

Risk Management in the Entertainment Industry





Prepared for the VICTORIAN ASSOCIATION OF PERFORMING ARTS CENTRES (VAPAC)

by
HAZCON PTY LTD
Environmental & Occupational Health
and Safety Consultants



Welcome to the VAPAC Risk Assessment Training Session.

This is the second presentation in a two part training session which is aimed at increasing the participants awareness of risk assessments in the entertainment industry.



Aim of This Session

- This training session is a general approach to safety in the entertainment industry.
- For more detailed information regarding safety in the entertainment industry, please refer to the Australian Entertainment Industry Association (AEIA) "Employers' Guide to OH&S in the Entertainment Industry". A copy is included on the CD with this presentation.



Objectives:

On completion of this program you should be able to:

- Identify common workplace hazards within the entertainment industry
- Assess risk (at a basic level)
- Recommend / Implement control measures for identified hazards in accordance with the hierarchy of controls.



Session Outline

- OHS Legislation
- Risk Management
- Hazard Identification

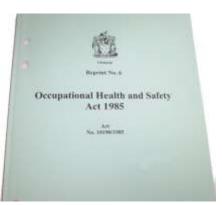
- Risk Assessment
- Control Measures

Job Safety Analysis



OH&S Legislation





OH&S Legislation

The Victorian Occupational Health & Safety Act 2004 covers all workplaces and includes theatres and voluntary groups.



Property of the Control of the Contr

OH&S Legislation

There are specific Regulations for hazards such as: Hazardous Substances, Plant, Noise, Manual Handling and Working at Heights.



OH&S Legislation

- Codes of Practice are issued to help workplaces gain compliance to legislation
- Workplaces can also use Australian Standards, Industry Standards and Guidance notes to implement safe working procedures. The AEIA Guideline for theatres is an excellent resource.





OH&S Legislation

- Compliance with the Act and Regulations are mandatory, employers can be prosecuted when found to be in breach
- Codes and Industry standards are not mandatory, however they are used to establish compliance.



OH&S Legislation - Hierarchy

OH&S

Mandatory compliance

Act 2004

Regulations

Used to gain compliance

Codes of Practice

Standards

Industry Standards / Guidelines



Duty of Care

The law requires that everything that is reasonably practicable be done to protect the health and safety of people at work.

This includes voluntary, professional or amateur groups.





Practicable

The OH&S Act 2004 definition:

"Practicable" ... means taking into account:

- The severity of the hazard or risk in question;
- The state of knowledge about that hazard or risk;
- Availability of ways to mitigate risks;
- The cost.



Risk Management



What is Risk Management?

The systematic method of identifying, assessing and controlling hazards and risks associated with all activities at a workplace.

Or the simple process of asking, "What can go wrong?"



Risk Management

An employer or team leader is required to:

- Consult with persons under their control
- Identify hazards
- Assess risks
- Use appropriate control measures to eliminate or control the risk
- Monitor, evaluate and ensure the effectiveness of controls.



The Risk Management Process is:

- Hazard Identification
- Risk Assessment
- Control Measures



Hazard Identification



What is a Hazard?

A hazard is something with the potential to cause harm, injury, illness or disease.



Hazard Identification

 All employers must identify any foreseeable health or safety hazards that could cause harm to their employees and others within the workplace

 "Other people" includes patrons, performers, artists, contractors and visitors to the workplace.



Hazard Identification

The hazards may arise from:

A production / event, equipment, substances and materials in use for the production, the environment (particularly in outdoor events or performances) and the people involved.



Types of Hazards

POTENTIAL

- Heavy items
 stored incorrectly
 (too high makes
 lifting awkward)
- Incorrect tools used
- Inexperienced person operating at height

OBVIOUS

- Unlabelled chemical containers
- Unguarded openings
- Staging gear obstructing Fire Exits



Types of Hazards

HIDDEN

DEVELOPING

- Faulty Electrical Equipment
- Asbestos
- Orchestra Pits

- Housekeeping gradually deteriorating
- Adverse working posture



Types of Hazards - Continued

EQUIPMENT

HUMAN

- Physical condition of equipment
- Operability and condition of safety devices
- Condition of the fire protection devices/equipment
- Maintenance

- Safe work practices
- Human factors
- Fatigue, distraction, time pressures, attitude
- Occupational stress



Types of Hazards - Continued

ENVIRONMENTAL

- Noise
- Lighting
- Heat, Cold
- Chemical
- Biological
- Weather
- Surfaces



Examples of Hazards

- Working at heights
- Manual handling
- Electrical hazards
- Tools, equipment, machinery
- Hazardous, defective objects
- Inadequate warning signs
- Hazardous arrangement or storage
- Improper illumination or ventilation



- A walk through of the workplace a simple visual check by persons experienced in identifying hazards and by employees working in the area
- A review of the type of work being performed, the way the work is done and the work practices in use at the time.



