

LPA Guidelines

Safety Guidelines for the Live Entertainment and Events Industries

Traffic and Vehicle Access Hazard Guide

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Traffic and Vehicle Access Hazard Guide

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Disclaimer

In legislative terms, the requirements of the *Work Health and Safety Act 2011* (the WHS Act) and Work Health and Safety Regulations (the WHS Regulations) are mandatory. In contrast, a guide is designed to assist obligation holders to comply with the requirements of an act or regulation. The information contained in the LPA guides is not mandatory, has no legal status and may not apply in all work situations.

Obligation holders still have a duty to assess the risks in each work situation and take all reasonable steps to eliminate or minimise the risks that are specific to each work activity.

Traffic and Vehicle Access Hazard Guide

1. Overview

This guide provides information to assist in managing risks associated with **Traffic and Vehicle Access Hazards** in live entertainment and events. Information in this guide is based on the Work Health and Safety Act 2011 (WHS Act) and Work Health and Safety Regulations 2011 (WHS Regulations), which are operational in all states except Victoria and WA, where adoption of the legislation is not yet enacted (as at Jan 2018).

It is recommended that this information is referenced during the planning and delivery of events to assist in identifying hazards, assessing risks and determining appropriate control measures to eliminate and or minimise these risks, so far as reasonably practicable.

This guide does not replace the need to implement risk management strategies, undertake research or seek specialist advice.

Each worker and person conducting a business or undertaking (PCBU) has a responsibility to understand their obligations under WHS legislation. Codes of practice and Australian and international standards provide approved guidance on how to meet work health and safety obligations.

Traffic and Vehicle Access Hazards refers to any work where a person could come in contact with vehicles, whether on public roads or from vehicles accessing a venue or event on site or where people are exposed to hazards where the event traffic is requiring access to areas where members of the public are present. There are two main risks associated specifically with Traffic and Vehicle Access Hazards:

- Injuries or death due to persons who come in contact with vehicles/motorised devices
- Injuries or death due to persons being struck by an object being moved, either onsite or while travelling from or to a venue or event site.

The most effective way to protect pedestrians is to eliminate traffic hazards. This could be achieved by designing the event layout to eliminate interactions between pedestrians and vehicles. Examples could include not allowing vehicles in pedestrian spaces or providing separate traffic routes. Where this is not reasonably practicable, the risks must be minimised, so far as is reasonably practicable. This can be done by careful planning and control of vehicle operations and pedestrian movements at the event.

The risk of serious injury or death increases significantly when contact is made with vehicles or objects that are heavy or travelling at speed.

This Traffic and Vehicle Access Hazard Guide provides practical information and suggested control measures for:

- Licences
- Forklifts
- Elevated work platforms
- Vehicle events
- Personal protective equipment
- Fatigue management

Traffic management needs to be addressed for all three phases of event delivery:

- Event preparation/bump-in
- Event staging – the production
- Event dismantling/bump-out

The risks and control measures for each of these three stages should be actively considered and documented in a traffic management plan. (See 2.3 below)

The preparation and dismantling phases may involve significant construction activities. The traffic management risks relating to these activities should be managed and more information on traffic management is provided in the Code of Practice: Construction Work, and the Traffic Management Guide: Construction Work – available from Safe Work Australia.

Issues to consider at each event phase include:

Loading and unloading equipment and goods at permanent and temporary venues e.g. amusement devices, building and catering supplies, scenery, lighting and sound equipment, performers, transporting staff to different locations.

Where possible, restricting public access to the area during bump-in and bump-out

The type of vehicles and traffic routes and how these may differ during each event phase Staff training and experience with the different types of vehicles being used

- Public transport, vehicle types and peak periods
- Walkways and crossings
- Parking and parking control
- Crowd control pedestrian movement and crowd safety
- Emergency service access
- Effective monitoring of and response to traffic management throughout the event

Part 1 Safety Guidelines for Live Entertainment and Events provides general information on duties, obligations and risk management.

