



The Contingency Planning

Learning Outcomes

By the end of this unit, the learner will be able to:

- ✓ Plan for unexpected situation
- ✓ Explain the need for a contingency plan

The Contingency Planning

Having a contingency plan is all about having strategies in place to deal with any incident that is likely to affect the smooth running of an event. It involves identifying risks or hazards that may occur and devising measures to deal with them appropriately. This exercise should be done well ahead of time before the event starts. The best strategy is to identify the worst-case scenario and to plan how you will deal with this to minimise the likelihood of this actually happening in the first place. Knowing the potential risks ahead of time reduces the time it takes to respond to an incident to ensure the safety and security of the people present at the event site. Information about the risks and the characteristics of the audience who will be attending the event makes it easy to plan more efficiently and to deal with any hazard more effectively.

Event Risk Assessment

Having a risk management strategy to deal with risk assessment and control to prevent cancellation of the event and more important to preserve the lives of people is very critical to the success of events. This strategic plan can also be used to secure insurance to cover the whole event. All risk assessments need to be recorded. It is also recommended that the assessor visit the venue when identifying potential hazards.

Five Steps to Risk Assessment

Step 1

Get to know about which activities need to be executed, where they will take place and how they will be executed and identify all potential hazards related to the activities.

Step 2

Targets which are likely to be affected by the hazards should be identified and recorded.

Step 3

You need to find out about existing safety precautions and operational procedures.

Step 4

Next, you need to assess the risks

Step 5

Recommend any urgent action/s that need to take place to minimise or eliminate the risks altogether.

How to Manage Risks

Creating an effective risk management plan to check risks at the event involves doing the following:

- You need to clearly define the event and also list all key stakeholders
- Organising a risk management meeting involving all stakeholders and staff
- Creating common terminology to describe and categorise all risks
- Putting the risks in a particular order or ranking the risk
- Developing procedures to manage the risks
- Delegating responsibilities for dealing with risks
- Creating a risk management plan and implementing the plan
- Ensuring regular monitoring of risk as n also putting in place incident reporting system
- Undertaking debriefing meeting after the event and making recommendations on specific actions to take in future based on what transpired at the event

What is Risk Management?

Risk management is defined as a logical and systematic method of establishing the context, identifying, analysing, evaluating, treating, monitoring and communicating risks associated with any activity, function or process in a way that will enable organisations to minimise losses and maximise opportunities.'

It is important to realise that risk occurs in all aspects of an event including:

- health and safety
- administration
- staff management
- financial
- legal
- marketing and public relations
- crowd management
- security
- event related activities
- environment
- fire and evacuation
- technology
- transport
- weather

Hazard Analysis

Event planners find information obtained from undertaking hazard analyses on likely emergencies critical to determining their effect on people and properties. Hazard analyses can help to determine what actions are required to prevent emergencies from occurring and also provide the best ways to respond to incidents at events. Hazard analysis begins with the creation of a list of potential risks at the event site. The nature of the list is dependent on the geographical location of the site, the topological features and the local weather pattern. For example, while some coastal areas may be prone to Tsunami and others areas may experience tornadoes instead.

The event manager needs to consider the effect of hazards which may lead to other hazards (secondary hazards) such as collapsing buildings and power loss, etc.

Typical List of Risks and Hazards

Abandoned vehicles	Hurricane
Airplane crash	Intentional chemical release
Airspace encroachment	Kidnapping
Assault	Landslide
Avalanche	Loss of utilities (water, sewer, telephone)
Biological incidents	Lost child
Bomb threat/suspicious package	Lost and found
Building inspection	Media relations
Cancellation of event	Motorcades
Civil disturbance with demonstrations	Mudslides
Communications	Parking
Credentials	Permitting
Crowd control	Power failure (sustained)
Cyber attacks	Radiological release
Dam failure	Security
Demonstrations	Structural collapse
Dignitary protection	Subsidence
Drought	Terrorism
Earthquake	Ticketing
Epidemic or other public health concern	Tornado
Evacuation of area	Traffic control

Explosive materials	Train derailment
Fire	Tsunami
First aid matters	Urban conflagration
Flood	Volcanic eruption
Food handling violations	Wildfire
Food waste disposal problems	Winter storm
Hazardous Materials release	
Hostage without terrorism	
Human waste disposal problems	

Event planners must identify characteristics of each possible hazard to determine the risk and consequences. Characteristics to identify are:

- Frequency of occurrence: The number of time the hazard is expected to happen based on predicted and historical data
- Magnitude and intensity: How severe the hazard is going to be
- Location: The exact location where the hazard can be found
- Spatial extent: Geographical area likely to suffer from the impact of the hazard
- Duration: How long the hazard is expected to persist
- Seasonal pattern: Periods of the year when hazards are more likely to occur
- Speed of onset and warning alert: The difference between the time of first warning and the actual time of occurrence

Potential Consequences

The event planner should assess hazards by studying the community to determine the following:

- People (deaths, injuries, and displacement).
- Critical facilities (days of service loss, repair time).
- Community functions (disruption).
- Property (damage, destruction, cost of replacement or repair).
- Potential secondary hazards (dams, chemical processing plants).
- Loss of revenue.
- Negative public image of jurisdiction.

Identify the Hazards

This involves knowing the type of hazards that can emerge with the community where the event will be hosted.

Weigh and Compare the Risks

Qualitative and quantitative ratings should be used to understand the level of threat posed by hazards. Such information is useful for planners to use for planning emergency arrangements.

Profile Hazards and their Potential Consequences

Historical and predictive information can be used in conjunction with data on the community to estimate the impact of hazards on the community.

Create and Apply Scenarios

Ratings of hazards can help the planners to know how to assign resources and what resources to use to bring an emergency situation under control. Brainstorming sessions can help to identify the signs at the early stages of the hazard, the consequence of the hazard, and finally, the impact on the locality.

Contingency Plans

This involves brainstorming to determine how a top-ranked hazard would develop into an emergency state. It deals with how a hazard starts and then escalates and provides opportunity to find out the resources that could be used to bring the situation under control. Knowing that not all events are bound to progress according to the event plan but some will experience some sort of incident, it is always advisable to develop contingency plans for each event to manage incidents when they occur. The event management company may hold consultation meetings with stakeholders and staff to devise an emergency response plan to provide analyses on hazards and their effects. In devising such a plan, the following factors must be considered:

- Weather conditions which will likely result in the cancellation or postponement of the event
- Provision for monitoring storms
- Determining the type of plans needed to deal with dangerous weather conditions
- Identifying people who will make decisions during emergency or incident moments
- How notification of cancellation or postponement will be done
- Provision of extra security personnel to cover for other staff engaged to deal with an incident
- Arranging for consultative meetings with hospital management to discuss the event and likely medical needs in the event of an incident

- Fire service requirement should be discussed with the fire service management team ahead of time
- How will mass decontamination be carried out?
- What steps would be taken to deal with Chemical, Biological, Radiological, and/or Nuclear attacks

The Planning Process

Organising for Safety

After developing the health and safety policy and delegating all responsibility, you need to create a safety plan before any work starts at the site.

The four elements of effective organisation you will be required to use include the following:

- Competence
- Control
- Cooperation
- Communication

Competence

Competency is the ability of staff to undertake activities for which they have been employed in a professional capacity while observing the rules of engagement. This requires staff of all trades to have the right training, expertise, knowledge and experience to carry out their assigned duties. Specialist advisers are also expected to have high competency when working for event management companies.

Evidence of competency of workers in terms health and safety awareness should be provided in the form of contractors' and subcontractors' health and safety procedures showing how the workers would be able to manage their own health and safety when executing their assigned duties.

Control

Control involves the establishment of organisational structure by management which shows all health and safety responsibilities, accountability of workers and how reporting should be done. Mechanisms of monitoring and controlling health and safety on the site should be well-understood by all workers before work begins.

Co-operation

Preparation of various plans, procedures, risk assessment, and other essential tools for staging the event will require input from contractors as well as, other workers who will be working on the site. This is the ideal opportunity for all staff to find out what is expected of them and how they can cooperate with

others to achieve the health and safety objectives and minimise potential risks associated with their respective tasks.

Communication

This involves maintaining effective communication with the workers by constantly reminding them of their safety obligations and the need to follow procedures accurately.

Monitoring Safety Performance

Two monitoring systems are normally used to maintain and enhance health and safety at event sites. These include

- Active monitoring
- Re-active monitoring

The active monitoring is pre-emptive in nature and provides a feedback mechanism for reporting performance levels before accidents or incidents occur. It involves regular comparison of a contractor's safety policies with the actual safety procedures adopted while work is being done at the site. Reactive monitoring on the other hand occurs only after an accident or incident has happened. It involves reporting all injuries, damages or risk likely to result in injuries. It also requires reporting on compromises in safety standards. Accidents and incidents are normally reported in event log books which are also used to record other pertinent information to be audited and reviewed in the near future. The ultimate goal of the monitoring system is to enhance the safety performance of future events.

