their workplace. It applies to all businesses or undertakings where there is a risk of injury due to the movement of people, vehicles and mobile plant in the workplace, such as shopping centres, warehouses, factories, construction sites, road and rail logistics depots, ports and container yards.

The guidance may also be useful for persons conducting a business or undertaking who design workplaces and mobile plant.

Persons conducting a business or undertaking who carry out construction or maintenance work on or adjacent to public roads should refer to their local road authority for the relevant traffic management requirements and guidelines.

### ***How to use this code of practice***

In providing guidance, the word 'should' is used in this Code to indicate a recommended course of action, while 'may' is used to indicate an optional course of action.

This Code also includes various references to provisions of the WHS Act and Regulations which set out the legal requirements. These references are not exhaustive. The words 'must', 'requires' or 'mandatory' indicate that a legal requirement exists and must be complied with.

DRAFT

## 1. INTRODUCTION

---

There is a risk of death and injury in workplaces where vehicles, mobile plant and pedestrians share the same work areas or traffic routes.

Traffic management involves the safe movement of vehicles (such as cars, trucks and buses), mobile powered plant (such as forklifts) and pedestrians within, through and around sites where work is carried out.

### 1.1 Who has responsibility for managing traffic hazards?

A **person conducting a business or undertaking** has the primary duty under the WHS Act to ensure, so far as is reasonably practicable, that workers and other persons at the workplace are not exposed to health and safety risks arising from the business or undertaking. This duty includes implementing measures to control the risks of persons being injured due to the movement of vehicles or plant at the workplace.

A person conducting a business or undertaking who has management or control of a workplace must ensure so far as is reasonably practicable, that the workplace, the means of entering and exiting the workplace and anything arising from the workplace is without health and safety risks to any person.

A **principal contractor** for a construction project (where the value of the construction work is \$250,000 or more) has duties that include managing health and safety risks associated with traffic in the vicinity of the workplace that may be affected by construction work carried out in connection with the construction project.

**Designers, manufacturers, suppliers and importers** of plant or structures must ensure, so far as is reasonably practicable, that the plant or structure is without risks to health and safety. This includes, for example designing workplaces so that vehicle and pedestrian routes are separated or designing mobile plant with optimum operator visibility, speed limiters and warning devices.

**Officers** such as company directors have a duty to exercise due diligence to ensure that the business or undertaking complies with the WHS Act and Regulations. This includes taking reasonable steps to ensure that the business or undertaking has and uses appropriate resources and processes to manage risks associated with traffic in the workplace.

**Workers**, including those who drive vehicles and operate mobile plant, must take reasonable care for their own health and safety and must not adversely affect the health and safety of other persons. Workers must also comply with any reasonable instruction and cooperate with any reasonable policy or procedure relating to health and safety at the workplace.

### 1.2 What is involved in managing traffic hazards?

Effectively controlling the risks associated with traffic hazards involves following a systematic process known as *risk management* consisting of the following steps set out in this Code:

- identify traffic hazards
  - if necessary, assess the risks
  - implement and maintain risk control measures, and
  - review the effectiveness of control measures.
-

Guidance on the general risk management process is available in the *Code of Practice: How to Manage Work Health and Safety Risks*.

### **Consulting workers**

Consultation involves sharing of information, giving workers a reasonable opportunity to express views and taking those views into account before making decisions on health and safety matters.

**S. 47:** The WHS Act requires that you consult, so far as is reasonably practicable, with workers who carry out work for you who are (or are likely to be) directly affected by a work health and safety matter.

**S. 48:** If the workers are represented by a health and safety representative, the consultation must involve that representative.

Consultation with workers and their health and safety representatives is required at each step of the risk management process.

You should also encourage your workers to report traffic hazards immediately so that risks can be managed before an injury occurs.

### **Consulting, co-operating and co-ordinating activities with other duty holders**

**S.46** The WHS Act requires that you consult, co-operate and co-ordinate activities with all other persons who have a work health or safety duty in relation to the same matter, so far as is reasonably practicable.

Sometimes you may have responsibility for health and safety together with other business operators who are involved in the same activities or who share the same workplace.