A review of administrative issues such as scheduling, to ensure sufficient time for:

- Consultation,
- Safe planning and implementation
- Fatigue management
- Security issues, management of violence, harassment
- Other possible causative factors in both physical and psychological injuries.



- Looking at technical information provided by the manufacturer of equipment and/or the set builder, set components manufacturer, costume designer and manufacturer
- Researching information regarding substances being used in a production or event to determine whether they are hazardous.



- Development of checklists that are relevant to the type of event or production
- Examining records of incidents of similar types of events or productions or the same event or production in a different venue
- Checking to ensure that engineering specifications have been followed and are suitable for the intended purpose.



Each Hazard Should be Listed with Information on:

- Where the hazard occurs;
- Factors that contribute to the hazard or compound it;
- Persons likely to be exposed to the hazard;
- The frequency of exposure to that hazard.



What to Consider

- Task details
- Materials
- Tools and equipment
- Timing of task (day or night time, summer or winter)
- Location (height, confined space, etc.)
- Effect of task on other people/activities/equipment
- Effect of other activities nearby on task
- The workplace environment
- Dangerous materials
- How your system of work is organised
- Employees required



Risk Assessment



What is Risk?

Risk is the possibility of injury, damage or loss should a hazard become uncontrolled.

The measure of risk is a combination of exposure, probability and the severity of a hazard occurring.



Risk Assessment

In order to assess whether it is safe to carry on with an activity you need to find out:

- What could go wrong?
- What will happen if it does?
- How serious is the effect?
- How likely is it to happen?



When Assessing Risk Associated with Any Hazard, it is Necessary to Ask the Following Questions:

- Who is to be exposed to the hazard?
- How often are people near the hazard?
- Has this hazard already caused any problems?
- How easily could someone be hurt?



When Assessing Risk Associated with Any Hazard, it is Necessary to Ask the Following Questions:

 How common is it for this hazard to cause problems in other workplaces?

- Which factors relating to that hazard need to be taken into account, according to health and safety law?
- Which factors or specific aspects of the work are increasing the likelihood of injury or illness.



It is Important to Record the Identified Hazards and Classify Them e.g. Hazards That:

- Could kill or cause serious injury, permanent disability or ill health;
- Might cause injury or illness resulting in an employee being off work for several days; or
- Might cause injury or illness resulting in an employee requiring first aid.



A Review of Health and Safety Information Relevant to the Particular Hazard Including:

 Any health and safety information provided by the supplier of any plant or substance (including a person who hires or leases out the plant);

• Material Safety Data Sheets for any substance being used.



Assessment

- The outcome of a risk assessment is a prioritised list of risks which then provides a basis for planning preventative measures
- The list should be ranked from most to least severe – for example "death from falling from a lighting bridge" to "soft tissue injury from bumping into set pieces".



Assessment

For each identified hazard, a ranking should be applied according to the likelihood that it will occur and how serious the result could be.



High Risk

If a potential outcome from a hazard could be very likely to kill or seriously injure a worker or a member of the public, it would be the highest priority and should be addressed first.



Low Risk

 If an outcome is very unlikely, i.e. it could happen but probably never will, it would be classified at the lowest priority

 This hazard would be addressed after all higher risks had been eliminated or effectively controlled.



Example of a Risk Assessment Form

A form is useful to really look at all the risks associated with a production.



