

# The event safety guide

A guide to health, safety and welfare at music and similar events

## Extract from the Purple Guide

### Crowd Management

The safety and enjoyment of people attending a music event will depend largely on the effective management of the crowd. Crowd management, however, is not simply achieved by attempting to control the audience, but by trying to understand their behaviour and the various factors which can affect this. It is necessary to put a complete system into practice rather than attempt to control certain elements of obvious concern, without understanding the underlying issues. Further information on crowd management can be found in HSE's *Managing crowds safely*.

In addition to the aspects covered in this chapter, many other factors in the design and planning of the event will have a bearing on crowd management such as:

design of the venue to allow good entry and exit and to allow for crowd movement within the venue;

audience capacity;

provision of adequate facilities for refreshments, sanitary requirements, etc;

clear, effective means of communication with the audience.

### Audience profile and crowd dynamics

Two important aspects to be considered in crowd management are:

audience profile; and

crowd dynamics.

Many factors may introduce the potential for crowd movement and therefore need to be

considered at the venue and site-design stage, such as:

multiple-stage entertainment;

provision of satellite stages, platforms and stage thrusts;

sound and video towers; sight-line obstructions or restricted views;

multiple-barrier systems and pens;

location of facilities;

the psychological state of the audience;

special effects.

The way in which crowds behave and respond is a combination of physical and other factors. The dynamics of the crowd will depend, in a large part, on the activities of the crowd and this, in turn will be influenced by the character of both the crowd and the groups or artists performing.

Matters to be addressed include:

the character of the artists or groups, eg diving into audience, throwing items into audience and performing in audience arena;

the audience profile, eg male/female split, age of audience, heavy consumption of alcohol or likelihood of drug consumption, physical behaviour, eg 'slammers';

likely crowd activities; eg body surfers, slam dancers, moshers, aerialists and stage diving.

It is important for stewards to be able to recognise and understand what are normal' activities for the audience.

### **Entry and exit of the audience**

Before the audience enters the venue, ensure that checks are made of all fire and emergency facilities and that:

all exits are unlocked;

escape routes are clear;

emergency lighting works;

fire-fighting equipment and alarms

are in full working order;

a PA system for use in emergencies can be heard clearly in all parts of the venue.

If these checks are to be carried out by stewards clear instructions must be given.

### **Entrances and exits**

Ensure that entrances and exits are clearly signposted and operate efficiently. Consider the needs of children and people with mobility difficulties. Separate entrances and exits for pedestrian access from entry routes used by emergency services, and concession vehicles. Provide information to the audience about any restricted exits that are not in use while the event is in progress (see chapter on Venue and site design for more information on entrances and exits).

### **Opening time**

Problems may occur at entry points if large numbers of people seek to gain admission at the same time and if the situation is not properly managed this may result in crushing injuries. It is therefore recommended that:

entrances are opened some considerable time (eg 1-2 hours) before the event is due to start and the audience is made aware of this by tickets, posters or other means.

If significant crowding is likely to occur before that time, consider opening gates before the published time, providing that on-site services are ready;

admission is staggered by providing early supporting acts or other activities.

It is important to appreciate that when entrances are opened early the audience demands on facilities such as waste clearing, sanitary accommodation and catering, will be increased.

### **Crowd pressure at the entrances**

This can be reduced by:

keeping all other activities, including mobile concessions, well clear of entry points;

arranging for adequate queuing areas away from entrances;

creating holding areas away from entrances to relieve the pressures on these points;

ensuring that barriers, fences, gates and turnstiles are suitable and sufficient for the numbers using them;

locating ticket sales and pick-up points away from the entrance;

providing a sufficient number of trained and competent stewards;

arranging for a short-range PA system and megaphones to be made available at entrances to

notify people of any delay.

### **Opening the entrances and arrangements for the front-of-stage area**

When entrances are first opened at non-seated events, the audience tends to rush towards the front which can cause tripping accidents and injuries. Carefully consider how the area in front of the stage will be managed and stewarded when the entrances are opened. If a standing area is provided in front of the stage, make sure that entrances do not lead directly to this area from stage right or left.

One recommended method of easing the initial rush towards the stage and preventing slipping or tripping accidents is to provide a line or lines of stewards across the arena through which the audience can move towards the stage in an orderly manner. This may be supplemented by PA announcements to keep the audience informed about what is happening.