The Role of The Safety Co-ordinator

The event manager needs to select someone who is very competent in overseeing all safety-related issues. The appointed safety coordinator should be experienced, knowledgeable, and have understanding of all legislation relating to safety at the workplace. The safety coordinator is also expected to report to the event manager. It is best to appoint someone who is not likely to have other conflicting roles. Generally, members of the organising team are not to be selected for the role of safety co-ordinator.

The responsibilities of the safety co-ordinator include the following:

- Selecting and monitoring staff
- Ensuring adherence to rules and regulations
- Working in close collaboration with all event staff
- Undertaking safety checks and assessing risks
- Inspecting permits and certificates to ensure compliance

- Providing contractors with safety information
- Managing safety issues during major incidents

It is not recommended that event organisers appoint themselves as the safety coordinator. To be effective, the safety coordinator should not have other competing roles which would inevitably face an event organiser during the course of the event.

Auditing and Reviewing Safety Performance

Auditing is done at the end of the event to determine whether loopholes or oversights or other problems exist in relation to safety policies and risk control measures and to understand the extent of their effectiveness. Another aspect of auditing involves undertaking debriefing sessions immediately after the events. Debriefing sessions make it possible for other stakeholders to share their views about your safety management system – an invaluable source of feedback to help you improve on future event.

Site Suitability Assessment

As mentioned earlier on, choosing a suitable site for the event can contribute to the overall success of the event. This requires carrying out a comprehensive assessment of the site to determining the capacity of the parking area, the capacity of the venue, free space for the audience, availability of temporary structures, suitability of the backstage area etc. This assessment is best carried out using a rough estimate of the number of people to expect and how you would want the event to proceed.

Venue/Site

Try to find more than one potential venue as likely candidates for hosting the event. Consultation with emergency services about the choices of venues you could use should help narrow down the numbers. When deciding on the venue to use for the event at the planning stage, you may have to determine:

- Whether the event would require multiple venues
- Whether fixed facilities are appropriate for the event or otherwise
- How the event may affect fixed facilities
- If the particular type of event can be hosted at a temporary venue
- Whether services and utilities have already been provided
- If additional services and utilities would have to be provided
- Whether you will need to procure backup services or utilities
- If event be 'one-of-a-kind' if hosted at a temporary

The initial stages of planning requires that an elaborate map or grid referencing system containing the location of all facilities and emergency provisions must be made available to all staff and guests who wish to attend the event. The map should contain the following details:

- Transport pick-up and drop-off points
- Guest and official viewing areas
- Seated eating areas
- Pedestrian walkways or thoroughfares
- Performers and officials or stewards marshalling areas
- Duration of the event and consideration for potential conflicting event on the date of the event
- First aid points and medical centres
- Provision of easily accessible facilities for people with disabilities
- Consideration for contingency arrangements in the event of bad weather
- Hazard warning systems
- Identification of hazards from utility lines which could brought down by storms and sources of potential floods
- Availability of adequate space for medical services to deal with large number of casualties
- Accessible routes for ambulances
- Provision of areas for mass decontamination
- Provision for emergency evacuation
- Provision of crowd control routes and procedures
- Provision of crowd overflow areas
- Availability of extra space and buffer zones around large venues (e.g., stadiums) at urban centres
- Site for protestors

Dealing with Disasters

Planning

Event risk assessment for preparing major incident plans should consider the following areas:

- Fire or explosion
- Terrorism
- Structural failure
- Crowd surge

- Violent behaviour
- Power/lighting failures
- Extreme weather events
- Off-site hazards which have potential to affect site activities
- Safety equipment malfunction (e.g., PA system or CCTV camera)

Preparation of Major Incident Plans

When preparing major incident plans, you need to consider the following:

- Select personnel who will take important decisions
- Provision efficient documentation and providing messaging boards
- Clearly mark out emergency routes
- Identify people who will need some sort of assistance
- Understanding the geography of the site of the venue
- Choosing holding areas for the crowd
- Creating coded messages to alert stewards during major incidents
- Designing mechanisms to warn public about incidents
- Adopting measures and procedures for evacuating people and for containment
- Selection of assembly point for emergency service providers
- Identifying local hospitals who are capable of dealing with major incidents and securing routes leading to the hospitals
- Location of emergency storage equipment
- Assigning roles to the staff to perform during major incidents
- Determining how decontamination would be done
- Knowledge of the nearest mortuary facility or provision of temporary one

Some Specific Scenarios

Event Cancellation or Postponement

The decision to cancel, postpone or interrupt an event must rest with the person who was selected during the planning phase to make the final call. The conditions for cancelling or postponing must be clearly specified and everyone needs to be made aware of this before the event starts.