EVENT

Assessment/Event Location:

Hazard Identification, Risk Assessment and Control Report

Even	t Name:								
Date	Date(s):								
Brief	f descript	tion of elements	to be	e assesse	d:				
Asse	ssors det	ails:							
Nam	ie	Title			Name		Title		
							<u> </u>		
Oua	litative Me	asures of Likelihoo							
A		ost Certain		The ever	nt is expected to oc	cur in m	ost circumst	ances.	
В	Likel	y		The ever	nt will probably oc	cur in mo	ost circumsta	ances.	
С	Mode	erate		The event should occur at some time.					
D	Unlik	cely		The event could occur at some time.					
E	Rare			The ever	nt may occur only i	in except	ional circun	nstances.	
Qua	litative Me	asures of Consequ	ence o	r Impact					
1	Insig	nificant		No injur	ies. Low financial	loss.			
2	Mino	Г		First aid treatment. On-site release immediately contained. Medium financial loss.					
3	Mode	erate			treatment required e. High financial		e release cor	ntained with outside	
4	Majo	r		Extensiv		fproduct		ty. Off-site release	
5	Catas	strophic		Death. I financial	Toxic release off-si loss.	te with d	etrimental e	ffects. Huge	
Qua	litative Ris	k Analysis Matrix	- Leve	l of Risk					
-		Consequences	<u> </u>	M	Malan		Malan	Constant	
1 :1	celihood	Insignificant (1)	-	Minor (2)	Moderate (3)	-	Major (4)	Catastrophe (5)	
LIN	A	S		S	Н		H	(3) H	
	В	M		S	S		Н	Н	
	С	L		M	S		Н	Н	
	D	L		L	M		S	Н	
	E	L		L	M		S	S	



Likelihood of Risk

EVENT

Hazard Identification, Risk Assessment and Control Report

Assessment/Event Location:

Date(s):									
Brief	descripti	on of element	s to be	assesse	ed:					
	•									
Asses	sors deta	ils:								
Name)	Title			Name	Title				
Qual	itative Mea	sures of Likelih	ood							
4	Almos	st Certain		The ever	nt is expected to occ	ur in most circumst	tances.			
3	Likely	,		The event will probably occur in most circumstances.						
-	Mode	rate		The event should occur at some time.						
)	Unlike	ely		The event could occur at some time.						
3	Rare				nt may occur only in	exceptional circun	nstances.			
Qual		sures of Conseq	uence o							
1	Insign	ificant		No injur	ries. Low financial le	oss.				
2	Minor			First aid treatment. On-site release immediately contained. Medium financial loss.						
3	Mode	rate			treatment required.		ntained with outside			
4	Major				ve injuries. Loss of p		ty. Off-site release			
					detrimental effects.	-				
5	Catast	rophic		Death.	Toxic release off-site l loss.	with detrimental e	effects. Huge			
Qual	itative Risk	Analysis Matri	x - Leve	l of Risk						
		Consequences	ļ .		_					
	121 1	Insignificant	.	Minor	Moderate	Major	Catastrophe			
Like	elihood	(1)		(2)	(3)	(4) H	(5) H			
	A B	S M	1	S S	H S	H	H			
	С	L.	1	M	S	H	Н			
	D	L	1	L	M	S	Н			



Likelihood of Risk

Severity of Risk

EVENT

Hazard Identification, Risk Assessment and Control Report

Assessment/Event Location:

E	vent N	ame:									
D	ate(s):										
В	rief des	scripti	ion of elements	to be	e assesse	d:					
A	Assessors details:										
N	ame		Title			N	ame		Title		
1. (Qualitat	ive Mea	asures of Likelihoo	d							
A		Almos	st Certain		The ever	nt is	s expected to occu	r in	most circumst	and	ces.
В		Likely			The event will probably occur in most circumstances.						
C		Mode	rate		The event should occur at some time.						
D		Unlike	ely		The event could occur at some time.						
Е		Rare				The event may occur only in exceptional circumstances.					
	Qualitat	_	asures of Conseque	nce o							
1		Insign	nificant	!	No injuries. Low financial loss.						
2		Minor	•		First aid treatment. On-site release immediately contained.						
<u></u>		WIIIOI		!	Medium financial loss.						
3		Mode	rate		Medical treatment required. On-site release contained with outside						
	! ;			<u>'</u>	assistance. High financial loss.						
4		Major	•	!	Extensive injuries. Loss of production capability. Off-site release						
5	1	Cotoot	trophic		with no detrimental effects. Major financial loss. Death. Toxic release off-site with detrimental effects. Huge						
3	,	Catasi	порине	!	financia			witti	deti illientai e	116	cis. Huge
3. (Qualitat	ive Risl	k Analysis Matrix -	Leve	l of Risk						
			Consequences							I	
			Insignificant		Minor	╛	Moderate		Major]	Catastrophe
	Likeliho	od	(1)		(2)	_	(3)	Ш	(4)	╛	(5)
	A		S		S	Ц	Н		H		H
	В		M		S	4	S		H		H
H	C		L		M	4	S		Н	4	H
\vdash	D E		L L		L L	\dashv	M M		S S	41	H S
_ <u> </u>			L		L		IVI		2		S
Lege	nd				ъ. "						