In these situations, you should communicate with each other to find out who is doing what and work together in a co-operative and co-ordinated way so all risks are eliminated or minimised as far as reasonably practicable.

For example, a transport company should consult with goods suppliers as well as with businesses having the goods delivered about how the risk of collision with workers and others at their workplaces will be controlled. This may involve finding out the safest way to access the site and scheduling appropriate times for loading and unloading.

Further guidance on consultation is available in the *Code of Practice: Work Health and Safety Consultation, Co-operation and Co-ordination*.

## **2. RISK MANAGEMENT**

---

Traffic management should commence with an identification of the hazards and an assessment of the risks so that effective control measures can be implemented.

Elements to take into account in traffic management include:

- pedestrian routes - ensure all pedestrian movements are provided for
- traffic demand - determine the capacity required to accommodate traffic demand. Also decide on the amount of space which must remain open, and where applicable, the times of day when traffic volumes are higher, for example when deliveries are made
- vehicle routes - select the appropriate means of routing traffic at the site, i.e. through, around or past the site or a combination of these and ensuring that all required traffic movements are provided for
- traffic control and the type of control required – for example using portable or permanent traffic signals or using trained persons to direct traffic
- requirements for special vehicles such as over-dimensional vehicles
- emergency services access
- parking requirements
- safe access to welfare facilities for visitors or customers
- the type of information, instruction, training and supervision required.

### **2.1 Identifying traffic hazards**

Traffic hazards occur at the workplace when there is an interaction or potential interaction between pedestrians and vehicles (including powered mobile plant).

Traffic hazards involving vehicles and mobile plant may occur during:

- vehicles or plant reversing and manoeuvring
- delivery and pick up from manufacturing process lines
- picking goods from pallet racking in warehouse operations
- arrivals or departures
- loading or unloading on and around vehicles
- hitching or unhitching of trailers
- mounting or dismounting from vehicles
- securing of loads
- maintenance work.

Traffic hazards involving pedestrians may occur due to:

- a lack of physical barriers to separate pedestrian walkways and pedestrian crossings
- blocked pedestrian routes – for example routes that are obstructed by parked vehicles or equipment can cause pedestrians to divert onto unsafe routes

- pedestrians and vehicles using the same route
- unsuitable and dangerous pedestrian routes – for example if routes are poorly maintained (cracked footpaths), have blind corners or inadequate lighting
- pedestrian routes that have poor drainage and are prone to flooding
- narrow roads where there is not enough room for pedestrians and vehicles
- drivers not being able to see pedestrians, for example when reversing
- poorly designed routes causing pedestrians to take short cuts
- locked emergency doors and gates preventing pedestrians escaping in the event of an emergency
- a lack of disabled access to and within a workplace – for example if a person in a wheelchair is required to use the same ramp used by forklifts
- drivers accessing truck/trailer trays during loading and unloading.

The following methods can help identify hazards associated with the movement of vehicles and pedestrians:

- obtain a floor plan or sketch a site layout
- examine the way forklifts, vehicles, delivery drivers and pedestrians move or need to move around, and work out the frequency of interaction
- identify the places where there is the potential for a collision to occur – look at floor surfaces, exits, driveways, overhead structures, doorways and housekeeping standards and evaluate the adequacy of any existing risk control measures
- look for blind spots caused by stationary equipment and vehicles, as well as other areas of poor visibility or low lighting levels
- ask your workers about any problems they have noticed
- talk to pedestrians and incoming drivers about any traffic management problems they encounter at your workplace
- review your incident and injury records (including 'near misses')
- review security and other footage to identify areas where pedestrians and vehicles interact at various times.

## **2.2 Assessing the risks**

A risk assessment involves considering what could happen if someone is exposed to a hazard and the likelihood of it happening. A risk assessment can help you determine:

- how severe a risk is
- whether existing control measures are effective
- what action you should take to control the risk
- how urgently the action needs to be taken.

A risk assessment is unnecessary if you already know the risk and how to control it effectively.

Pedestrian movement and vehicles reversing, loading and unloading are the activities most frequently linked with workplace vehicle incidents.