On the occasion that an event has to be cancelled, postponed or interrupted, plans need to be in place to control the crowd who could become angry or dissatisfied about such actions. Procedure for readmitting the crowd should also be prepared as part of the contingency plan.

Stopping and Starting an Event

The person responsible for stopping the event must be known to all people who need to be aware of such information. Unscheduled stopping of events is a source of hazard due to guests being inconvenienced and this has to be considered very critically by the incident planning team before arriving at a decision to stop the event. Significant evaluation of risks needs to be undertaken before deciding to evacuate the venue. All of the actions to take need to be planned in advance, rehearsed and tested sufficiently to ensure they will not escalate problems.

Unattended Packages

Plans containing procedures for dealing with unattended packages must be prepared well in advance of the start of the event. The responsibilities for dealing with issues pertaining to different aspects of security threats posed by unattended items should be delegated to experts or specialist from backgrounds depending on the nature of the threat. The plan should consider where people may be evacuated to in the event of an incident and whether the services of an explosive detecting dog would be needed.

Concealment Areas

Areas which could serve as hiding places for weapons or concealed items need to be identified with the help of the police and preventive measures put in place to deter troublemakers from using these places.

Security Sweeps

Arrangement for security personnel to undertake site sweep should be made ahead of time. The persons to perform this activity must be identified, the goal of the sweep outlined, the frequency of the sweep determined and procedures for dealing with incidents clearly stated. This calls for venue staff and security personnel to collaborate to ensure this is done thoroughly and the venue site secured immediately.

Suicide Bombers

The threat posed by suicide bombers is a serious one that needs to be considered by the planning team and measures adopted to deal with this threat during events should it ever occur. Suicide bombers do not care much about being captured. They tend to target crowded public venues or areas to detonate the bomb which are concealed on their bodies. Other deadly tactics employed by terrorists involve using multiple suicide bombers; some bombers acting as decoys to draw emergency personnel to the scene before other bombers detonate their own with the emergency personnel as their target.

Criminal and Terrorist Risks

Terrorists like to attack high profile targets attending special events due to the worldwide media coverage at such events as well as the large number of people attracted to these events. It is important that security personnel do not underestimate the likelihood of an attack on small community event by thinking that they are not at risk of such attacks. Regardless of the size and nature of events, adequate preparations to deal with terrorist activities should be undertaken to protect all participants as well as the security personnel themselves. This means that personal protective equipment needs to be worn by the security personnel for their protection in their various roles. Terrorists are selective when it comes to picking events for launching attacks. They may choose a target based on the location, expected guests, festive periods, etc. Pre-emptive action by event organisers should identify potential terrorist groups who may be attracted to a particular event and for them to prepare adequately for such threats.

Threat Assessment

Having information on a terrorist's mode of operation is very important when trying to create an effective plan of preventive actions to take in those situation. The safety team should prepare well by practicing how they will respond in the event of a terrorist attack and they should have plans in place to reduce the likelihood of such an incident. The event planners need to understand two important categories of terrorism to equip them to deal with situation effectively:

- Counter terrorism: which deals with action taken to prevent terrorist activities
- Anti-terrorism: which has to do with reducing the potential impact of terrorist activities

Pre-Event Public Health Survey

Pre-event health assessment should be conducted by the event organisers in consultation with health authorities for the venue selected to host large crowds. The aim of this assessment is to determine whether the following facilities are available:

- Running water
- Provision of toilet facilities
- Provision of refrigeration for all perishable foodstuff
- Certified providers of bulk food items to the site catering team
- Provision of adequate refuse bins with covers for all waster products
- Provision of storage and removal facilities for liquid waste

Monitoring of health-related activities should be undertaken by public health inspectors to ensure that correct procedures are being followed. Food service operators who violate standards should be ordered to 'stop operating immediately' (what is termed 'cease operation order').