Likelihood of Risk

Severity of Risk

Evaluation of Risk

EVENT

Hazard Identification, Risk Assessment and Control Report

Assessment/Event Location

Even	t Name:								
Date	(s):								
Brief	descriptio	n of elements	to be assess	sed:					
Asse	ssors detail	s:							
Nam	e	Title		Name	Title				
0.00	Litatina Mass	ures of Likelihoo		-	<u>. </u>				
A A	Almost			rent is expected to	occur in most circums	tances.			
В	Likely	Corum		•	occur in most circums				
C	Modera	te		The event should occur at some time.					
D	Unlikel		\longrightarrow \vdash	The event could occur at some time.					
E	Rare		The ev	ent may occur only	y in exceptional circui	nstances.			
Qua	litative Meas	ures of Conseque	ence or Impac	t T					
1	Insignif	icant	No inj	uries. Low financi	al loss.				
2	Minor			id treatment. On-si m financial loss.	ite release immediatel	y contained.			
3	Modera	te		al treatment requirence. High financia	ed. On-site release co	ntained with outside			
4	Major				of production capabilits. Major financial lo				
5	Catastro		financ	ial loss.	site with detrimental	effects. Huge			
Qua	litative Risk	Analysis Matrix	Level of Risl			11			
		Consequences Insignificant	Minor	Moderate	Major	Catastrophe			
Lik	elihood	(1)	(2)	(3)	(4)	(5)			
Lik	A	S	S	Н	H	Н			
	В	M	S	S	Н	Н			
	С	L	M	S	Н	Н			
	D	L	L	M	S	Н			
	E	L	L	M	S	S			



EVENT

Hazard Identification, Risk Assessment and Control Report

Assessment/Event Location:									
Event Name:									
Date(s):	Date(s):								
Brief description of elements to be assessed:									
Assessors details:									
Name	Name Title Name Title								



Likelihood of Risk

1. Qualitative Measures of Likelihood

A	Almost Certain	The event is expected to occur in most circumstances.			
В	Likely	The event will probably occur in most circumstances.			
С	Moderate	The event should occur at some time.			
D	Unlikely	The event could occur at some time.			
Е	Rare	The event may occur only in exceptional circumstances.			
•					



Severity of risk

2. Quali	Qualitative Measures of Consequence or Impact								
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 effects. Huge financial loss.							



Evaluation of risk

3. Qualitative Risk Analysis Matrix - Level of Risk

	Consequences				
	Insignificant	Minor	Moderate	Major	Catastrophe
Likelihood	(1)	(2)	(3)	(4)	(5)
A	S	S	Н	Н	Н
В	M	S	S	Н	Н
С	L	M	S	Н	Н
D	L	L	M	S	Н
Е	L	L	M	S	S

Legend

H: High risk.

Detailed research and management planning required at senior levels.

S:

Significant risk.

Senior management attention required.

M:

Moderate risk.

Management responsibility must be specified.

L:

Low risk.

Manage by routine procedures.



Risk Assessment

Using the Risk Management approach a work activity can be evaluated and control measures implemented.



Control Measures



What is Risk Control?

 When hazards have been identified and risks to health and safety assessed, the risks need to be controlled

 Risk Control means taking actions to eliminate or reduce the likelihood that exposure to a hazard will result in an injury or disease.



What is Risk Control?

A fundamental principle of Risk Control is to implement control measures via the Hierarchy of Controls.

This tells you which solution you should use first.



1. ELIMINATION



- 1. ELIMINATION
- 2. SUBSTITUTION



- 1. ELIMINATION
- 2. SUBSTITUTION
- 3. ENGINEERING CONTROLS



- 1. ELIMINATION
- 2. SUBSTITUTION
- 3. ENGINEERING CONTROLS
- 4. ADMINISTRATIVE CONTROLS



- 1. ELIMINATION
- 2. SUBSTITUTION
- 3. ENGINEERING CONTROLS
- 4. ADMINISTRATIVE CONTROLS
 - 5. PERSONAL PROTECTIVE EQUIPMENT



Action to be Taken

What action can be taken at the planning and purchasing stages?