People who work with, or near, vehicles and mobile plant such as cars, vans, forklifts, trucks, semi-trailers, trailers, tractors and earthmoving equipment are most at risk.

People also at risk may include customers and visitors at workplaces.

Factors that should be considered when assessing the risks arising from traffic hazards include:

- the design and layout of work areas, including:
  - the physical environment, such as lighting levels and road surfaces
  - the number and movement of people at the workplace
  - traffic destination, flow, volume and priorities
  - the speed of traffic
  - adequate space for the minimum turning radius of vehicle types accessing the work areas
- the need for load shifting equipment and if the equipment is suitable for the task
- the time of day when traffic volumes are higher
- housekeeping for the work area (e.g. cleaning following spills)
- the effectiveness of any existing risk control measures – for example travel paths, physical separation, crossings or speed limits.

### 2.3 Controlling the risks

The methods for controlling risk is to rank them from the highest level of protection and reliability to the lowest. This ranking is known as the *hierarchy of risk control*.

You must always aim to eliminate a hazard, which is the most effective control. If this is not reasonably practicable, you should minimise the risk by working through the other alternatives in the hierarchy.

The hierarchy of control	Examples
Eliminate the hazard	Eliminate the interaction between vehicles and pedestrians. Eliminating hazards is often cheaper and easier to achieve when designing the layout of the workplace.
Substitute with something safer	Replace forklifts with more people-friendly load shifting equipment such as a walker stacker or an automated conveyor system.
Isolate the hazard from people	Physically separate vehicles and mobile plant from people by distance, using sturdy barricades or by isolating a delivery area from other pedestrian or work activities.
Use engineering controls	Install speed limiters to mobile plant.

Use administrative controls	Create 'no-go zones' that are clearly marked. Use signs and devices such as mirrors to alert drivers and pedestrians.
Use personal protective equipment	Provide high visibility or reflective clothing.

Administrative control measures and personal protective equipment do not control the hazard at the source. They rely on human behaviour and supervision and used on their own tend to be the least effective control measures to minimise risks.

## 2.4 Reviewing control measures

The controls that you put in place to protect the health and safety of people should be monitored and reviewed regularly to make sure they work as planned. Do not wait until something goes wrong.

You can use the same methods as in the initial hazard identification step to check controls. Consult your workers and their health and safety representatives and consider the following questions:

- Are the control measures working effectively in both their design and operation?
- Have the control measures introduced new problems?
- How effective is the risk management process? Are all traffic hazards being identified?
- Are traffic safety procedures being followed?
- Has instruction and training provided to workers been successful?
- Are the frequency and severity of health and safety incidents reducing over time?
- If new legislation or new information becomes available, does it indicate current controls may no longer be the most effective?

If problems are found, further decisions are needed regarding control measures.

A checklist to assist in reviewing control measures is at *Appendix A*.

### 3. TRAFFIC CONTROL MEASURES

---

The most important step in managing risks involves eliminating them so far as is reasonably practicable, or if that is not possible, minimising the risks so far as is reasonably practicable.

#### 3.1 Pedestrian routes

The safest way to protect pedestrians is to eliminate the hazard, which means removing the use of all vehicles and mobile plant in the workplace. Where this is not reasonably practicable the risks must be minimised. For example provide:

- separate traffic routes so that vehicles cannot physically enter pedestrian space
- pedestrian barriers at building entrances and exits to prevent pedestrians walking in front of vehicles
- traffic control barricades.

If this is not reasonably practicable consider:

- gates that are interlocked, chicaned or hinged so they open towards the pedestrian - these methods create a stop or pause in the pedestrian's movement before entering a traffic area to increase their awareness of any traffic movement
- railings or bollards to protect 'blind' or convex corners of buildings
- vision panels in pedestrian doors entering vehicle areas
- mirrors for both pedestrians and vehicle use
- pedestrian routes that represent paths people would naturally follow which will encourage pedestrians to stay on designated safe routes and avoid taking potentially hazardous shortcuts
- separate, clearly marked footpaths or walkways, for example using lines painted on the ground or different coloured surfacing (see Figure 1) along with sturdy or light weight barriers and signage.