Public Health Contingency Arrangements

Contingency plans in this respect should include the following details:

- Provision of contact details for key event personnel such as emergency service personnel, environmental health personnel, health service personnel, trades people etc.
- Provide other staff with contact details
- Contact details of food proprietors on 24-hour basis
- Availability of alternative suppliers of equipment and utility if failure of utilities occurs
- Standby staff in the event regular staff become ill
- Provision for product recall
- Procedures for tracking epidemiological cases
- Efficient procedures for dealing with complaints
- Procedures for debriefing

Planning Medical Care

Medical logistic issues to tackle when planning events:

- Determine the number of medical stations you need
- Decide whether injured people need to find their way to medical facilities or there will have to be medical staff stationed across the venue to help the injured
- Devise unique medical identification codes. Will it be high visibility vest or uniform?
- Would you require vehicles to carry people to the medical facility? If vehicles are required, then the appropriate type needs to be chosen for the task: use four-wheel-drive for off-road venues or golf cart for green fields.
- Determine the form of transport for transferring people from medical facilities; this could be ambulance or chauffeur-driven.
- Find out how medical personnel would be effectively deployed to assist spectators in crowded areas
- Determine effective communication tools for attending medical team to use for communicating with other offsite medical personnel and key stakeholders
- Consider how to deal with sponsorship conflicts between the medical team and the event sponsor
- Determine the extent of onsite medical care that will be required based on the characteristics of the event

- Determine the kind of different medical profession you may need at the site, i.e., doctors, paramedics, and nurses, etc.
- Find out who will supply the medical personnel and where funding for this arrangement will come from
- Determine how external and local service personnel will synchronise their services if the services of both are required
- Determine the level of expertise of health staff to identify whether they would require further training
- Will authentication be required of the health personnel/ vehicles when accessing certain areas of the site/venue?
- Would there be the need for aero-medical services and its provision for landing area?
- The location of trauma centre should be clearly stated
- You need to identify the location of primary and secondary hospitals
- Consider whether there is sufficient number of beds and personnel to deal with emergency situations and take appropriate steps to address these

Management and Planning

- Identification of companies taking part in the process and selecting one of them to lead
- Organising series of meetings for key personnel to formulate the plan
- Determination of the role each company will play in relation to the provisions medical care
- Understanding the type of care to be provided
- Finding out which laws or regulations are important when providing emergency first aid care
- Creating a budget for medical care services
- Partnering with other emergency services providers such as the police, fire brigade and security services
- Consideration for equipment and the suppliers to provide them. How would the equipment be acquired? Would it be renting, buying, or borrowing the equipment?
- Determining whether volunteers will be needed and the qualification they are required to hold and how they are going to be rewarded.
- Providing security at medical centres for the medical team
- Provision of information management systems for treating patients
- You need to consider how patients' records will be managed after the event
- Preparing for weather-related illnesses such as hypothermia and heat stroke
- Determining the number of incidents reported by medical publication of similar event

Casualties

According to some experts who studied past events, casualties mostly arise from the following sources:

- Fainting and exhaustion at restricted areas due to heat, hysteria, etc.
- Injuries from broken glasses and bottle missiles
- People getting crush due to 'surging' to the front
- Diving onto the stage or 'surfing' on the crowd
- Use of prohibited drugs and excessive alcohol consumption
- Old-age medical condition

Medical Access to Venue

Medical service providers working at event venues must agree on the following:

- Making use of agreed reference maps to reach casualty quickly
- Determining the means of getting to distresses guests in crowds or through obstacles
- How to transport patients onsite
- Which access route should be dedicated to ambulance use
- How the nature of event might affect medical operations at the venue
- The use of aero-medical services and the regulations to govern this

Level of Care

Levels of care can be categorised as follows:

- Basic—first aid.
- Intermediate—first aid plus IV therapy and oxygen.
- Advanced—Care and life support and early management of severe trauma.
- Site Hospital—full monitoring, ventilation, and resuscitation capability.

Other level-of-care concerns include:

- Provision for treating patients who are victims of biological, chemical, radiological attacks
- Enhanced coordination of medical activities between onsite medical team and local offsite medical personnel
- Identification of the location of nearest hospital to the venue
- Availability of experienced medical staff who have managed similar events and have the requisite knowledge to deal with major incidents

Medical Aid Posts

Medical aid posts should be:

- Properly marked and easy to identify
- Located within five minutes of crowded areas
- Well-maintained and accessible to emergency vehicles
- Security-protected
- Equipped with good communication facilities
- Provided with adequate number of beds for injured or ill people
- Provided with adequate disposal facilities

Environmental Concerns

Weather

The effect of the weather on an event is usually determined by the location of the venue and whether the event is being held outdoors or indoors. Event organisers need to consider the extremes of the weather conditions, especially, with regards to high or low temperatures as these present hazards and risks to the audience. Other weather problems in addition to the extreme temperatures include thunderstorms, lightning strike, gusting wind, tornadoes etc.; these are conditions which are common to outdoor events. Local evacuation plans may not have provision for dealing with extra large number of people at event. Such situations will have a negative impact during emergency periods. It is at the planning phase that the event manager will get the opportunity to consider all likely weather scenarios and their effect on the event. Structures and equipment to be installed must be considered carefully in terms of their composition (whether metal, wood, plastic or stone), their height as well as their positioning. The areas surrounding the structures must be well-protected. The impact of lightning strikes on the equipment and consequently on the participants should be determined by an electrical expert to help the organisers to come up with measures to prevent electrocution when the stage or scaffolds become energised.

