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A Welcome Statement

Welcome to the second issue (December 2009) of the Journal of Crowd Safety and Security Management (JCSSM). Since the appearance of the first issue of the Journal, in its modest form, in February 2009, the Journal's webpage has been receiving, on average, 50 hits a week from readers around the world. In the first issue we focused entirely on publishing abridged and edited versions of students' work-based projects; however, our aspirations as stated in the Editorial Statement were to do much more. In this issue, I am pleased to say that we have taken the first steps on the long road of fulfilling these aspirations. We have invited a number of notable academics and industry practitioners to help us on this journey by becoming the first members of the Journal's advisory Editorial Board, and I am humbled to state that they have all accepted our invitation and readily answered our requests for contributions to the current issue. We aspired to publish, alongside students' edited projects, double blind peer reviewed articles, and in this issue Professor Gil Fried of the University of New Haven and Professor Robin Ammon of Slippery Rock University – USA have become the first contributors to this section. We also have the first contributions to the Journal's Commentaries/Research Note section from Professor Ben Challis, Professor Gil Fried and Philip Wood MBE, which we hope will trigger responses from our readers. We are, further, instigating a Discussion Forum to allow you to enter into debates around issues of concern to the industry and its links to the academic disciplines that underpin its practices. We have our first reviewers, and we have a reflective and insightful introduction by Professor Patrick Smith. So, there are reasons for us to be pleased about what we have achieved in this short period of time. These achievements would not have been possible without the active support of our readers and contributors. To our readers and contributors we say thank you; let us together build this Journal to become a theoretical articulator of the practices of the industry.

I look forward to meeting you on the electronic pages of this Journal as authors of articles, commentaries or research notes; reviewers; or participators in the Journal's Discussion Forum. Happy New Year.

Dr. Ali Bakir
Editor-in-Chief
On behalf of the Journal’s Editors

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Published Volumes

- Volume 1, No. 1, February 2009
- Volume 1, No. 2, December 2009

Notes for Contributors

- Practitioners’ work based projects should be emailed as Word attachments to the Journal’s Editors where they will be summarised and edited.
- Articles for a double blind review should be emailed to the Journal’s Editors as Word attachments. The first page of the manuscript should include the title of the paper and the author’s name, affiliation, address, telephone number and email address. The second page should contain the title of the paper, an abstract (150 words) and up to five key words. Correspondence will be only with the first author.
- References and citations should follow the BNU Harvard style

- For the BNU Harvard style go to: www.bucks.ac.uk/referencing

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Editors’ Statement

The Journal of Crowd Safety and Security Management – An Online Journal (JCSSM) is an educational, industry oriented journal which is designed to serve as a forum for practitioners, scholars, and students who are actively engaged in the academically fledgling industry of crowd safety and security.

The Journal seeks primarily to publish:

a) Summarised and edited versions of practitioners’ work-based projects. The aim is to share and disseminate the findings of these projects to a wider audience. Practitioners’ projects are selected, not necessarily because of their methodological rigour or the significance of their findings, rather they are chosen because of the relevance and importance of their work to the current development in the industry.

Although practitioners’ projects are summarised and edited, the responsibility for the rigour of the research and the validity and reliability of the findings remains with the authors.

b) Good quality well developed industry-based research articles after subjecting them to double blind reviews.

In addition, the Journal will publish essays, discussion and research notes, book reviews, and commentaries. The overriding aim of the Journal is to contribute actively to the professionalisation of the crowd safety and security industry by creating a platform which encourages dialogue between the industry and academia, and promotes research and good practice.

The Journal is published twice yearly, and the Editors will strive to include in each issue:

- Abridged and edited practitioners’ work-based projects
- Articles subject to double blind reviews (up to 8000 words)
- Research notes and discussions (description of work in progress)
- Industry views (perspectives from practitioners)
- Book reviews
- Commentaries
- News, events, education fora, conferences, seminars

Note: We have increased the word limit of the refereed articles and removed it from other contributions to give authors more room to express and discuss their ideas.
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I read Mick Upton’s introduction in the previous edition of this journal with considerable interest since Mick was tracing how, as a representative of the crowd and event management industry, he became involved with higher education. This Introduction will, I hope, trace how as a teacher in a university, I became involved in and fascinated by the crowd and event management industry and in that sense, I hope that it will complement Mick’s piece and in so doing provide a reflection of that rich relationship which exists between the industry and higher education.

In my role as a classroom practitioner I have worked in a range of settings and in a fairly diverse number of cultures, attempting to facilitate learning in massive, aircraft hanger sized lecture theatres accommodating over 350 students, to seminars held under a massive Sapodilla tree in the Caribbean, tents planted on the sports grounds of a secondary school in deepest Leicestershire and a temporary classroom which served three times a day as a restaurant in what was then Czechoslovakia at the height of the Cold War (complete with my own designated secret policeman who fed reports amongst other things on my drinking habits through to his colleagues in Brno).