- The preferred control measures elimination, substitution or engineering controls can be applied most effectively at the planning, design and purchasing stages
- This will reduce the time required for health and safety training and supervision
- Addressing health and safety issues after the event is usually more costly, less efficient and less effective.



Elimination

This is the most effective control.

 Remove the unsafe act or device completely out of the work system (do you really need it?)



Elimination

This is the most effective control.

- Remove the unsafe act or device completely out of the work system (do you really need it?)
- Remove a fire hazard by using noncombustible materials



Elimination

This is the most effective control.

- Remove the unsafe act or device completely out of the work system (do you really need it?)
- Remove a fire hazard by using noncombustible materials
- Avoid using firearms or explosives on stage is an example.



Substitution

Redesign the work process so that less hazardous equipment, materials or quantities are used;

• Smaller Props



Substitution

Redesign the work process so that less hazardous equipment, materials or quantities are used;

- Smaller Props
- Modifying the rake of the stage to ensure that it is not too steep



Substitution

Redesign the work process so that less hazardous equipment, materials or quantities are used;

- Smaller Props
- Modifying the rake of the stage to ensure that it is not too steep
- Curtain and lighting rigs operated with electric motors instead of manually hoisting the ropes.



Engineering Controls

Isolating or engineering hazards to prevent accidents e.g.:

Exclusion zones / restricted working areas



Engineering Controls

Isolating or engineering hazards to prevent accidents e.g.:

- Exclusion zones / restricted working areas
- Providing guarding around staging components



Engineering Controls

Isolating or engineering hazards to prevent accidents e.g.:

- Exclusion zones / restricted working areas
- Providing guarding around staging components
- Guarding and lock out devices on electrical equipment



Engineering Controls

Isolating or engineering hazards to prevent accidents e.g.:

- Exclusion zones / restricted working areas
- Providing guarding around staging components
- Guarding and lock out devices on electrical equipment
- Counterweight stops on flying systems



Engineering Controls

Isolating or engineering hazards to prevent accidents e.g.:

- Exclusion zones / restricted working areas
- Providing guarding around staging components
- Guarding and lock out devices on electrical equipment
- Counterweight stops on flying systems
- Use of mechanical lifting devices



Administrative Controls

Minimise risk by administrative means:

Provision of safety and induction training adequate supervision



Administrative Controls

Minimise risk by administrative means:

- Provision of safety and induction training adequate supervision
- Job planning / rotation e.g. organise shifts for bump in and bump out to minimise fatigue / stress



Administrative Controls

Minimise risk by administrative means:

- Provision of safety and induction training adequate supervision
- Job planning / rotation e.g. organise shifts for bump in and bump out to minimise fatigue / stress
- Assess ongoing requirements maintenance schedules, signage, etc.







Personal Protective Equipment (PPE)

• i.e. Safety glasses, hearing protection, safety helmets, and fall arrest devices







Personal Protective Equipment (PPE)

- i.e. Safety glasses, hearing protection, safety helmets, and fall arrest devices
- PPE is the least preferred solution for hazards as it does not address the risk at the source







Personal Protective Equipment (PPE)

- i.e. Safety glasses, hearing protection, safety helmets, and fall arrest devices
- PPE is the least preferred solution for hazards as it does not address the risk at the source
- PPE can provide a false sense of security.



Job Safety Analysis (JSA)

for smaller jobs



What is a Job Safety Analysis (JSA)?

A detailed review of a job or task to determine the best method of carrying out the work for a specific task while at the same time minimising risk to personnel, plant and equipment.



What is a Job Safety Analysis?

A JSA is based on:

 Engaging the mind before the hands and investing a small amount of time to step through the work in your mind

 Stepping back from the job to consider potential hazards and consequences.



Key Features of a Job Safety Analysis?

- Identifies hazards before a task is started
- Allows for individual job planning
- Allows for sharing of information
- Identifies hazards throughout and at the completion of tasks.



When is a JSA required?

- A JSA is to be considered at the planning phase of work activities
- When existing risk management systems have identified a significant risk for a specific task.



How is a JSA performed?

 A JSA is a process which assists in identifying and eliminating workplace hazards

 Using the Risk Management approach, the task has to be evaluated by identifying hazards, assessing risks and implementing control measures.



How is a JSA performed?

