LPA Guidelines

Safety Guidelines for the Live Entertainment and Events Industries

Part 2. Hazard Identification and Risk Management

February 2018

LIVE PERFORMANCE AUSTRALIA

Safety Guidelines for Live Entertainment and Events
Part 2. Hazard Identification and Risk Management

Contents

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.

Version Control	
Title: Part2. Hazard Identification and Risk Management	Version: V 1.0
Owner: Live Performance Australia	Date amended:
Date of release: February 2018	Date of review: February 2019

1. Principles of Risk Management

Effective management of risk is the foundation for delivering safe events.

Risks must be managed to ensure the health and safety of workers and of all other people associated with the event including audiences, customers and visitors. Everyone has a role in risk management and PCBUs such as event promoters, organizers and specialist contractors must do whatever they can to eliminate or minimise risks.

People working on the event must take reasonable care of their own and others' safety, and follow policies and procedures. Instructions must be provided for audiences and visitors to enable them to experience events safely, and they are expected to follow these.

2. The Risk Management Process

The risk management process is about systematically identifying hazards, understanding and assessing the harm they could cause, implementing the most effective controls and ensuring these measures are effective.

Risk management is a four-step process that requires management commitment and the involvement and cooperation of workers. In live entertainment and events there can be multiple PCBUs, contractors and employees in control of various activities in the workplace. Each PCBU needs to be involved in the risk management process for activities they control or influence.

Where they exist, workplace health and safety committees and health and safety representatives (HSRs), must be included in the risk management process.

Step 1. Identify hazards

Hazards are situations or things that have potential to harm a person or a business. Examples include:

- Noisy machinery
- A moving forklift
- Chemical exposure
- Working at height
- A repetitive job
- Workplace bullying

Identifying hazards in the workplace involves finding things and situations that could potentially cause harm. To achieve this, inspect the workplace, talk to people about problems or near-misses and review information about typical hazards in live entertainment and events, including your own event data and reviews. Use tools such as the Event Hazard Checklist or complete an event risk profile.

Step 2. Assess the risks

Risk is the possibility that harm (death, injury or illness) might occur when a person is exposed to a hazard. A risk assessment establishes the following:

- How severe could the harm be?
- What is the likelihood of that harm occurring?

It is good practice to work through the sequence of events that could lead to an incident. This will build up an understanding about compounding issues and the effectiveness of existing controls. This analysis may demonstrate the need for additional controls.

Risk assessments can vary in detail according to the hazards and information being considered. A risk assessment template is provided in this guide as one option for documenting risk information.

Step 3. Control the risks – the hierarchy of risk control

Risk control means taking action to eliminate or minimise health and safety risks. The most effective and recommended way of controlling risk is to eliminate the hazard. If this is not reasonably practicable the next step is to minimise the risks following the steps set out in the accepted hierarchy of control (see below).

The WHS Regulations require that duty holders work through the hierarchy of controls to determine a single control measure or a combination of different controls that together provide the highest level of protection that is reasonably practicable.

Hierarchy of risk control – general work health and safety

Level 1

Elimination – removes the cause of danger completely.

Level 2

Substitution – controls the hazard by replacing it with a less risky way to achieve the same outcome.