**Figure 1:** Walkway marked with lines and bollards

### 3.2 Vehicle routes

Where possible, traffic routes should be separate for both vehicles and pedestrians at the workplace. Traffic routes should be:

- one-way if possible with adequate passing space around stationary vehicles
- wide enough for the largest vehicle using them including the load
- designed with separate entry and exit points for large vehicles
- surfaced with bitumen, concrete or other suitable material that is well drained
- clearly sign-posted to indicate restricted parking, visitor parking, headroom, speed limits, vehicle movement and other route hazards
- able to take into account routine activities such as meal breaks
- well maintained and free from obstructions, grease, slippery substances or surface damage and pot holes
- without excessive gradients – steep gradients that cannot be avoided should be clearly signposted. Forklift trucks and similar plant should operate on gradients only if they are designed to do so.

### 3.3 Safe crossings

If pedestrians have to cross vehicle routes at your workplace, you should consider:

- overhead walkways
- physical barriers with inward opening gates
- interlocked gates or gates with warning devices
- traffic light systems

These control measures should be supplemented with:

- clearly visible ground markings, lights and signs
- clear pedestrian and vehicle visibility.

### 3.4 Safe parking

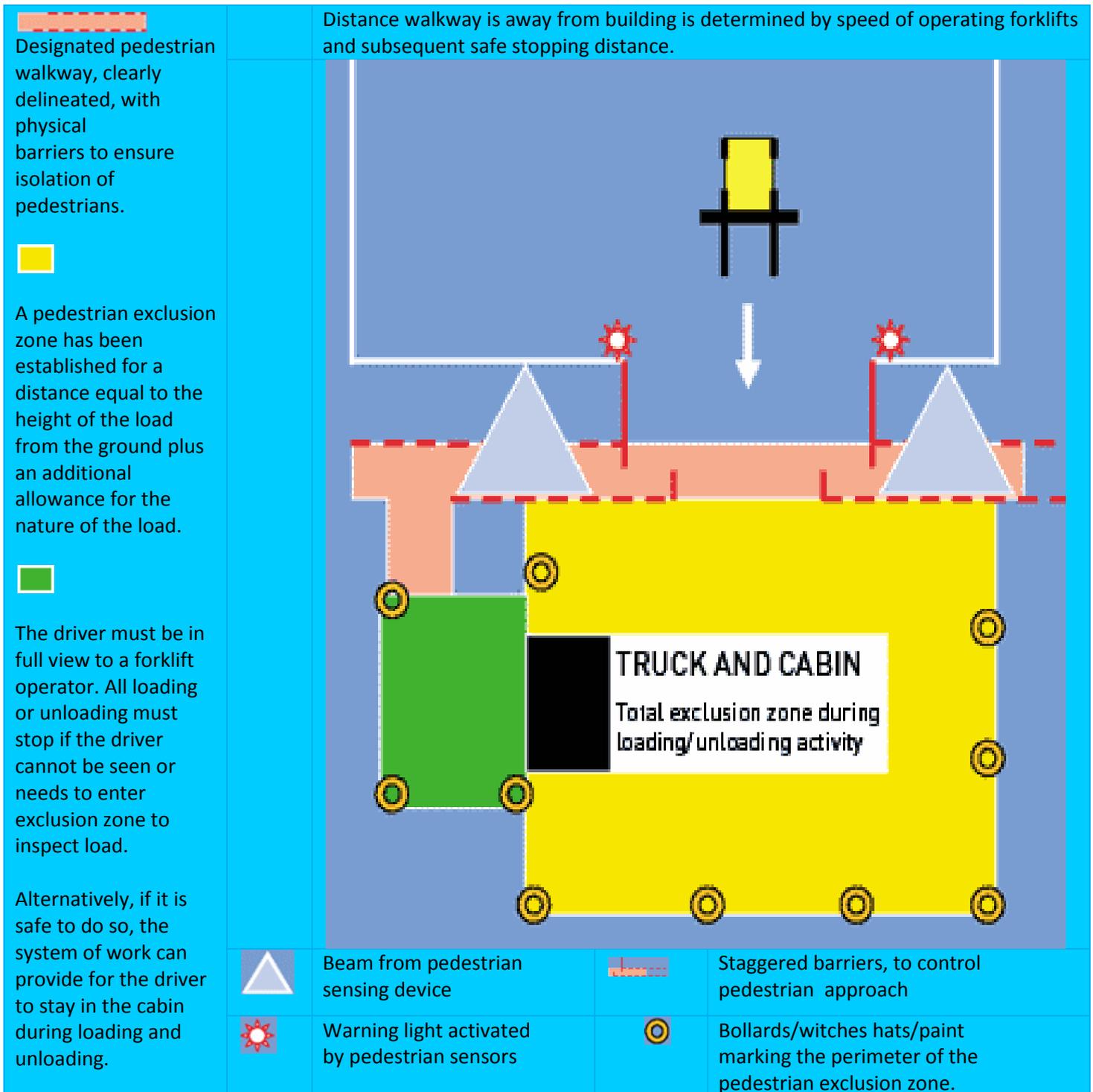
If onsite parking is provided, there should be separation between mobile plant and private vehicles. Private vehicles should only be parked in designated areas and away from busy work areas where practicable.