Planning considerations for weather phenomena include:

- Obtaining the latest weather forecast from the TV, internet, radio, or mobile phone
- Provide direct phone line connection to the nearest weather service station
- Informing participants about the latest weather information
- Making arrangements with the organisers to interrupt proceedings and provide information via the public address system and advice the participants on what to do
- Providing lightning detector systems

Time, planning, equipment, and extensive stakeholder participation are the most important ingredients necessary to develop an effective contingency plan to deal with severe weather issues.

Site Hazards

Planning team need to determine potential hazards which may include:

- Falling power lines
- Lightening striking certain structure and equipment at the venue
- Potential flooding due to nearby stream or water body
- Danger from bushfires
- Gusty winds
- Extremely high or low temperature
- Danger of snipers using elevated positions to carry out an attack
- Reptiles
- Rodents
- Insects
- Spiders
- Pollens and poisonous plants and weeds
- Marshes or swamps
- Quarries and pits
- Pollution from dust and noise (this will require the wearing of hearing protection)
- Water quality (bacteriological)
- Hazardous chemicals or underground tanks.
- Darkness
- Use of lasers or Ultra violet (UV)light
- Use of prohibited items such as weapons and drugs

Camping

You may have to consider the following if camping is allowed onsite:

- Removal of all fire hazards
- Provision of disposal facilities
- Provision of emergency service personnel and ambulance

- Presence of security personnel to protect properties and personal belongings
- Availability of public address system
- Construction of temporary streets

To ensure safety the camping site you need to consider:

- Danger from falling tree branches
- Flooding concerns
- Danger from utility line falling to the ground due to storms

Structural Matters

All structural facilities required for staging the event have to be considered carefully during the planning phase. The planners also have to decide whether or not a temporary structure would be required.

Stages, Platforms and other performance facilities

Structures such as stages and platforms and other structures to be used for an event need to be assessed for safety reasons by qualified professionals. The type of equipment and structure to use will depend on the nature of the event site. Stage arrangements or positioning depends on the expected behaviour of guest at the event. Elderly people attending events are known to be calm and teenagers are more boisterous, especially at rock concerts, where these teenagers or young adults tend to jump onto the stage and interact with their hero/heroine.

The situation of having fans accessing the stage is a risky undertaking and may result in accidents, so event planners need to understand the emotional dimension of the fans at events.

Ways of gathering information about different categories of crowds at events include:

- Public safety official/s and press review report may provide some relevant information on crowd behaviour
- Information on crowd behaviour can be obtained from spectators who have been to some past entertainment events
- The promoter may also provide the event manager with information on the behaviour of audiences at past events.

Elevation of the stage serves three purposes: the first is to enable the audience to have a better view of performers, the second is for it to act as a barrier and lastly to prevent crowds from accessing the stage and to create space in front of the stage since the audience would have to be a distance further away from the stage to have a decent view.

Sometimes the first aid personnel are stationed under the stages to work on injuries at the front of the audience section. Reinforcement using additional physical barrier is also required at the front of the stage to guarantee the safety and security of the guests.

Indoor Events

A 'V' shape barrier is effective for keeping crowds away from the main stage when there is a surge towards the front from behind. The space between the stage and the V-shape can be occupied by the security personnel. Provision should be made for this space to be easily accessed from the sides. The V-shape barrier should be firmly anchored into the floor with protection padding wrapped around it.

Outdoor Events

During outdoor events, board fences are used as stage barriers in a similar fashion to the V-shape barrier just described for indoor events, but with a few minor differences. The main difference is that the board fence provides walking space on either side of the fence whereas the V-shape has space on the stage side only. The major requirement for the board fence is that it should be made from a flexible material to prevent people getting crushed as a result of surging from the back and also it must be strong enough so it does not collapse and cause injuries when pressed against. However, most fences provided at event appear not to meet these two-fold criteria but they usually fulfil just one of them.

One advantage of having such a fence in front of the stage is that people seated at the front row would have to be positioned some distance away in order to have a view of the performer thereby providing some level of safety for the performers.