### **Ticketing**

Ticketing policies can have a direct effect on the safe management of the audience. Consider the following: where a capacity or near-capacity attendance is expected for an event, admission should be by advance ticket only;

tickets for seats which offer restricted views, or are uncovered, are marked accordingly, and the buyer forewarned;

tickets for seats with severely restricted views are not sold;

part of the ticket retained by the audience member after passing through a ticket control point should clearly identify the location of the accommodation for which it has been issued;

a simplified, understandable ground plan is shown on the reverse side;

if there is more than one entrance, introduce colour coding of tickets corresponding to different entrances and ensure audience members are proportionally divided between entrances;

all sections of the venue, all aisles, rows and individual seats, are clearly marked or numbered, as per the ticketing information.

### **Admission policies**

As stated above, the admission policies can have a direct effect on the rates of admission and the management of entrance areas and audience accommodation in general. Specific points to be considered include:

Cash sales - To ensure a steady flow of audience into the venue when entry is by cash, set the admission price at a round figure. This avoids the need for handling large amounts of small change.

Ticket-only sales - The advantage of confining entry to ticket-only is that the rate of admission should be higher than for cash sale. If tickets are sold at the event, wherever possible, provide separate sales outlets.

Ensure that these outlets are clearly signposted and positioned so that queues do not conflict with queues for other entry points.

Reserved (or numbered) seat ticket sales - Selling tickets for specific numbered seats has the advantage that the seats are more likely to be sold in blocks and the system allows different categories of audience member (eg parent and child) to purchase adjacent seats and enter the venue together. This policy helps to avoid random gaps and ensures that in the key period preceding the start of the event there will be less need for stewards to direct latecomers to the remaining seats, or move members of the audience who have already settled.

Unreserved seat sales - Selling unreserved seats has the advantage of being easier to administer. However, people are prone to occupy seats in a random pattern, and, as stated in paragraph 297, it can be hard to fill unoccupied seats in the important period before the start of the event. For this reason, when seats are sold unreserved, a reduction in the number of seats made available for sale may be necessary (in the region of 5-10% of total capacity, according to local circumstances).

No ticket sales on site - If all tickets have sold out in advance, or if tickets are not sold on site, every effort should be made to publicise this fact in the media. In addition, place signs advising people of the situation along all approaches to the event, to avoid an unnecessary build-up of crowds outside.

This is a preferred method for likely sell-out concerts

### **Ticket design**

Ticket design can have a direct effect on the rate of admission. Clear, easy-to-read information will speed the ability of the entry-point steward to process the ticket. Similarly, if anti-counterfeiting features are incorporated (as is recommended), ensure that there are simple procedures in place for the steward to check each ticket's validity.

### **Admission of young children**

It may not be appropriate to allow young children, particularly those under the age of five years, to attend certain events because they may be trampled or crushed. If they are not to be allowed in, clearly advertise this fact in advance. Where young children are allowed, consider arrangements for prams and pushchairs, and at large events, dedicated children's areas may be useful. Consider contingency planning for dealing with this element of the audience, such as relocation to a specific area and ensure that you have a procedure in place for stewards to assist with such relocation.

### **Pass outs**

Pass outs enable members of the audience to leave the event for a short time and return. Consider this facility for events that will last for more than four hours.

### **Guest/VIP/restricted areas**

Separate access points may be needed for particular types of ticket holders, eg guests and VIPs, artists and their entourage, workers, officials and emergency services workers. Consider the location of the gates between these areas and the main arena, to prevent any crowd build-up at such points. Clear identification of people permitted into such areas will assist stewards in controlling admission and in minimising delays in admission, which reduces queuing. Such identification may be by means of special passes or wristbands.

### **Searching**

Searching at entrances may be necessary to prevent prohibited items from being brought onto the site. Ensure that searching is only carried out by properly trained and supervised stewards.

### **Late leavers**

At the end of the event when most of the audience have left, if practicable, stewards can form a line in front of the stage and slowly walk to the furthest exit, moving the remaining audience out of the area.

### **Crowd sway/surges**

At large events it is sometimes effective to subdivide the audience into pens, which reduces the effects of sway and surge. If this method is used, ensure that there is a system in place to prevent overcrowding. Think carefully about where to position stewards to monitor the audience for distress, crushing, sway, or surges, as they all present a risk to members of the audience. Use of CCTV and/or the provision of raised viewing platforms, especially stage left and stage right, may help to monitor the audience for signs of distress.

If people are at risk, you will need to take immediate action, eg by enlisting the assistance of performers and by making an announcement. The performers could be asked to alert you or the safety co-ordinator if they are concerned about a possible serious audience problem. It can then be investigated immediately.

## **Police involvement**

If there is to be a police presence in, or at the event, the responsibilities and functions of the police need to be agreed and documented, eg whether particular posts are to be staffed by stewards or by police officers, and who will assume responsibility in particular circumstances.

Record the outcome of these discussions in a statement of intent. Remember that a statement of intent is a management statement and not a legal document.