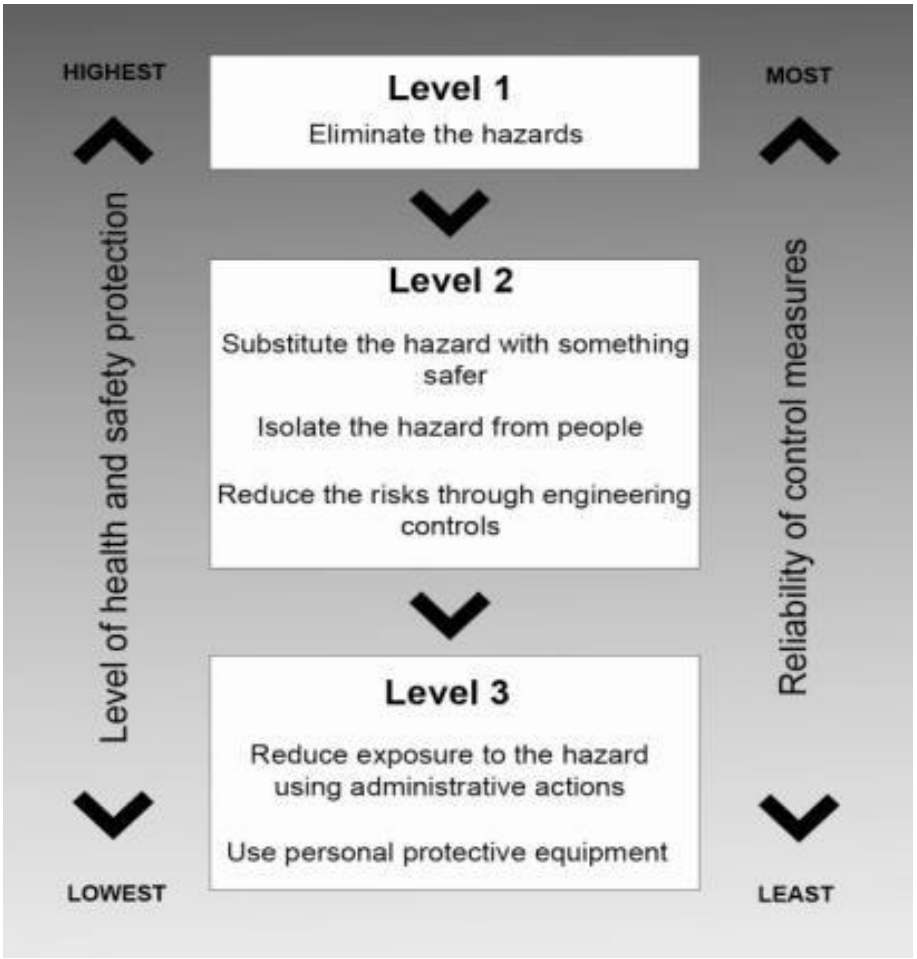
Isolation – separates the hazard from the people at risk by isolating it, e.g. install a safety barrier

Engineering – making physical changes lessens any remaining risk, e.g. redesign a machine by adding safeguards.

Level 3

Administration – use administrative controls to lessen the risk, e.g. install signs and rotate jobs.

Personal Protective Equipment (PPE) – require your employees to wear PPE, e.g. provide gloves, earplugs, goggles, iridescent vests.



Hierarchy of risk control – working at height

This list is similar to the general list above but has specific steps for working at height.

The five-level hierarchy for working at height is:

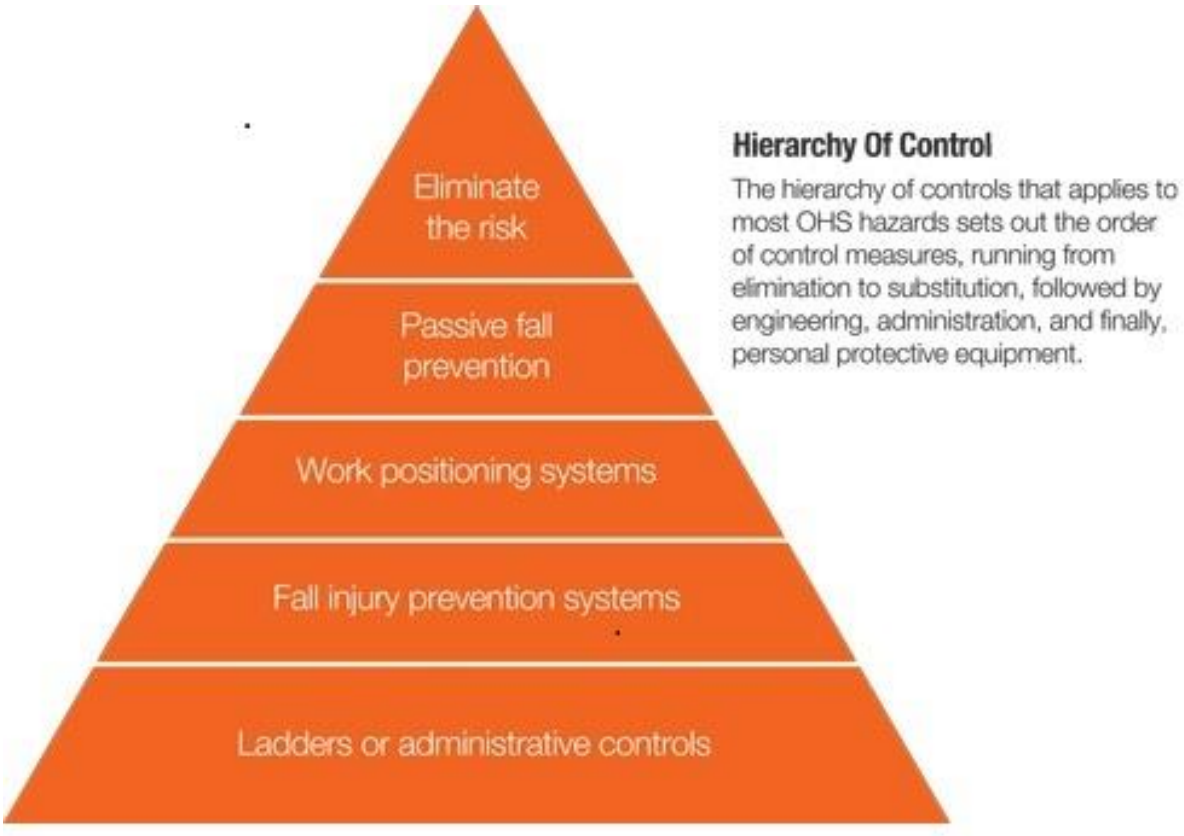
1: Undertake the work on the ground or on a solid construction