Emergency Evacuation

Some venues are designed to have collapsible physical structures to enable maximum escape passage way for evacuating the venue quickly during an emergency.

Temporary Structures

Most short duration events tend to rely on the erection of temporary structures such as viewing platforms, marquees, tents, dance platform, variety of towers, and overhead signs, etc. Under normal circumstances, structures have to be designed with safety features to deal with hazards. However, majority of these structures do not have inbuilt safety features as expected. While erecting such structures, it is important to have onsite a local authority building code inspector to ensure standards and specifications are complied with. Hazards often arise during the use of low quality structures which have not been designed to absorb large stress so that during the event the weights of spectators or high winds places extreme stress on the structure and present hazards to the guests.

Warning messages should be displayed by building inspectors when they find any temporary structure to be in violation of local authority building regulations. Long duration events on the other hand need regular inspection of temporary structures to ensure the integrity of the structure is intact.

Load Capacity

Structures must not be overloaded beyond their load capacity. Warning signs must be provided to alert people of this and to prevent misuse of the structures. Structures such as viewing platform, building walkways etc., should be controlled to ensure the audience do not overcrowd these structures and create risks for themselves and others. Protecting the base of the structure from getting damaged from the impact of vehicles is accomplished by creating buffer zones around them.

Seating

It is best to provide teenagers with seats to prevent surges and crushing. The seats need to be secured to the ground to allow medical teams to gain access to someone who needs urgent attention. There must be sufficient spacing to allow quick access.

Temporary Seating and Anchorage

Some venues come with fixed seat around the perimeter and unsecured foldable seats at the central area of the venue. Depending on the type of guests, these unsecured seats may not cause any problems. But when certain other categories of people like the very enthusiastic, boisterous, or aggressive ones turn up, the unsecured seats may become a source of grief when they are turned into dangerous missiles or projectiles. People standing on unsecured seats to get a better view may topple over and injure themselves or cause a domino effect when they fall on nearby seats.

Consequently, all unsecured seats need to be secured to the floor to avoid all of the hazards mentioned above. Alternatively, two long planks may be provided along the front and back of the chairs with the chairs attached to the planks.

General Issues for Consideration

There are a few major crowd issues that have to be dealt with. The first major crowd issue to address requires knowing the maximum number of people to allow to the venue to ensure the safety of guests. One also needs to know the age and gender of the guests to help make extra facilities available to children and senior citizens. Children may require child care and rental strollers and other special medical resources because they are more vulnerable to sustain injuries from getting crushed by older people.

Certain class of spectators are also attracted to events and due attention must be given to them. The following should be considered when planning events with regards to the kind of people who attend the event.

- Cases of certain people possessing weapons, drugs and alcohol may be high during rock events.
- There will be increased need for onsite medical facility for infirmed guest at 'faith healing' and similar religious events
- There is also the need for higher level of health services for senior citizens
- Beware of the propensity for violence at sport events and prepare for this
- Event planners should make provision for multicultural facilities such as special food, multi-lingual publications and interpreters at cultural events

Special considerations for outdoor events include:

- Controlling and distributing effectively across the field
- Working with a guide of four-five square feet per person when distributing crowds
- Barrier management of crowd by security personnel

Entrances and Exits

Important considerations for the entry and exit of spectators include:

Entrances

The main functions of entrances include:

- To enable supervising, directing, and marshalling participants
- To provide easy access points for emergence service personnel
- Making it easy for participants to escape from danger
- Security personnel use them as security check point to ensure no prohibited item gets into the venue

Entrances should also:

- Have the correct signage
- Be operational always
- Allow for separate access by pedestrians and vehicles

Entrance Management

Items event organizers need to consider when performing entrance management include:

- Ensuring flexible opening and closing times (ideal to stick with advertised times)
- Spacing entry times using support activities (performances)
- Ensuring entrances are well cleared of all other activities
- Remove all line from entrance areas
- Provide adequate number of fences, gates, barriers etc.
- Ticket sales and pick-up point should be in line with entrances but separated
- Availability of public address system
- Medical and security personnel should be close by to deal with unforeseen events
- Provision of properly designed security search point to prevent prohibited items such as weapons, drugs, and glass, etc., from being snuck in.
- Provide suitably designated area to store confiscated items
- Provide toilet nearby for emergency situations

Exit Management

Exit management include undertaking the following functions:

- Ensure that exit doors are not locked. If personnel are concerned about illegal entry, then doors could be fitted with alarms.
- Ensure that exit doors open in the direction of escape and are confirmed as operational.
- Check the placement, function, and signposting of exits.
- Ensure that doors that do not lead to an exit are so marked, preventing “dead end” entrapment and the potential for panic.
- Ensure that all exit corridors are free of all impediments to crowd movement.
- Ensure that turnstiles are freewheeling or can operate in reverse.
- Ensure that cords, which can create trip hazards, do not cross exit corridors. (If this precaution is unavoidable, the cord should be marked, insulated, and secured to the floor to prevent damage and potential electrical risks.)