2. Key Considerations – Traffic and Vehicle Access Hazards

Traffic control can be broken down into two main areas:

- a Identifying the hazards (as per all risk assessment processes)
- b Implementation of the control measures – traffic management plan – deemed necessary to eliminate or reduce/minimise the risks

2.1 Traffic management hazards

This checklist can help you identify potential traffic hazards at your workplace.

This checklist is not a standalone document—you can/should use whatever means are most useful and practical to identify traffic hazards specific to your workplace.

Consider the following:	Yes	No	Comments / Action
Have you checked the floor plan of your workplace? Sketching the layout of the workplace can also help.	<input type="checkbox"/>	<input type="checkbox"/>	
Have you asked your workers, pedestrians and visiting drivers about traffic management problems they encounter at your workplace? Consultation records are required.	<input type="checkbox"/>	<input type="checkbox"/>	
Have you reviewed your incident and injury records including near-misses?	<input type="checkbox"/>	<input type="checkbox"/>	
Is there security footage that can be reviewed to identify areas where pedestrians and vehicles interact?	<input type="checkbox"/>	<input type="checkbox"/>	
Which vehicle types including powered mobile plant use the same area as pedestrians?	<input type="checkbox"/>	<input type="checkbox"/>	
How do vehicles, delivery drivers and pedestrians move around the area? <ul style="list-style-type: none"> • Are they separated? • Are there physical barriers to stop them interacting? <i>Note: It can be difficult to see pedestrians when plant is reversing, moving at speed or has a load.</i>	<input type="checkbox"/>	<input type="checkbox"/>	
Do vehicles queue in a way that could create risks to pedestrians, for example crossing walkways or obstructing people’s view of vehicles?	<input type="checkbox"/>	<input type="checkbox"/>	
Are routes wide enough to separate vehicles and pedestrians?	<input type="checkbox"/>	<input type="checkbox"/>	
How often and where do vehicles and pedestrians interact? <ul style="list-style-type: none"> • Can work be scheduled to minimise interaction e.g. 	<input type="checkbox"/>	<input type="checkbox"/>	

loading and unloading at night, before businesses open or when people leave the work area e.g. during meal breaks for manufacturing process lines?			
Are activities done close to public areas, for example schools during peak traffic periods?	<input type="checkbox"/>	<input type="checkbox"/>	
When are traffic volumes higher e.g. pick-up and delivery times and vehicles arriving and leaving? <ul style="list-style-type: none"> Are there certain times when there are more people moving around the workplace e.g. break times and the ends of shifts? 	<input type="checkbox"/>	<input type="checkbox"/>	
Where are potential collision locations? For example: <ul style="list-style-type: none"> intersections and bottleneck areas around driveways and entrances 'blind' or convex corners where vehicles work close to other vehicles or pedestrians lack of disabled access to and within a workplace e.g. where a person in a wheelchair shares a ramp used by forklifts. 	<input type="checkbox"/>	<input type="checkbox"/>	
Are workers and visitors safe from vehicles when hitching and unhitching trailers, carrying out maintenance, getting on and off vehicles and securing loads?	<input type="checkbox"/>	<input type="checkbox"/>	
Is contact with stationary objects possible? For example, overhead structures, stationary plant or stored or discarded items.	<input type="checkbox"/>	<input type="checkbox"/>	
Are there blind spots at the workplace caused by stationary equipment and vehicles and other areas of poor visibility or low lighting levels? Consider how well the driver can see when their vehicle is moving.	<input type="checkbox"/>	<input type="checkbox"/>	
What other hazards could arise when routing pedestrians, for example noise, emissions or falling objects?	<input type="checkbox"/>	<input type="checkbox"/>	
What impact does the physical environment have on health and safety e.g.: <ul style="list-style-type: none"> road surfaces poor drainage and flooding lighting levels and visibility, and shade and light glare at different times of day? 	<input type="checkbox"/>	<input type="checkbox"/>	
Are pedestrian routes designed so pedestrians will not take short cuts?	<input type="checkbox"/>	<input type="checkbox"/>	
Are workers and visitors aware of the hazards and what procedures are in place to manage risks e.g. site induction training?	<input type="checkbox"/>	<input type="checkbox"/>	

Are contractors and new people to the site supervised?	<input type="checkbox"/>	<input type="checkbox"/>	
Are there any other hazards specific to your workplace that need to be controlled?	<input type="checkbox"/>	<input type="checkbox"/>	

Courtesy of Safework Australia

2.2 Traffic Control Measures

This checklist can help you implement effective control measures in your workplace.