## **Aids to crowd management**

Use of PA systems and video screens

It may be helpful to arrange a safety announcement for the audience before the event starts. The announcement could give information about the location of exits, the identification of stewards and procedures for evacuation. The use of video screens to provide entertainment before the event and during changeover periods can also help crowd management. They can be used to inform the audience about safety arrangements, facilities on the site and transport, etc.

However, screens may not be visible in all parts of the site and so it may be necessary to plan supplementary means of giving information.

## **Stewarding**

The main responsibility of stewards is crowd management. They are also there to assist the police and other emergency services if necessary. Apart from the specialist workers provided for the protection of the performers, the use of separate teams for security and stewarding should not be considered without consultation between all interested parties. The roles of these two groups are closely inter-linked and lack of communication can lead to ineffective crowd management.

## **Deployment and numbers of stewards**

The risk assessment will help you to establish the number of stewards necessary to manage the audience safely. When preparing your risk assessment for crowd management, carry out a comprehensive survey to assess the various parts of the site and consider the size and profile of the audience.

Basing stewarding numbers on the risk assessment rather than on a precise mathematical formula will allow a full account to be taken of all relevant circumstances, including previous experience. To manage the audience, locate stewards at key points. These include barriers, pit areas, gangways, entrances and exits and the mixer desk and delay towers.

Some of the matters to be considered for the risk assessment include:

previous experience of specific behaviour associated with the performers;

uneven ground, presence of obstacles, etc, within or around site, affecting flow rates;

length of perimeter fencing;

type of stage barrier and any secondary barriers;

provision of seating.

## **Organisation of stewards**

There has to be an established chain of command. Consider appointing a chief steward to be responsible for the effective management of all stewarding contractors at the event. (This could be a role of the safety co-ordinator.) The arrangements will depend on the nature and size of the event and venue but may include:

a chief steward; a number of senior supervisors, responsible for specific tasks, who report directly to the chief steward; and a number of supervisors who report direct to a senior supervisor and who are normally in charge of six to ten stewards.

Ensure that stewards receive a written statement of their duties, a checklist (if this is appropriate), and a plan showing key features. Brief stewards before the event, particularly about communicating with supervisors and others in the event of a major incident.

## **Conduct of stewards**

All stewards need to be fit to carry out their allocated duties, aged 18 years and over, and while on duty they should concentrate only on their duties and not on the performance. Ensure that stewards understand that they should:

not leave their place without permission;

not consume or be under the influence of alcohol or other drugs; and

remain calm and be courteous towards all members of the audience.

All stewards should wear distinctive clothing, such as tabards and be individually identifiable by means of a number which is clearly visible.

## **Competency of stewards**

Duties and competencies of stewards include:

understanding their general responsibilities towards the health and safety of all categories

of audience (including those with special needs and children), other stewards, event

workers and themselves;

carrying out pre-event safety checks;

being familiar with the layout of the site and able to assist the audience by giving information about the available facilities including first aid, toilet, water, welfare and facilities for people with special needs, etc;

staffing entrances, exits and other strategic points; eg exit doors or gates which are not continuously secured in the open position while the event is in progress;

controlling or directing the audience who are entering or leaving the event, to help achieve an even flow of people into and from the various parts of the site;

recognising crowd conditions to ensure the safe dispersal of audience and the prevention of overcrowding;

assisting in the safe operation of the event by keeping gangways and exits clear at all times and preventing standing on seats and furniture;

investigating any disturbances or incidents;

ensuring that combustible refuse does not accumulate;

responding to emergencies (such as the early stages of a fire), raising the alarm and taking the necessary immediate action;

being familiar with the arrangements for evacuating the audience, including coded messages and undertaking specific duties in an emergency;

communicating with the incident control centre in the event of an emergency.

### **Stewards' training**

Ensure that all stewards are trained so that they can carry out their duties effectively. The level of training will depend on the type of functions to be performed. Keep a record of the training and instruction provided, including the:

date of the instruction or exercise;

duration;

name of the person giving the instruction;

name of the person(s) receiving the instruction; and

nature of the instruction or training.

All stewards need to be trained in fire safety matters, emergency evacuation and dealing with incidents such as bomb threats. For those working in the pit area, make sure they are trained so that they are able to lift distressed people out of the audience safely and without risk to themselves. (The Guide to safety at sports grounds provides some further information on the training of stewards working in football stadia.)

### **Stewards' welfare**

Ensure that stewards are not stationed for long periods near to loudspeakers and make sure they are provided with ear protection in accordance with the Noise at Work Regulations 1989 (see chapter on Sound: noise and vibration). Stewards will need adequate rest breaks so ensure that arrangements are in place for them to have rest periods at reasonable intervals.

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