2: Undertake the work using a passive fall protection device

3: Undertake the work using a work positioning system

4: Undertake the work using a fall injury prevention system

5: Undertake the work from ladders, or implement administrative controls



Step 4. Review risk controls – the risk assessment

Regular review of risk controls is required to ensure that controls are working effectively. Changes in the workplace or to work practices may also trigger a review of controls.

Workers and HSRs, where they are exist, must be consulted and notes retained on file.
A risk assessment should be conducted when:

- There is uncertainty about how a hazard may result in injury or illness
- The work activity involves a number of different hazards and it is not understood how the hazards may interact with each other to produce new or greater risks
- There are changes in the workplace that could impact on the effectiveness of existing control measures specified by previous risk assessments
- An existing risk assessment is out of date
- A risk assessment is mandatory for certain high risk work activities such as entry to confined spaces or for live electrical work

Undertaking a risk assessment provides an understanding of the hazards in the workplace and how risks will be eliminated or minimised. Sometimes the required approach to managing the risks is mandated by law, or approved guidance is provided by a code of practice and a risk assessment may not be required in these circumstances so long as the requirements are followed and it can be proven the procedures were followed.

If the hazard is well understood and the risk controls are well known and are working effectively, it may not be necessary to do further risk assessment but the process as to how this decision was made, should be documented.

3. Hazard Tools and Templates

3.1. Risk assessment template

Risk Assessment Template			
Producer/presenter:		**Version:**	
Event:		**Date:**	
Venue:		**Review date:**	
Name of person who conducted this risk assessment:		**Approved by:**	
Performance conditions:			

Risk Assessment Template(cont.)								
Step 1. What are the hazards?	**Step 2. Who might be harmed and how?**	**Step 3. What are you already doing to address the hazard?**	**Current risk rating**	**Step 4. What further action is necessary?**	**Residual risk rating**	**How will controls be implemented**		
						Person responsible	**Due date**	**Completed**

3.2 Risk assessment matrix

Risk Assessment Matrix (**Adapted from AS 4360)**

MEASURE OF CONSEQUENCE OR IMPACT:

Level	Description	Explanation
1	Insignificant	No injuries, low financial loss
2	Minor	First aid treatment, on site- release immediately contained. Medium financial loss
3	Moderate	Medical treatment required, on site release contained with outside assistance, high financial loss
4	Major	Extensive injuries, loss of production capability, off site release with no detrimental effects, major financial loss
5	Catastrophic	Death, toxic release off site with detrimental effect, huge financial loss

MEASURE OF LIKELIHOOD:

Level	Descriptor	Explanation
A	Almost certain	Is expected to occur in most circumstances
B	Likely	Will probably occur in most circumstances
C	Possible	Might occur at some time
D	Unlikely	Could occur at some time
E	Rare	May occur only in exceptional circumstances

3.3 Levels of risk – qualitative risk analysis matrix

Likelihood	Consequences					
	Insignificant **1**	Minor **2**	Moderate **3**	Major **4**	Catastrophic **5**	
Almost certain **A**	S	S	H	H	H	**Legend**
Likely **B**	M	S	S	H	H	**H High** Immediate action required
Possible **C**	L	M	S	H	H	**S Significant** Senior management attention needed
Unlikely **D**	L	L	M	S	H	**M Moderate** Management responsibility must be specified
Rare **E**	L	L	M	S	S	**L Low** Manage by routine procedures

Adapted from materials kindly supplied by Arts Centre Melbourne.