This checklist is not a standalone document—you can/should use whatever means are most useful and practical to identify traffic hazards specific to your workplace.

CONSIDER THE FOLLOWING	Yes	No	Comments / Action
Separation			
Are separate entries and exits provided for vehicles and pedestrians?	<input type="checkbox"/>	<input type="checkbox"/>	
Do the entries and exits protect pedestrians from being struck by vehicles?	<input type="checkbox"/>	<input type="checkbox"/>	
Does the layout of the workplace effectively separate pedestrians, vehicles and powered mobile plant?	<input type="checkbox"/>	<input type="checkbox"/>	
Are systems in place to keep pedestrians and moving vehicles or plant apart like physical barriers, exclusion zones and safety zones?	<input type="checkbox"/>	<input type="checkbox"/>	
Vehicle routes			
Are the roads and pathways within the workplace suitable for the types and volumes of traffic?	<input type="checkbox"/>	<input type="checkbox"/>	
Are loading zones clearly marked?	<input type="checkbox"/>	<input type="checkbox"/>	
Do vehicle route designs take into account vehicle characteristics under all conditions, for example emergency braking, running out of fuel or adverse weather?	<input type="checkbox"/>	<input type="checkbox"/>	
Are there enough parking places for vehicles and are they used?	<input type="checkbox"/>	<input type="checkbox"/>	
Are traffic directions clearly marked and visible?	<input type="checkbox"/>	<input type="checkbox"/>	
If a one way system is provided for vehicle routes within the workplace is it properly designed, signposted and used?	<input type="checkbox"/>	<input type="checkbox"/>	
Are vehicle routes wide enough to separate vehicles and pedestrians and for the largest vehicle using them?	<input type="checkbox"/>	<input type="checkbox"/>	7

Do vehicle routes have firm and even surfaces?	<input type="checkbox"/>	<input type="checkbox"/>	
Are vehicle routes kept clear from obstructions and other hazards?	<input type="checkbox"/>	<input type="checkbox"/>	
Are vehicle routes well maintained?	<input type="checkbox"/>	<input type="checkbox"/>	
Do vehicle routes avoid sharp or blind corners?	<input type="checkbox"/>	<input type="checkbox"/>	
Pedestrian routes			
Are pedestrian walkways separated from vehicles?	<input type="checkbox"/>	<input type="checkbox"/>	
Where necessary are there safe pedestrian crossings on vehicle routes?	<input type="checkbox"/>	<input type="checkbox"/>	
Is there a safe pedestrian route which allows visitors to access the site office and facilities?	<input type="checkbox"/>	<input type="checkbox"/>	
Are pedestrian walkways clearly marked?	<input type="checkbox"/>	<input type="checkbox"/>	
Are pedestrian walkways well maintained?	<input type="checkbox"/>	<input type="checkbox"/>	
Vehicle movement			
Have drive-through, one-way systems been used to reduce the need for reversing?	<input type="checkbox"/>	<input type="checkbox"/>	
Are non-essential workers excluded from areas where reversing occurs?	<input type="checkbox"/>	<input type="checkbox"/>	
Are vehicles slowed to safe speeds, for example speed limiters on mobile plant or chicanes on vehicle routes?	<input type="checkbox"/>	<input type="checkbox"/>	
Do drivers use the correct routes, drive within the speed limit and follow site rules?	<input type="checkbox"/>	<input type="checkbox"/>	
Signs			
Are there speed limit signs?	<input type="checkbox"/>	<input type="checkbox"/>	
Are there clear warnings of powered mobile plant hazards?	<input type="checkbox"/>	<input type="checkbox"/>	
Is there clear signage of pedestrian and powered mobile plant exclusion zones?	<input type="checkbox"/>	<input type="checkbox"/>	
Is there enough lighting to ensure signs are visible, particularly at night?	<input type="checkbox"/>	<input type="checkbox"/>	
Warning devices			
Are flashing lights, sensors and reversing alarms installed on powered mobile plant?	<input type="checkbox"/>	<input type="checkbox"/>	
Information, training and supervision			8