Break the job into steps

Identify the hazards associated with each step

 Decide what actions are necessary to eliminate or control hazards

Develop a safe working plan or procedure.



Exercise - Stage your own Risk Assessments

Work through some common hazards for the work activity most suited to what you will be doing on site.

Technical / Stage Crew

Contractor

Performer

Front of House Staff





The following are some of the general hazards associated with technical and staging work in the Whitehorse Centre.



Additional specific hazards may be present depending on the work undertaken.



Technical / Stage Crew - Hazards

- Manual handling
- Working at heights
- Training and certificates of competency (Lighting/Rigging/Etc)
- Site specific hazards
- Power sources and electricity
- Chemicals
- Slips / Trips / Falls
- Adequate lighting
- Insufficient training





Manual Handling:

- Hazards: Heavy / awkward objects, awkward lifting postures, repetitive or sustained movements
- Control: Mechanical lifting aids, substitution for safer work practices, modified job design, planned body movements.



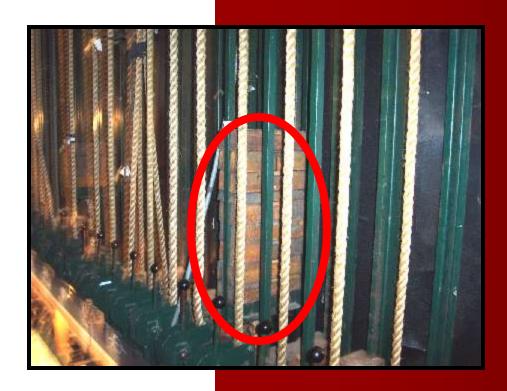
Manual Handling: Example

Counter weighted fly system

- Hazard: Working with heavy weights, working at heights, awkward body positions
- Control: Substitute for a electric hoist fly system.



Counter Weighted Fly System



Ropes and counter weights for fly system





Counter Weighted Fly System



Lighting rigs manually lowered into position via ropes





Electric hoist used to operate fly system.



Hoist eliminates the requirement for manual handling





Working at Heights

Hazards:

Falls, injuries, falling objects

Control:

Mechanical lifting aids, substitution for safer work practices, modified job design.



Working at Heights:

Fixing Lighting to Perch Bars

- Hazard: Working with heavy lighting equipment, working at heights - ladder, awkward body positions
- Control: Substitute for a safer means of access or redesign bars to eliminate the requirement to work at heights.





Fixing Lighting to Perch Bars:

- Ladder not secured
- Located in front of doorway
- Working above 3rd rung
- Lifting heavy light fixing to bar
- Ladder not suitable for a Two handed operation



Working at Heights:

Suggested Controls:

- Re-engineered Perch Bars that lower to the ground or an enclosed form of access.
- Elevated Work Platform



Performer

Hazards:

- Manual Handling
- Repetitive Movements / Overuse
- Noise
- Lighting
- Costume / Props
- Stage work



Performer

Hazard:

Noise - exposure to excessive levels of noise over a long period of time result in noise induced hearing loss.

Control:

Minimise excessive noise where possible, amplification of instruments at appropriate levels, positioning of speakers, hearing protection where necessary.



Contractors

Hazards:

- Unfamiliarity with worksite and industry hazards
- Working at heights
- Manual Handling
- Hazardous Substances



Contractors

Hazard:

Site unfamiliarity

Control:

Appropriate safety induction procedures, good communication and job planning.



Hazards

- Hours of work (Fatigue)
- Manual Handling
- Bullying and Harassment
- Cash Handling
- Noise
- Emergency Procedures
- Crowd Management



Hazard: Armed hold-up.

(Violence can have a dramatic impact on health, safety and the welfare of individuals.)

Control: Appropriate cash management and hold-up procedures.



Cash Handling:

- Limit the amount of time cash is onsite kept out of sight
- More frequent deposits to banks / secure holding units (vary times and routes where possible)
- Cash registers in appropriate locations
- Video surveillance
- Employees to work in groups where possible



Armed hold-up procedures:

During:

- A clear policy of non-resistance
- Slient alarm button
- Appropriate training using specific procedures to minimise potential for harm

After:

Counseling as part of an overall policy



Summary

- Before starting work or a production, ask yourself 'what can go wrong?'
- Can you do it safer?
- Have you controlled the risks?

A moment's thought before working, could save someone a serious injury or death.



This concludes the presentation thankyou for your time.