4. Understanding Hazards

Live entertainment and events have inherent hazards. Everyone in the workplace should understand these hazards and what they need to do to ensure their safety and the safety of others.

The PCBUs, including employers and contractors, are responsible for ensuring that all hazards are identified, the risks are assessed and that the appropriate control measures are put in place to eliminate or minimise these risks. All workers must be instructed in the specific controls and their role in implementing these controls.

One proven way to ensure safe practices are understood and followed is by creating a Safe Work Method Statement (SWMS). The purpose of a SWMS is to ensure that all people involved with a specific task have a document outlining the risks involved with that work. The SWMS provides a logical step-by-step order to undertake the task safely.

Using the SWMS process:

- Ensures workers are adequately trained
- Helps workers recognise and manage associated hazards and risks
- Communicates the preferred way to safely perform work tasks
- Ensures that a task is done the same way every time, leading to repeatable and consistent outcomes

PCBUs must ensure that SWMS are prepared and kept on-site or at a location where they can be delivered to the job site promptly.

For works carried out on a regular basis, a generic SWMS may be prepared and used. The content of the SWMS should be refined over time and include consultation with workers and other persons involved with work. There are a number of sources of editable SWMS templates that can be used as the basis of preparing your own SWMS.

Remember: prior to each new activity, the SWMS must be reviewed and revised to ensure it applies to the specific task and the work site.

5. Safe Work Method Statements

Safe Work Method Statement (SWMS)	
What is an SWMS?	A SMWS sets out work activities in a logical sequence and identifies hazards and describes control measures. A SWMS allows supervisors and workers to understand what has been planned to ensure that work is undertaken in a safe manner.
When is an SWMS required?	WHS Regulation 2011 **requires** that SWMSs be developed for high risk construction work. A SWMS should also be prepared for any activity where a risk assessment deems it necessary. SWMS are routinely used to plan and record the safe method of work for a specific activity. This encourages the adoption of consistent and safe work practices.
What should a SWMS cover and how is it used?	There are legal requirements for what should be included in an SWMS prepared for high risk construction work. It is recommended these requirements be followed for ALL SWMSs. An SWMS must: • Identify the work that is high risk • Specify the hazards and risks to health and safety • Describe the measures to be implemented to control the risks • Describe how these measures will be implemented, monitored and reviewed. The SWMS must be easy to read and readily accessible. It should provide clear direction on the control measures to be implemented, avoiding statements that require supervisors or workers to make a decision. Workers and Health and Safety Representatives (HSRs) should be consulted in developing the SWMS. If this is not possible consultation must occur when the SWMS is first made available. Work must be carried out according to the SWMS. Workers should be provided with information and instruction regarding the SWMS activity. An SWMS provides a valuable tool for instruction and training, however it does not replace the need for appropriate supervision. The SWMS must be reviewed when there are substantial changes in the work activity, if new hazards are introduced, or if the SWMS is not followed. SWMSs may also be relied upon in the event of a workplace incident, providing evidence of the agreed work approach.
What records need to be kept?	The PCBU must keep a copy of the SWMS until all the work is completed. If there is a notifiable incident when the work is carried out, the SWMS must be kept for at least 2 years after the incident occurs.
Further Information	The Safe Work Australia *Construction Work Code of Practice* provides further guidance on SWMS

5.1 Safe work method statement guide

Steps for completing the SWMS template (cont.):

Hierarchy of control – General

- Eliminate the risks so far as is reasonable practicable
- If this is not reasonably practicable, minimise them so far as reasonably practicable by applying the appropriate

hierarchy of control measures:

- substituting the hazard
- isolating the hazard
- implementing engineering controls

If the risk still remains:

- implementing administrative controls
- ensuring the provision and use of suitable personal protective equipment (PPE)

In the Responsibility section, provide a name and title of the person who will implement the control, and nominate who is responsible for review.