Do powered mobile plant operators have relevant high risk work licences? Are they trained in operating the particular model of plant being used?	<input type="checkbox"/>	<input type="checkbox"/>	
Have workers received site specific training and information on traffic hazards, speed limits, parking and loading areas?	<input type="checkbox"/>	<input type="checkbox"/>	
Is information and instruction about safe movement around the workplace provided to visitors and external delivery drivers?	<input type="checkbox"/>	<input type="checkbox"/>	
Is the level of supervision sufficient to check traffic movement and ensure safety of pedestrians and drivers?	<input type="checkbox"/>	<input type="checkbox"/>	
Personal protective equipment			
Is PPE like high visibility clothing provided and used where necessary?	<input type="checkbox"/>	<input type="checkbox"/>	
Vehicle safety			
Have vehicles and powered mobile plant been selected which are suitable for the tasks to be done?	<input type="checkbox"/>	<input type="checkbox"/>	
Do vehicles have direct visibility or devices for improving vision like external and side mirrors and reversing sensors?	<input type="checkbox"/>	<input type="checkbox"/>	
Are vehicles fitted with effective service and parking brakes?	<input type="checkbox"/>	<input type="checkbox"/>	
Do vehicles and powered mobile plant have seatbelts where necessary?	<input type="checkbox"/>	<input type="checkbox"/>	
Is there a regular maintenance program for all vehicles and powered mobile plant?	<input type="checkbox"/>	<input type="checkbox"/>	
Is there a system for reporting faults on all vehicles and powered mobile plant?	<input type="checkbox"/>	<input type="checkbox"/>	
Do drivers carry out basic safety checks before using vehicles?	<input type="checkbox"/>	<input type="checkbox"/>	
Are there any other control measures that should be implemented to manage risks at your workplace?	<input type="checkbox"/>	<input type="checkbox"/>	

Courtesy of Safework Australia

2.3 Traffic management plan

A traffic management plan documents and helps explain how risks will be managed at an event.

This may include:

- The event summary
- Contact details of key personnel
- Approvals for the event and road closures from police and road authorities
- A traffic control plan describing how to control the movement of traffic affected by the event activity
- Traffic control measures including drawings of the layout of barriers, walkways, signs and the general arrangements to warn and guide traffic around, past or within an event site
- Specific SWMS for the tasks being undertaken
- Lighting along all pedestrian and vehicle routes and operational areas
- Travel paths for vehicles including entries and exits, routes for special or heavy vehicles, details of where traffic streams cross
- Special event clearways
- Weights of loads, forklift and heavy goods tug capability requirements
- Cable management in relation to both vehicle and pedestrian access to the site
- Identified and well-marked pedestrian routes
- The number of entries and exits and how they will be managed
- Monitoring and controlling site access provided to delivery vehicles
- Parking arrangements including over-flow parking
- Provisions for people with disabilities e.g. ramps at entries and exits
- The responsibilities of traffic controllers in the workplace
- The responsibilities of people expected to interact with traffic in the workplace
- Communication between the traffic monitors and event management in case of an emergency
- Measures to monitor the effectiveness of the traffic management plan

If the event has been classified as construction work, specific additional requirements will need to be implemented from the various construction codes of practice.

For bulk transfer of raw materials, product or livestock onto or off an event site, freight vehicle movements including trains and trucks should be coordinated with the relevant transport company and local authorities.

The traffic management plan should be monitored and reviewed regularly including after an incident to ensure it is effective and takes into account changes at the workplace. Workers should be aware of and understand the traffic management plan and receive information, instruction, training and supervision. Site induction should include the traffic management plan.