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

### 3.5 Safe loading and unloading

Loading bays should be situated in locations where vehicles can be manoeuvred easily and safely. They should be clearly sign-posted, protected from adverse weather conditions and be on level ground or platform.

Truck driver safety zones should be provided and clearly marked, and where necessary, protected by physical barriers (see Figure 2).



**Figure 2:** Example of traffic control for truck loading and unloading

### 3.6 Safe reversing

Where possible, the need for reversing should be eliminated, for example with drive-through loading and unloading systems or using multi directional mobile plant or rotating cabins.

Where this is not possible you should minimise the need for reversing, for example by reorganising loading and unloading procedures.

Examples of other control measures include:

- designing reversing areas large enough for the vehicles that will be using them
- fitting reversing sensors or reversing cameras including infrared systems for low light situations
- placing fixed mirrors at blind corners
- fitting refractive lenses on rear windows to help drivers see 'blind spots'
- using warning devices such as rotating lights and audible reversing alarms
- using radios and other communication systems
- providing designated and clearly marked reversing areas
- excluding non-essential personnel from the area
- ensuring drivers have another person to direct them before reversing if they cannot see clearly behind. The driver should maintain visual contact with the person signalling them and signallers should wear high-visibility clothing
- ensuring visiting drivers are familiar with workplace routes and reversing areas
- ensuring reversing sensors, reversing cameras, rear vision mirrors, fixed safety mirrors and windscreens are kept clean and in good working order.

### 3.7 Signs

Clear road markings and signage should be used to alert vehicle operators to:

- exclusion zones
- parking/no parking zones
- speed limits
- pedestrian crossings
- vehicle crossings
- blind corners
- steep gradients
- other known hazards.

Further information on signs is available in AS 1319: *Safety Signs for the Occupational Environment*.

### 3.8 Lighting

All routes, manoeuvring areas and yards should be:

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

### 3.9 Forklifts and other powered mobile plant

Persons with management or control of powered mobile plant must ensure that the risk of powered mobile plant colliding with pedestrians or other plant is controlled so far as is reasonably practicable. If there is a possibility of collision, the plant must have a warning device that will warn persons who may be at risk from the movement of the plant and measures must be taken to eliminate or minimise the risk.

Control measures to manage the risks where mobile plant is used include:

- using overhead walkways, high impact physical safety barriers or boom gates
- providing separate entries and exits for pedestrians and mobile plant
- staging areas to facilitate alternative load shifting equipment
- isolating pallet racking aisles
- scheduling work that prevents mobile plant and pedestrians being in the same area at the same time
- using speed-limiting devices and implementing speed limits
- using proximity devices that trigger signals, boom gates and warning signs
- using a combination of audio (alarms and horns) and visual (flashing lights) warning devices and ensuring these are working when the plant is operating
- creating 'no go' zones for pedestrians (e.g. forklift-only areas in loading bays)
- creating 'no go' zones for mobile plant (e.g. pedestrian-only areas around tearooms, amenities and entrances)
- removing blind corners and ensuring intersections are well lit
- locating signs to give advance warning to pedestrians and operators and indicate who must give way – implement and enforce procedures that cover when and how pedestrians and mobile plant must give way to each other
- implementing systems of work that prevent forward carrying of loads if they prevent clear vision
- minimising the number of moving plant working at one time - where multiple items of mobile plant are being operated around the workplace, a competent person should direct the plant:
  - when operating in close proximity to each other
  - when reversing
  - where persons are on the ground

- providing high-visibility or reflective clothing for workers and plant operators and high-visibility markings for mobile plant, in addition to other measures.