Throughout all of these experiences it has always struck me that developing an appreciation and understanding of the culture of those with whom I was working was a pre-requisite to promoting, supporting and enabling the learning of one’s students, be they five or fifty-five. As with exposure to new cultures a couple of the first things one notices are language and behaviours. The vocabulary of egress, ingress, crowd flows, ego ramps, mojo barriers and the like surrounded me – these people were speaking English, but not as I knew it. In my naivety I thought that HE stood for Higher Education, I was to learn that it also meant Hostile Environment - not to mention those initials, acronyms and abbreviations which are the everyday language of the military, the police and event management. A Principal was probably the head of a college, I thought, but not for the close protection girls and boys.

And then there was the behaviour – perhaps most dramatically expressed by the ubiquity of the mobile phones. It became evident very quickly that requesting the turning off of the phones would be a non-starter; some of these people had two and three phones ranged out in front of them competing for desk space with their note pads. Most were prepared to mute their phones, but six or seven simultaneously vibrating phones can provide an original backbeat to a presentation on learning theory. In addition, individuals would grab a flashing and vibrating phone, stand up, perhaps nod at me by way of apology and then walk out!

What this taught me was that I was dealing with people for whom action and responsiveness were priorities – I did not need to be
told that time was money, that lesson was evident. Whilst it would have been easy to dismiss these behaviours as bad manners, such judgements would have created a barrier to creating a working relationship. “Go with the grain” was a mantra which kept repeating itself in my head, because the pay-offs were worth it in terms of what I saw happening before my eyes. Having presented an outline of a concept such as preference in terms of approaches to learning, or motivation, I would set the participants an exercise in which they were required to explore how these concepts related to their professional experiences. Now whether it is the military backgrounds of many of the participants, or the ‘hands on’ nature of the crowd and event management industry, I am not sure, however what I do know is that given a task these individuals will apply themselves to it provided they see that whatever it is has some relevance to them.

In short, as I learned from them, they learned something from what I was presenting to them and they contributed in enthusiastic and occasionally robust terms to what might be called the learning milieu. Experienced, bright and enthusiastic as most of them were, it often felt as if I was lighting the blue touch paper and then standing clear as these individuals hoovered up what previously they might well have condemned as jargon and so much academic claptrap. Perhaps the most rewarding feedback that I received – and by and large these people were not shy of providing feedback whether sought or not – was the following:

“Y’know when I first came on this programme, I thought it was a bit, y’know, tree-hugging – but it’s made me think. It’s made me look at what I do, and how I do it.”

Praise indeed from a former paratrooper and member of UK Special Forces who has since gone on, like many from those early cohorts to complete further programmes and qualifications.

And the lessons? – I mean, even teachers can learn if they try hard enough. Well I would say that the lessons are that experienced and mature adults meeting together and prepared to listen to each other can learn and promote each other’s learning and development in significant ways. No one has the sole rights on knowledge or expertise, but the creation of those conditions which bring people together and encourage them to engage with ideas, to share their insights and contribute to each other’s understandings are what learning is all about. Each of us, from whichever background we come from has a contribution to make, something to give and something to take away in the form of new understandings and insights. Jerome Bruner suggested that learning was a continuing iterative cycle in which we create knowledge and then, subsequently and in the light of experience and fresh insights we refine those understandings and develop as human beings. Long live the spiral of learning.
1 IS PHYSICAL FITNESS A NECESSARY REQUIREMENT IN PROVIDING PERSONAL PROTECTION?

Sean Stone
May 2009

Abstract
The purpose of this study is to investigate whether physical fitness is a necessary requirement in providing personal protection in the United Kingdom, particularly as the competences guidelines set by the Security Industry Authority for licensing do not stipulate physical fitness requirements. The study is also timely, as since the introduction of the SIA CP Licence in 2006, there has been little research in this area. The method used in this research was quantitative data analysis based on a questionnaire administered to a purposeful sample of SIA licensed close protection personnel. The key findings suggest there is a need for physical fitness in the CP industry, and that such a need is perceived to lead to improved level and quality of close protection service.

Introduction
This research focuses on the skills required of close protection (CP) personnel in the United Kingdom (UK) as set down by the Security Industry Authority (SIA); it does not cover the skills required by CP operatives working overseas, providing armed protection in hostile environments. This paper will investigate if physical fitness is a necessary requirement in providing personal protection. The reason why this research is important is two fold: firstly, to the author's knowledge there has been no specific paper written on this subject, and secondly, that with the introduction of the SIA CP Licence (on 20th March 2006), the syllabus of close protection courses consisted of ten units of competence, none of which required physical fitness. Ten of the 108 SIA approved CP training companies, who were contacted, confirmed that physical fitness was not a prerequisite to attending the course, nor were their trainees expected to participate in any physical activities.