Courtesy of Safework Australia

3. General Guide – Traffic and Vehicle Access Hazards

3.1 Responsibilities

PCBUs have specific obligations under WHS regulations to manage the risk of injury in the workplace. The WHS regulation specifically mentions traffic in relation to construction work and this must be addressed especially where large events will be considered as construction sites.

Designers in particular have an important role in eliminating or minimising the risk of a vehicular incident in the design of sets and structures, access points to the performance area and in large events, the design of the public areas where temporary structures are required as part of the event. This includes lighting and sound designers especially where lighting and sound can be a distraction to both pedestrians and drivers. PCBUs must ask designers for the risk assessment on the design and designers are required to supply one. Workers must also take reasonable care of their own safety and the safety of others.

3.2 Training and competence

All persons undertaking work with vehicles must be trained and competent in the specific activity and apart from the specific driving/operating licences required for the specific plant being used, it is a requirement that traffic controllers (operators of a traffic stop/slow bat) have a Traffic Controller Licence and that managers or staff designing traffic management plans undertake training in 'Implement Traffic Control Plans'. Additional training and induction to site-specific and job-specific safe work methods may be required.

Licences are required for activities deemed as high risk work. See relevant WHS legislation for details.

3.3 Consultation, cooperation and coordination

The WHS Act makes consultation with workers a legal requirement. Consultation, cooperation and coordination between PCBUs is a requirement where they share a duty for the safety of a worker or for work to be done.

PCBUs should use the information in this guide to consult with workers including event staff to determine the Traffic and Vehicle Access Hazards and risks associated with an event and how to best eliminate or minimise these risks using the hierarchy of controls.

Consultation should start as early as possible, before decisions are made, and continue through the duration of the event.

Consider the other parties who will need to be involved in the consultation process when planning the event and determine what information needs to be shared and discussed. During an event, PCBUs are required to consult, cooperate and coordinate with other PCBUs such as the venue or site management, unions, production companies, designers, event organisers or promoters, catering providers, security, subject matter experts such as structural engineers or safety officers, local authorities or governments, emergency services, rigging companies, performers, suppliers of plant or equipment etc.

If employees are represented by health and safety representatives, the consultation must involve those representatives.

Areas to address during consultation may include induction, schedules, floor plans, set, lighting and sound designs, site specific requirements, risk assessments, SWMS, hazards and control measures, legislative requirements, licences, plant movement, traffic management, exclusion zones, key contacts, emergency procedures, permits to work etc.

Opportunities for consultation include toolbox talks, event briefings, site inspections, and stakeholder meetings, post event reviews, working groups or forums.

3.4 Design and planning

In the early stages of design and planning for an event, the following criteria should be addressed when planning traffic access to the event:

- Legislative requirements
- An appropriate and viable emergency access plan
- Consultation with relevant PCBUs and workers
- Selection of the means assessing traffic and vehicle access hazards
- Selection of the plant and equipment required to complete the task
- Appropriate scheduling and allocation of resources to minimise impact on others
- Development of risk assessments and SWMS including controls agreed to during consultation
- Access to site and logistics
- Maintenance programs for all plant being used
- Emergency procedures
- Communication methods

3.5 Event delivery

In the delivery stages of an event (bump-in, rehearsal, show, bump-out etc.) the following criteria should be addressed to minimise the risks of traffic and vehicle incidents:

- Consultation with relevant PCBUs and workers
- Site-specific inductions including the traffic management plan
- Equipment inspections and/or maintenance
- Work permits or engineering certificate requirements
- Implementation and monitoring controls identified in risk assessments or SWMS
- Compliance to legislative requirements
- Review, consult and adjust control measures as required on site
- Incident reporting and management
- Sign-off and handover procedures

3.6 Review

After an event, the following criteria should be reviewed in consultation with relevant parties:

- Incident reports and outcomes including near-misses
- Effectiveness of the risk control measures
- Scheduling
- Areas for improvement

- Incidents of non-compliance
- Any new hazards or risks identified

3.7 Documentation and records

The following documents and records should be created, maintained and kept on site when undertaking traffic control or management during an event:

- Risk assessments and SWMS
- Training records, certificates of competency and licences
- Induction records
- Toolbox talk topics and attendance
- Evidence of consultation
- Incident reports, including near-misses
- Plant design specifications and maintenance records
- Engineering certification, work permits and sign-off records

Any of the above documents could be requested to be sighted by other PCBUs for verification or clarification and should be available at all times.