### **Speed and stopping distances**

The risk management process should determine the speed limits appropriate for the workplace. Reducing speed is particularly important where administrative controls are the only reasonably practicable control measure.

Many forklifts do not have speed gauges therefore you should consider buying or hiring forklifts with speed limiting devices or where this is not possible retro-fit them to existing forklifts.

Once speed limits are determined, signs should be located so that operators can easily see them and systems should be implemented to ensure speed limits are complied with.

Table 1 shows the typical distance it takes for a 2.5 tonne forklift to stop once the worker has applied the brakes. This is in optimal conditions: travelling on a dry, even surface with good traction, driven by an alert worker who is not distracted by other activities or fatigued.

A fully laden forklift cannot use its maximum braking capacity because the load will slide or fall from the tines or the forklift will tip forwards. Stopping distances are often significantly under-estimated.

Note that the distance at which a forklift can stop is affected by:

- the speed at which it is travelling
- the weight of its load
- its mechanical and tyre condition
- the road surface
- the size of the forklift and how it affects visibility.

**TABLE 1: Reaction distance and approximate total stopping distance for a 2.5 tonne forklift**

Reaction distance and approximate total stopping distance (typical reaction time: 1.5 seconds)							
<b>Speed (Kilometres/hour)</b>	6	12	14	16	18	20	22
<b>Speed (metres/seconds)</b>	1.7	3.3	3.9	4.4	5	5.6	6.1
<b>Distance travelled while driver reacts and begins to apply the brakes in an emergency (metres)</b>	2.5	5	5.8	6.7	7.5	8.3	9.2
<b>Total emergency stopping distance (metres)</b>	2.9-3.2	7-8	8-10	9.5-12	11.14	13-16.5	14.5-19

### 3.10 Information, instruction, training and supervision

A person conducting a business or undertaking must ensure, so far as is reasonably practicable, the provision of any information, training, instruction or supervision that is necessary to protect all persons from risks to their health and safety arising from work carried out as part of the conduct of the business or undertaking.

You should ensure that everyone who has access to your workplace including workers, customers and visitors, are aware of your traffic management procedures and have information and instructions on designated safe routes, parking areas, no-go zones and speed limits. This could be addressed through an induction process at your workplace.

Visitors should report to the reception or site office, if appropriate, and be given information on your safety procedures before they are allowed into areas where mobile plant or vehicles are used. You should provide appropriate supervision to ensure that safety procedures are being followed, particularly if you are relying on administrative control measures to minimise the risk of injury.

#### **High risk work licences**

Certain types of plant, such as forklift trucks and some types of cranes require the operator to have a high risk work licence before they can operate the plant. Schedule 3 of the WHS Regulations sets out the classes of high risk work licences and the types of plant involved. If a worker is undertaking training for the high risk work licence, they must be directly supervised by a licenced operator.

### 3.11 Traffic management plans

A traffic management plan may be developed to assist in managing risks and communicating information regarding control measures. It may include details of:

- the desired flow of pedestrian and vehicle movements
- the expected frequency of interaction of mobile plant, vehicles and pedestrians
- traffic controls for each expected interaction, including illustrations of the layout of barriers, walkways, signs and general arrangements to warn and guide traffic around, past, or through a work site or temporary hazard
- roles and responsibilities of persons in the workplace for traffic management
- instructions or procedures associated with the control of traffic, including in an emergency.

### 3.12 Specific requirements for construction work

Where high risk construction work is carried out a safe work method statement (SWMS) must be prepared before work commences. High risk construction work includes construction work that is carried out:

- in an area of a workplace in which there is any movement of powered mobile plant
- on, in or adjacent to a road, railway, shipping lane or other traffic corridor that is in use by traffic other than pedestrians.