Prior to the introduction of SIA CP Licence, training companies offering CP courses did not have to comply with a national syllabus and therefore the content of courses did vary. The variation also covered the level of physical fitness required by candidates prior to attending the course and the actual level of fitness taught on the course. For example, the Task International course in January 1997 required candidates to be able to run five miles in under forty-five minutes with additional physical exercises being performed in order to pass a section of the course.

The requirement for physical fitness as a skill was supported by a number of publications (Holder & Hawley, 1998; Consterdine, 2000). There was an underlining theme that CP personnel should be physically fit; Holder and Hawley (p6) point out that CP personnel should be in the best possible physical condition, and Consterdine (p290) suggests that fit people are better able to deal
with stressful situations – ‘fight or flight’. Padgham (2006: 27) also argues that physical fitness is necessary for health, alertness and speed of reaction, as well as the more obvious physical demands of long hours or conflict management situations.

It is thus argued that the reason why physical fitness is important is due to the physically demanding situations that a CP operator may face. For example, it is not uncommon for the CP operator to run up a flight of stairs to meet the principal who has entered a lift with colleagues, leaving no room in the lift for the CP operator. Instances are also known where the CP operator had to carry a collapsed principal. The physically demanding activities make it imperative that CP operators follow and maintain some sort of physical conditioning program (Haney, 2005), so that they can perform at their best in every situation (Holder & Hawley, 1998). A physically fit CP operator will experience less fatigue and have quicker reactions (Brown, 2007).

In comparison, failure to keep fit can present problems not just to the CP operator but to the principal as well. This can lead to issues of the CP operator becoming a liability within the team especially if lack of fitness contributes to a physical incident with the principal. Additionally an unfit CP operator portrays an image which emphasizes lack of: self-discipline, professionalism, and capability (Brown, 2007). Lack of professionalism, in particular, reinforces the public perception that the ‘big guy’ has an automatic right to work in this industry (Horak, 2007), where in fact ‘the strength you need is the kind that is immediately available rather than pumped-up beach boy muscles’ (Elhanan, 1985: 16). Although, physical ability is seen as important, it should, however, be noted that it is only one of the hard skills needed for a competent CP operator (Padgham, 2006).

There is also a need to explain physical fitness within the close protection industry. Physical fitness is defined by three types of exercises: aerobic exercises such as running, where the body is exercising, forcing its heart and lungs to work harder and deliver oxygen to the muscles that are being used; anaerobic exercises such as heavy weightlifting which requires the performer to use short bursts of physical power; and resistance exercises such as using free weights to increase muscle strength and mass (Brown, 2007).

Study Method
The purpose of this study was to discover if physical fitness is a necessary requirement in providing personal protection. The most useful and direct method of collecting data for quantitative analysis was a questionnaire survey. A two-page questionnaire was designed and administered online to a purposive sample (Veal, 1997) of male and female SIA CP Licence holders based in the UK. The age of the respondents ranged between 30 and 56 years; they included respondents with both former military and non-military backgrounds. There was also an opportunity in the questionnaire for respondents to add additional comments.

Respondents received all communications electronically, including the reasons why they were being asked to participate in the research and
instructions on how to fill the questionnaire and submit their replies. This meant that respondents did not have direct communication with the questionnaire’s designer (Barnes, 2001). The questionnaire was designed to solicit answers to questions, such as: fitness exercises the respondent participates in, importance of forms of fitness necessary for providing personal protection, and whether principals should expect a level of fitness from their protectors.

**Results And Analysis**

Questionnaires were sent to 56 SIA CP Licence holders, accounting to 1% of potential candidates who hold SIA CP Licence. The number of questionnaires that were returned was 38, consisting of 37 males and one female. Analysis of the data of this small number of respondents shows that:

- 24 (63%) respondents had military experience.
- 24 respondents participated in physical fitness during their SIA CP course.
- The physical fitness exercises that respondents participated in included cardio (14 respondents), martial arts (14), circuits (8), and weights (6); see Figure 1. After the introduction of the SIA CP course in 2006, physical fitness was not part of the syllabus, some respondents had attended courses prior to 2006 and those that attended after 2006 took these courses as an add-on to the core syllabus.
- 24 respondents agreed that physical fitness exercises are important in providing close protection service. The largest number (18) felt that all exercises (cardio, weights, circuits, and martial arts) were important; see Figure 2.
37 (95%) respondents stated that fitness helped them in their close protection role.