Various WHS documents and records need to be retained for differing periods of time – see relevant WHS legislation for details.

4. Suggested Control Measures

4.1 General traffic and vehicle access hazards

4.1.1 Managing the risks – traffic

All locations and tasks that could lead to injury due to collision with traffic or the loads being carried must be identified.

Specific control measures to eliminate the risks of collisions must be implemented, where it is reasonably practicable to do so and minimised where elimination is not practicable.

1. Eliminate the risk of collision by excluding pedestrians from the traffic corridors
2. Minimise the risk of collision by policing the traffic flow of both pedestrians and vehicles
3. Minimise the risk of collision by providing a safe system of work

The most effective control measure must be selected first unless it is not practicable to do so. It may be necessary to use a combination of controls. In order of effectiveness, they can include:

- Exclude pedestrians and/or multiple vehicles from the area
- Introduce a policed stop go system for pedestrians and vehicles
- Manually move the equipment using non-motorised/mechanical aids if the risk assessment will allow this

Administrative control measures may also be used to support physical level controls. These include Safe Work Method Statements (SWMS), work permits, isolating 'no go' areas, and planning work so that people are not required to work in the same areas as vehicles and other motorised devices.

If in any doubt consult a traffic management professional. Do not attempt to control traffic and vehicle access by ad-hoc methods – plan all movements.

It is important to ensure suitably trained and competent personnel are available to implement and monitor risk control measures when managing traffic and vehicle access hazards.

4.1.2 Vehicle events

During car and motor cycle events engineering control measures should be used to separate vehicles from workers and pedestrians. Seek advice from suitably qualified and experienced people if this skill and training is not available in your immediate team.

Control measures should be appropriate for the vehicle type, speed and environmental conditions and may include physically altering the road layout or appearance to actively or passively slow traffic down using bollards, speed humps and chicanes.

Using traffic controllers, marshals, parking attendants and spotters during peak periods who are competent to carry out this work, should be considered.

Control measures should be considered including the use of exclusion zones, PPE, alarm/warning systems, regular site inspections, safety staff and professional traffic management controllers.

4.2 Forklifts

Forklifts are an essential device for the movement of scenery and site materials within the entertainment industry. However, forklifts are a dangerous tool accounting for an average of more than 5 deaths per year between 2003 and 2015. (Safe Work report 2015) The main reasons why people are killed or seriously injured by a forklift include:

- Hit by a forklift because of driver error, working too close to the forklift or inadequate traffic management
- Hit by a load a forklift was moving because the driver did not use the required attachment, or when assisting to adjust or steady the load
- Not wearing a seat belt in a tip-over, the forklifts mostly tipped because operators were turning on uneven or sloping ground.

Forklift incidents can be prevented, especially when workers and PCBUs work together to improve health and safety at work.

Forklift operators need to be licensed and experience counts when managing the risks of forklift operation. It is possible for a member of staff to have the appropriate licence but not be competent on the use of the machinery due to lack of experience. It's always recommended that a PCBU runs a practical test on the competency of any staff member with a license.

4.3 Elevated work platforms (EWP)

The motorised action of EWPs (boom lifts, scissor lifts, vertical lifts) means they are classed as traffic. There are two aspects of the use that concern PCBUs – the vertical movement and the horizontal movement.

The vertical movement and associated risks has been addressed in the 'Working at Height – Hazard Guide'

In general the PCBU will provide a working platform that must be appropriate for the task. They will ensure the surface on which the EWP is being used is structurally capable of supporting the load of the EWP. Consult the venue operator or a structural engineer if in doubt.