Escalator Management

Event organisers should provide for:

- Staff control at the top and bottom, including an emergency stop button.
- Metering of the flow at both ends.

Security Roles and Responsibilities

The role and responsibility of all security personnel should be clearly defined and good communication maintained between security and emergency services. The event manager needs to maintain a good working relation among the following groups of personnel:

- Security personnel
- The promoter
- Health and medical services
- Other police and emergency services
- Other security services (for example, those who are responsible for the performers' personal safety)

Special Security Considerations

When making arrangements for special security, the event manager and organisers need to consider the following:

- Would the event use the service of private security or the police?
- What provision will be made to integrate private security personnel and the police if the primary security duty is assigned to private security?
- Understanding what policy to use when dealing with minor offenses
- If money will be collected and stored onsite, what ideal security arrangements need to be made to protect the facility where the money will be stored?
- What are the risks associated with transferring the money from one point to another and what kind of security would be needed for the safe movement of the money?
- What security measures will be adopted to protect high-profile persons in crowded areas or when moving them through crowds?
- Consider how lost or stolen property would be handled
- Consider putting in place measures to detect forged credentials
- Also identify how to deal with lost or missing persons

A policy of equal treatment and searching of people should be adopted by all security personnel when dealing with all guests, with no preferential treatment given to any particular person. All guests must be treated as 'equal security risks.'

Roles and responsibility must be clearly stated and may include:

- Preventing audience from gaining access to the stage
- Managing the audience to prevent crushing
- Maintaining adequate security at entrances and exits
- Providing stewards to direct traffic at the site
- Conducting thorough searches for prohibited items, such as weapons and drugs
- Providing security for large sums of money
- Helping emergency services

Pre-Event Briefing of Security Personnel

To enable security personnel to perform their duties effectively, you must brief them appropriately prior to the event. This briefing should provide security personnel with:

- a grid map showing key areas to patrol
- Explanation of procedures to security for them to deal with inappropriate behaviours
- Basic information on all aspects of the events including parking and emergency procedures, etc.
- Training on how to operate special equipment during emergencies
- Adequate training in using communication devices and procedures for reporting incidents
- Details on contingency plans and emergency/evacuation procedures, e.g., alerting safety personnel, etc.

Briefing security personnel on what is expected of them is important to ensuring they are able to perform efficiently. This should be done before the event begins. At the briefing session, the security personnel are provided with:

- Clearly mark doors which do not lead to an exit to prevent entrapment and panicking of people who picked the wrong route
- Exit corridor must be free of all obstacles that can affect movement of guests
- Provide reversible turnstiles which are in good working conditions
- Avoid having cords crossing exit corridor to prevent tripping people. Alternatively, the cords could be marked, insulated and secured to the floor
- Exit doors should at most be secured with alarm without locking them to prevent illegal entry

- All exit doors should open in the direction of escape and in good working order
- Provide adequate sign to indicate location of exit

The attitude of security staff can diffuse confrontational situations or escalate matters to fever pitch level during an event. The event organisers must consider the role of security personnel to ensuring an enjoyable experience for the guest by reminding them, at pre-event briefings, of their role not only in controlling the crowd but also as facilitators of peace.

Deployment

Security personnel should be strategically deployed to key areas of venues. For indoor events, foot patrols may be more suitable while outdoor events may require golf carts, vehicles or bicycles for patrol duties. The security personnel should monitor all areas and focus on particular problem-spots. Strategically sited observation points may also be established to observe the crowd with surveillance cameras or video pole cameras for highlighting populated areas.

Information Centre

Provision of an adequately resourced information centre will relieve pressure on other personnel such as medical, security and event staff and also serve as a place for guests to clarify any aspects of the event they are unsure about.

Further Reading:

- ✓ *Contingency Planning and Disaster Recovery: A Small Business Guide*
By Donna R. Childs, Stefan Dietrich 2011
- ✓ *Guidelines for Contingency Planning for Information Resources Services*
By DIANE Publishing Company 1996