

HOW TO DO RISK ASSESSMENT

Risk Assessment

- Event risk assessments
- 5 steps to risk assessment
- Fire risk assessment
- Exhibitor risk assessment
- Contractors' risk assessment
- Vetting risk assessment
- Consultation
- Summary of risk assessments at events
- Risk Assessment Templates

Event Risk Assessment

There is an absolute legal requirement under the Management of Health and Safety at Work Regulations (MHSWR) to carry out a 'suitable and sufficient' risk assessment. This means that it must identify all 'significant risk'. Significant risks are those which are reasonably foreseeable in terms of probability and severe enough in outcome to warrant consideration i.e. they are more than trivial. Risk assessment is a MANAGEMENT responsibility and all but the simplest risk assessments should be carried out by competent staff who are knowledgeable about the event or the activity in question.

Generally the venue will produce a generic risk assessment for the halls which indicates common hazards and control measures for all events. The organiser should then produce their own specific risk assessment detailing the hazards and controls for that particular event.

Examples of common risks associated with any event or exhibition are as follows:

- Multiple contractors working in a single workplace
- Fall from working at heights and working on a live edge
- Slips, trips and falls on a level surface
- Manual handling – lifting or moving of heavy/awkward loads
- Falls on stairs or escalators
- Injury from electric shock
- Objects falling from height or loads falling from vehicles
- Impact injury from moving vehicles
- Injury from use of work equipment e.g. circular saws
- Hanging wires
- Structural collapse of seating or an exhibition stand
- Outbreak of Legionnaires disease from a water feature
- Food poisoning incident from temporary catering outlet
- Fire and fire related incidents
- Major incident and civil emergency
- Excessive working hours
- Stress
- Alcohol and drug misuse related incidents

Before diving into the detail, however, it is necessary to think about the event in totality. Any event is a combination of three factors as follows:

- The type of event e.g. trade or consumer (for entertainment events the type of entertainer)
- The type of visitor expected and numbers expected
- The venue

This combination will create a risk dynamic which is unique to that event alone. The risk assessment in total should be set in that context.

5 Steps to Risk Assessment

There are two key definitions which are an important part of the risk assessment vocabulary.

A 'hazard' is something with the potential to cause harm (injury loss or damage)

A 'risk' is the potential for harm to be realised. This is usually seen as a combination of likelihood and severity and which is detailed in step two below.

The key is recognising that whereas there are a great many things which are hazardous, it is the context in which they arise which dictates whether or not they are actually a risk.

The most widely accepted approach in the events industry is the five steps approach as follows:

- Step 1: Identify the Hazard and who could be harmed
- Step 2: Assess the risk
- Step 3: Develop Controls
- Step 4: Implement Controls
- Step 5: Monitor and Review

Step 1: Identify the hazard and who could be harmed

This is the hardest part as it involves predicting everything that could reasonably foreseeably go wrong.

There are various approaches to this based on the type of hazard or the type of harm as follows:

Types of Harm

- Hazards that cause injury, such as a broken bone
- Hazards to health, such as noise

Type of Hazards

- Physical e.g. a vehicle
- Chemical e.g. carbon monoxide in exhaust fumes
- Biological e.g. food poisoning
- Ergonomic e.g. upper limb disorders from working at a key board
- Psychosocial e.g. violence

It is important to consider the potential consequences and who could be harmed. For example with an electrical fault the consequences are both potential injury from the shock or a fire.

Step 2: Assess the Risk

This depends on the complexity of the operation. For simple processes it is often sufficient to award a straightforward:

- Low
- Medium
- High

Most event risk assessments require more detail. It is necessary to assess both the potential likelihood of an incident or accident and the potential severity if it does happen. A widely used format is shown below.

Likelihood	Severity
1. Very Unlikely	1. Minor/First Aid
2. Unlikely	2. RIDDOR 3-Day
3. Likely	3. RIDDOR Major Injury
4. Very Likely	4. Death or very serious injury to one person
5. Almost Inevitable	5. Death or serious injury to many persons

Risks are assessed both before and after controls are put into place. Before controls, we are assessing what would happen if there were no controls. It is important when considering severity to assess the most likely outcome. For example, consider a rigging operative falling from 3m onto concrete. The operative could be killed or they could get away with no injuries. The most likely outcome however, would be a major injury such as a broken bone.