Workers must be trained and deemed competent to operate the particular brand and type of equipment and in both fall arrest and emergency rescue procedures.

Workers require a High Risk Work Licence when operating EWPs able to reach a height of >11m or with a boom length of 11 metres or more.

All workers need to meet safe work requirements set out in AS 2550 *Cranes, hoists and winches – Safe use – Mobile elevating work platforms*.

The Elevating Work Platform Association of Australia (EWPA) provide certification (Yellow Card) for the safe operation of various types of EWPs with a reach of less than 11 metres. It is recommended that Yellow Card certification be adopted at all work sites as the minimum standard for safe operation of vertical EWPs with a reach of less than 11 metres.

For heights or lengths greater than 11m the National High Risk Licence is required for operation – again a check on competency should be applied as possession of the ticket may not indicate the professionalism/competency of the ticket holder.

4.4 Motorized tugs/powering mobile plant

Using inappropriate tugs, or other devices to move items such as stage sections, stage machinery, trussing of front of house items such as seating banks etc. is becoming more common in the entertainment industry and as such the PCBU and the workers must become more aware of the risks they pose.

The choice of tug must be appropriate for the task, positioned correctly and used in a safe way and while no specific licensing is required, a drivers licence and a demonstration of the operator's experience in operating the units should be a minimum qualification before using one.

4.5 Personal protective equipment (PPE)

PPE safety clothing is now considered almost as default equipment even when the risk of contact with vehicles as almost negligible. This is in part due to the many different tasks entertainment industry staff may encounter over any given day.

Hi-visibility clothing and steel toe boots are almost standard work wear but the PCBU and the workers should be aware that once a minimum PPE requirement is defined by risk assessment:

- The standard kit may not be appropriate for the situation and may need to be augmented
- The worker may not have worn the basic kit of steel and hi-visibility and may need to be replaced on the front line as being inappropriately dressed
- The worker may not have the appropriate PPE available and will need to be redeployed or issued with appropriate equipment for task

Other PPE deemed necessary will need to be issued and this can include:

- Hearing protection
- Safety glasses
- Hats and long sleeves and sunscreen for outdoor work
- Gloves
- Hard hats
- Working at heights
- Torches and light-up batons

4.6 Fatigue management

Fatigue may increase the risk of incidents because of a lack of alertness. Fatigue may result in a slower reaction to signals or situations and affect the ability to make good decisions. Fatigue management has to be implemented in all areas of event management from truck drivers and plant operators to crew travelling times and adequate meal breaks for all staff and contractors.

If fatigue is identified as causing a risk to work health and safety, then suitable control measures should be implemented in consultation with workers to eliminate or minimise the risks. See General Operational Hazard Guide for more information on fatigue.

Fatigue guides are available from the various state-based safe work organisations and Safe Work Australia. It is recommended that these organisations are continually monitored for changes as fatigue management is generally governed by the road transport industry and changes can be made without reference to the entertainment industry.

A number of industries mandate maximum hours of work and minimum break times and these need to be understood and acted upon.

4.7 Licensing

PCBUs must see written evidence from the worker that they have the relevant license for that work. Check that the license

- Has not expired
- Includes the relevant classes of license
- Has the correct photo and name of the worker

Types of licenses that may apply include:

- Crane
- Forklift
- Hoist
- Reach stacker
- Marine license
- EWP

EWP licence types

There are two classes of forklift licenses. They are:

- EWPA Yellow Card – basic EWP training for vertical lifts for heights under 11m
- Nationally accredited High Risk Licence for EWP and boom lifts for over 11m, issued by the relevant state safe work organisation.

Forklift licences

A High Risk Work License is required to operate a forklift. There are two classes of forklift licenses. They are for:

1. A forklift truck equipped with a mast and an elevating load carriage with a pair of fork arms or other attachment (class LF)
2. An order picking forklift truck where the operator's control elevates with the load carriage/lifting media (class LO)

Note – regarding the use of tugs/ powered mobile plant

Officially tugs do not need a license for operation but as with all WHS requirements the PCBU will need to ensure that the operators have had training, that this training has been recorded in the employees file and that all possible safe-guards identified in the risk assessment have been followed.