SWMS must be prepared before work on the activity commences. The SWMS should provide the safest and most practical way to undertake the task. Arrangements must be in place to ensure that the work undertaken follows the SWMS. If the work is not carried out in accordance with the SWMS, the work must be stopped immediately and not started again until the reasons for not complying with the SWMS have been determined. It may be necessary to update the SWMS to reflect a change affecting how the work is done. Workers and contractors undertaking the task must be able to follow the SWMS. This means being able to access it and understand how and why it provides the safest and most practical way to undertake the activity. This may require providing training or supervision. The SWMS must be reviewed whenever there is a significant change to the activity, if a new hazard or control is identified, or if an incident occurs. SWMS must also be reviewed if work has been stopped due to not following the SWMS, and amended if a safer and more practical approach is identified. All persons whose work is impacted by the revision must be advised of and understand the changes made. SWMS must be retained until the work is completed or for two years if an incident occurs. Organisations often choose to retain SWMS indefinitely.

5.2 Safe work method statement template

Safe Work Method Statement Template			
Work Activity			
Activity title:			
Location:			
Associated Risk:			
Organization/PCBU details:			
Name:			
Office address:			
ABN:	***Contact number:***	***Mobile number:***	
Responsibilities:			
SWMS prepared by:	**Name:**	**Position:**	
	Signature:	**Date:**	
People consulted in preparing the SWMS	**Name:**	**Name:**	
	Name:	**Name:**	
	Name:	**Name:**	

Safe Work Method Statement Template (cont)		
SWMS approved by:	**Name:**	**Position:**
	Signature:	**Date:**
Person responsible for implementing SWMS:	**Name:**	**Position:**
	Signature:	**Date:**
Note all relevant legislation, standards, policies and procedures:	**Relevant legislation and qualifications/licenses *for this activity:***	
Note permit to work, licenses, qualifications or competencies required.		

Activity	Hazards	Risk control measures	Responsibility
List the tasks or steps, required to perform the activity in the sequence they are carried out. (Start with an action word)	*For each task, list the hazards that could cause injury*	*Describe the control measures and how they will be used to make the activity as safe as possible*	*Nominate the name and title of the person who will implement the control*

Safe Work Method Statement – competency record

The following staff have been trained to undertake activities as specified the SWMS

Name	*Position*	*Signature*	*Date*	*Instructor/supervisor*	*Relevant license/competency*

Review of SWMS – Title					
Version	***Amendment***	***Reviewer (name)***	***Reviewer (signature)***	***Date***	***Date for next review***

6. Event Hazard Checklists

As shown previously, the entertainment and events industry have hazards that are found in all industries from transport, to hospitality as well as our own specific hazards from orchestra pits to counterweight flying systems. Recent incidents overseas have seen wind events where stages have collapsed to situations where ambulances have not been able to get to patients as access roads have not been factored into the site plans.

Australia does not have specific published documentation for the entertainment industry – bar one entertainment standard for lighting fixtures (AS/NZS 60598.2), so working within established local guidelines is very difficult.

Although there is no Australian version, international best practice is a publication called *The Purple Guide* in the UK and *The Event Safety Guide* through the Event Safety Alliance in the USA.

The chapters in this publication show the range of potential hazardous areas of our industry and include the following that should be used as an initial checklist for all the areas that need to be covered in the risk assessment process:

Planning and management	Venue and site design	Fire safety
Major incident planning (emergency planning)	Communication	Crowd management
Transport management	Structures	Barriers
Electrical installations and lighting	Food, drink and water	Merchandising and special licensing
Amusements, attractions and promotional displays	Sanitary facilities	Waste management
Sound: noise and vibration	Camping	Facilities for people with disability.
Special effects, fireworks and pyrotechnics	Medical, ambulance and first-aid management	Information and welfare
Children	Performers	TV and media
Stadium music events	Arena events	Large events
Small events	Classical music events	Unfenced or un-ticketed events, incl.radio roadshows
All-night music events	Unlicensed events	Health and safety responsibilities

Source: http://www.thepurpleguide.co.uk/index.php/the-purple-guide