Step 3: Develop Controls

- Having determined what the hazards are, and to what extent they pose a risk we now need to do something about it. We are required by MHSWR to take a methodical approach which attempts to reduce risk at source. This can be considered under the following headings:
- Eliminate the risk at source. There is a point at which any operation is simply too risky and you must consider this. An alternative is to find a different approach. A good example of eliminating risk at source is a mother grid. It eliminates the risk of riggers falling from height by lowering the grid to the floor and carrying out a fix and hoist.
- Substitute for a safer method or product. A good example is the use of emulsion paints as a substitute for the more hazardous solvent paints in stand build, or at seated event substituting a glass bottle with a plastic bottle for drinks.
- Reduce the risk in a quantifiable way. A good example is the prolific use of centre tapped earth transformers for temporary power (the yellow boxes). This reduces the voltage risk from 230V to a safer 100V or below on the event floor.
- Isolate from the hazard. This is a common form of control at event build ups. Workers are isolated from the risk of falling objects when raising a lighting rig by taping off the area under the rig to prevent access.
- Control the risk. All too often this is the start point in many poor risk assessments. Notice how far down the order this is. The most common form of control on the event floor is the use of security and floor management. Another example is an agreed safe system for the lowering of stand panels (i.e. not just letting them fall!)
- Personal Protective Equipment (PPE) are items such as hard hat and safety shoes. They are only effective if something goes wrong. A hard hat is only of use if something falls on your head. It also only protects you and not the person next to you unless they are wearing one too. Far better to prevent the object falling in the first place.
- Discipline is also a method on which there is far too much reliance. It is fairly self evident that simply telling people not to do things that are unsafe and then punishing them when they do, is not an effective way of controlling risk.

The example below illustrates the general layout of a risk assessment using the example of vehicle access. P=Probability of an injury, S=Likely severity should an injury occur, R=Risk rating (ie PxS). With no controls the risk rating is assessed to be 8, which is HIGH and unacceptable. After controls are put into place it is assessed to be 4, which is LOW and acceptable.

Hazard	Consequence	Who is at Risk	P	S	R	Controls	P	S	R
Access and egress of vehicles	Impact injuries Collision	Staff Exhibitors Contractors Members of the public	2	4	8	Isolate pedestrians with barriers Competent traffic marshals to ensure even flow of traffic and marshalling of routes and cargo doors Abide by house (venue) traffic rules	1	4	4
Key									
Action Level									
1- 4 LOW no further controls required									
5 -7 MED – justify /review for each event day									
8+ HIGH –immediate action/ further controls needed									

The MHSWR and associated guidance also requires that risks should be mitigated with a view to achieving maximum reduction in the level of risk within the bounds of what is reasonably practicable. This means that the employer should do what is reasonable within the constraints of the available resources in terms of time, money and personnel. This is not a licence to do nothing on the basis that it is too expensive, but should be the result of careful consideration. The key word here is 'reasonable'. The question to be asked is have you made reasonable provision to control the risks relative to the costs of controlling them? For example, consider the requirement for floor managers in a large exhibition. How many floor managers would provide just enough cover? Let us say you decide that two would suffice. Three would be better but how much would it achieve in risk reduction relative to the cost? This is the line of logic which you need to follow.

Step 4: Implement Controls

This is the business of implementing controls on the event floor itself. It is worthwhile considering all the practical implications of control measures before they are put into place. For example you may decide on full bag searches as a security measure. This may be easier said than done when you are expecting thousands of visitors! If it must be done then you need to think of the practical application such as the space for bag searches and the number of security staff that you will need.

Step 5: Monitor and Review

It is important to monitor the event floor to ensure that prescribed controls are actually in place. You also need a system of reviewing risk assessments. Event risk assessments have a natural review cycle and a new one is required for each event. For routine operations every risk assessment should have a review date. Other times when risk assessments need to be reviewed are:

- When there has been an accident or incident
- When there is a significant change in personnel or process
- When there is a change in the law
- When monitoring reveals problems.