5. Legislation, Standards and Guidance

More information on how to manage traffic at a workplace and at events is provided in:

General guide for workplace traffic management

<https://www.safeworkaustralia.gov.au/collection/workplace-traffic-management-guidance-material>

Guide to organising public events in the ACT

http://www.tams.act.gov.au/_data/assets/pdf_file/0011/335648/Special_Events_Handbook.pdf

Event management plan checklist and guide

Event management guides and plans are available from many different Government bodies.

Working near forklifts

http://www.safework.nsw.gov.au/_data/assets/pdf_file/0003/62139/working-near-forklifts-8195.pdf

Crowd Control at Venues and Events – WorkSafe Victoria

https://www.worksafe.vic.gov.au/_data/assets/pdf_file/0005/208229/ISBN-Crowd-control-at-venues-and-events-practical-occupational-health-and-safety-guide-2007-01.pdf

There may be further material available in the State or Territory where the event is being held.

Further guidance on consultation is in the Code of Practice: *Work health and safety consultation, cooperation and coordination*.

<https://www.safeworkaustralia.gov.au/system/files/documents/1702/whsconsultationcooperationcoordination.pdf>

Additional guidance on the risk management process is in the Code of Practice: *How to manage work health and safety risks*.

<http://www.safeworkaustralia.gov.au/sites/swa/about/publications/pages/manage-whs-risks-cop>

Other codes of practice, guidance material and other resources are available on the [Safe Work Australia](http://www.swa.gov.au) website (www.swa.gov.au).

Australian and New Zealand Standards

AS/NZS 4994 Temporary edge protection series

AS 2550 *Cranes, hoists and winches – Safe use – Mobile elevating work platforms*.

AS1742.3 – 2009, Traffic Control for Works on Roads

AS 1742.10-2009 Manual of uniform traffic control devices Pedestrian control and protection

AS/NZS 1158.1.2:2010 lighting for roads and public spaces Vehicular traffic AS 2578-2009 traffic signal controllers

AS 1742.13-2009 Manual of uniform traffic control devices Local area traffic management

AS/NZS 3001:2008 Electrical installations – Transportable structures/vehicles incl. site supplies

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Sources:

Safe Work Australia 2016 *TRAFFIC HAZARD CHECKLIST*.

<https://www.safeworkaustralia.gov.au/system/files/documents/1703/traffic-hazards-checklist.pdf>

Safe Work Australia 2016 *TRAFFIC CONTROL MEASURES CHECKLIST*.

<https://www.safeworkaustralia.gov.au/system/files/documents/1703/traffic-control-measures-checklist.pdf>

Safe Work Australia 2016 *TRAFFIC MANAGEMENT GENERAL GUIDE*.

<https://www.safeworkaustralia.gov.au/system/files/documents/1702/traffic-management-guide-construction-work-july-2013.pdf>

Safe Work Australia 2016 *GUIDE FOR MANAGING THE RISK OF FATIGUE AT WORK* – for Managing Heavy Vehicle Driver Fatigue and the National Rail Safety Regulator's Guidance on Fatigue Risk Management Program.

<https://www.safeworkaustralia.gov.au/system/files/documents/1702/managing-the-risk-of-fatigue.pdf>

Safe Work Australia *Fatigue management a worker's guide*

<https://www.safeworkaustralia.gov.au/system/files/documents/1702/fatigue-management-a-workers-guide.pdf>

Safe Work Australia *FIRST AID IN THE WORKPLACE Code of Practice*

<https://www.safeworkaustralia.gov.au/system/files/documents/1705/mcop-first-aid-in-workplace-v3.pdf>

Workcover NSW '*safety in the road freight transport industry*'

http://www.safework.nsw.gov.au/_data/assets/pdf_file/0008/49931/safety-in-the-road-freight-transport-industry-1129.pdf