The SWMS must identify the high risk construction work, specify associated hazards, describe measures to control risks and how these will be implemented.

Information and instruction for workers involved in construction work must include the contents of SWMS and workers must have easy access to the relevant SWMS at the workplace.

If the work undertaken is classified as a construction project under the WHS Regulations, the principal contractor must prepare a WHS management plan. The WHS management plan sets out the arrangements to manage the risks associated with more complex construction projects, and in particular this relates to the interaction and co-ordination of a number of contractors and subcontractors.

Traffic management planning and SWMS should be incorporated in the WHS management plan. Further information on the preparation of SWMS and WHS management plans is available in the *Code of Practice: Construction Work*.

DRAFT

**APPENDIX A: TRAFFIC CONTROL CHECKLIST**

Have the following been considered?	Yes	No	Comments/Action
<b>Separation</b>			
Are separate entries and exits provided for vehicles and pedestrians (including visitors)?			
Do the entries and exits protect pedestrians from being struck by vehicles?			
Does the layout of the workplace effectively separate pedestrians, vehicle and mobile plant?			
Are systems in place to keep pedestrians and moving vehicles or plant apart, e.g. physical barriers, no-go zones?			
<b>Vehicle routes</b>			
Are the roads and pathways within the workplace suitable for the types of volumes of vehicular traffic?			
Are loading zones clearly marked?			
Are there adequate numbers of suitable parking places for all vehicles and are they used?			
Are traffic directions clearly marked and visible?			
Is there a properly designed and signed one-way system used on vehicle routes within the workplace?			
Are vehicle routes wide enough?			
Do vehicle routes have firm and even surfaces?			
Are vehicle routes kept clear from obstructions and other hazards?			
Are vehicle routes well maintained?			
Do vehicle routes avoid sharp or blind corners?			
<b>Pedestrian routes</b>			
Are pedestrian walkways separated from vehicles?			
Where necessary, are there safe pedestrian crossings on vehicle routes?			
Is there a safe pedestrian route that allows visitors to access the site office and facilities?			
Are pedestrian walkways well maintained?			
<b>Vehicle movement</b>			
Have drive-through, one-way systems been used wherever possible to reduce the need for reversing?			
Are non-essential personnel excluded from areas where reversing occurs?			
Are vehicles slowed to safe speeds, for example speed limiters on mobile plant or chicanes on traffic routes?			

Have the following been considered?	Yes	No	Comments/Action
Do drivers use the correct routes, drive within the speed limit and follow site rules?			
<b>Signs</b>			
Are there appropriate speed limit signs?			
Are there clear warnings of mobile plant hazards?			
Is there clear signage of pedestrian and mobile plant exclusion zones?			
Is lighting adequate to ensure that signs are visible, particularly at night?			
<b>Warning devices</b>			
Are flashing lights, sensors and reversing alarms installed on mobile plant?			
<b>Information, training and supervision</b>			
Do mobile plant operators have relevant high risk work licences and are trained in operating the particular model of plant being used?			
Have workers received site specific training and information on particular hazards, speed limits, appropriate parking and loading areas?			
Is information and instruction about safe movement around the workplace provided to visitors and external delivery drivers?			
Is the level of supervision sufficient to check traffic movement and ensure safety of pedestrians and drivers?			
<b>Personal Protective Equipment</b>			
Is PPE such as high visibility clothing provided and used where necessary?			
<b>Vehicle safety</b>			
Have suitable vehicles and mobile plant been selected for the tasks to be undertaken?			
Do vehicles have good direct visibility or devices for improving vision e.g. external and side mirrors, sensing devices?			
Are vehicles fitted with effective service and parking brakes?			
Do vehicles and mobile plant have seatbelts where necessary?			
Are there guards to prevent access to dangerous parts of the vehicles, e.g. power take-offs, chain drives, exposed exhaust pipes?			
Is there a regular maintenance program for vehicles and mobile plant?			
Is there a system for reporting faults on vehicles and mobile plant?			
Do drivers carry out basic safety checks before using vehicles?			