Fire Risk Assessment

The principles of risk assessment generally still apply as they have been outlined above, however, a fire risk assessment is a very specific legal requirement under The Regulatory Reform (Fire Safety) Order and related guidance. Every venue must do a fire risk assessment. They must make the findings available to an event organiser. For practical purposes, especially in large venues, this may be the section which applies particularly to the halls. The organiser must then do their fire risk assessment. The key question to be asked here is 'to what extent does my event alter the dynamics of the fire risk and fire loading in the hall?' Note. Fire Legislation and guidance referred to in the eGuide applies only in England and Wales and will be updated as and when UK venues outside England and Wales adopt this guidance. Notwithstanding, fire safety is a science and as such the key principles are generally applicable in any venue.

Typical aspects which would increase the fire risk would be:

- Naked flame on stands (candles or gel burners)
- Use of compressed or flammable gases on stands
- Use of pyrotechnics, lasers and other stage effects
- Cookery demonstrations
- Exhibition of motor vehicles
- Likelihood of illegal smoking in outfield areas or in built storage areas on stands
- High levels of packaging waste
- High numbers of complex structures.
- Hot works during stand construction
- Dressing of stock or Octanorm panels with untreated (non flame retardant) materials.

Exhibitors will also need to complete a fire risk assessment. To keep it simple it is suggested that they fill in some form of return which either indicates that there is no risk, or acknowledges it, and includes it as part of the stand risk assessment (see below).

Any stand which is a complex structure or space only stand on which large numbers of people could gather will need a fire risk assessment simply because of the escape issue.

The Government has issued a set of guidance books for various industries. The principal guidance which applies to the Events Industry is Fire Safety Risk Assessment – Large Places of Assembly. It is written especially for venues for gatherings of over 300 persons. Other guidance in the series includes Small and Medium Places of Assembly for small gatherings up to 60 or medium gatherings up to 300, and Theatres Cinemas and Similar Premises.

A suggested fire risk assessment template can be found under Risk Assessment: Templates.

Exhibitor Risk Assessment

Every exhibition stand is a miniature workplace and therefore needs a risk assessment. Again the five steps approach will apply. There is a danger, however, of over complicating things. The erection of shell scheme will be covered by the shell scheme contractor's assessment. If the activity on the stand is clearly without significant risk, there is no need for a risk assessment, although there is a need for the exhibitor to confirm that this is the case. Most organisers have a simple form for shell scheme exhibitors to either confirm that they have no significant risk or indicate which they have and how they intend to control it. This should be sufficient and can include the aspect of fire risk assessment.

For space only stands it is a little more complex. They will have to produce risk assessment and method statements for the safe erection and dismantling of their stands. They will also have to produce a fire risk assessment for the stand once it is in use. If they have any other activities on the stand, such as catering, this will also have to be covered by risk assessment.

Contractors' Risk Assessment

Contractors are the subject matter experts in their own field and must produce a show specific risk assessment for their activities. Again the risk assessment should reflect the complexity of the operation. As a guide contractors generally fall into two categories. The first category is those larger contractors whose activities interact with other parties working in the hall such as the lifting contractor. Their risk assessments should be reasonably comprehensive with specific detail on how they will control the risk to others. The second category is those contractors whose activities do not interact greatly such as floral delivery. These could be simpler risk assessments focusing on ensuring that they can operate safely in the hall.

Vetting Risk Assessment

Organisers should vet risk assessments to make sure they have been done properly. The following are common indicators of a poor risk assessment:

- Too simplistic, does not cover the range of risks
- It is simply a big book of all the risk assessments that the company has ever done without any attempt to relate it to the show
- It contains obvious and erroneous references to the last show they did
- Generated by head office so the team on the ground have no idea what is in it
- Long overdue for review
- It has clearly been done by someone who has never worked in an event venue.

Consultation

One of the major failings of risk assessments generally, is that they are done by people who only have a partial grasp of what is involved. It is very important to involve people who know the subject matter. For example at a ski show there was a demonstration of ski stunts on a specially constructed ski run. The organiser took the trouble to consult with a professional downhill skier on some of the technical aspects such as safety distances and ski bindings etc.