30 (79%) respondents indicated that having a military/police background helped them physically in providing close protection.

26 (68%) respondents suggested that their latest close protection role required them to be physically fit. Of these, 20 indicated all physical fitness exercises were required; 16 emphasised weights and cardio; and 8 mentioned circuit exercises. Martial arts had a zero response (see Figure 3).

28 (74%) respondents felt that they were of intermediate fitness, while 10 (26%) stated that their level of fitness is that of an athletic; none described their fitness level as that of a beginner. Furthermore, 37 respondents said they were physically fit, and 1 was not fit. Those who described themselves as fit, engaged in fitness exercises. Weights and cardio exercises proved the most frequently practiced by respondents, with a total of 22 and 20 respectively (see Figure 4).
28 respondents felt that fitness should be a compulsory part of the SIA CP courses, as opposed to 10 (26%) who felt they should not.

All the 38 respondents agreed that clients should expect a level of fitness from their protectors. 28 respondents also felt that the CP industry would benefit from having a standard level of fitness for licence holders, while 10 respondents said the industry would not benefit.

The results of the questionnaire showed that those respondents from a military background believed that physical fitness was a necessary requirement in providing personal protection. These respondents also kept physically fit; they described their level of fitness as intermediate and believed that clients should expect a level of fitness from their protectors.

Another finding shows that respondents who attended the SIA CP courses participated in cardio and martial arts exercises. The general theme that seems to run through the answers is, that all types of fitness are important when providing close protection. The majority of the respondents said they kept physically fit, particularly, through attending weights and cardio exercises. Physical fitness, respondents stated, provided confidence, promoted self-discipline and provided a more professional image.

Overall, respondents felt that there were advantages for CP operators in keeping physically fit. Fitness was seen as necessary to enable CP operators to work up to eighteen hours a day where they would need to maintain a high level of awareness, focus and concentration under extreme pressure, and cope with stressful situations.

**Conclusion**

The findings of this study showed that most practicing CP operatives think that physical fitness is necessary in providing personal protection.
Physical fitness is seen as a requirement not only as part of the SIA CP course but also afterward as part of the CP operator's continuing professional development. Fitness requirement is seen to make the CP operator more employable and able to provide a professional level of service.

The findings also revealed that CP operators from a military background, in contrast to those from a civilian background, believed that physical fitness is necessary in providing personal protection and that having a military background provides the physical attributes needed for close protection roles.

More research is required in the field of physical fitness and the CP industry, not only on the affect various levels of fitness provides but also what type of fitness is beneficial to the industry as a whole. An independent governing body made up of individuals from the fitness industry, the SIA, civilian and military CP operators may be required to discuss the possible introduction of a physical fitness programme on future SIA CP courses. The myth of the media generated 'bodyguard' has led to the perception that close protection is an industry dominated by the physically fit, martial art people, and those with excellent shooting skills. While this perception may add to the belief that all CP personnel keep fit on a regular basis – as the respondents to this questionnaire did; those candidates who attend a current SIA CP training course may, through the contents of the course, believe that physical fitness is not a requirement of the CP role.

Reference


Abstract
The rationale for undertaking this project was a perception that different local authorities interpret legislation differently, and as a result have different requirements of event organisers and security/crowd management companies. Quantitative research in the form of an online survey, hosted on the website of the Institute of Licensing, was conducted. Although the majority of respondents were local authority employees, the findings, nevertheless, confirmed the view that local authorities’ lack of a standardised approach caused practical problems. The findings suggest that the introduction of the Licensing Act 2003 might have contributed to the lack of standardisation, and indicated that local authorities that regularly host large events are better placed to assess event plans and deal with associated issues. The findings showed support for event training, specific guidance and new/revised event legislation; there was also an indication that shared knowledge/experience might be the best way to address the problem of lack of standardisation.

Introduction
This study examined the role of local licensing authorities at events; it specifically examined the differing approaches adopted by local authority staff, whether they took account of crowd management issues and the relationship with event organisers, security/crowd management companies and similar organisations involved in events. The rationale for undertaking this research was a perception, supported by anecdotal evidence, that different local authorities interpret legislation guidance and requirements of event organisers and security/crowd management companies differently. There is also the view that this difference in approach causes practical problems for organisations undertaking events in different local authority areas, as they have to respond to differing requirements. This study examined:

- the extent to which the Safety Advisory Group (SAG) concept is successful in ensuring that effective pre-event planning takes place (Most local authorities should use a SAG or similar multi-agency forum to bring together interested parties involved with large events).

- the relationship between event organisers and local authorities to ascertain whether local authorities are generally supportive of events taking place in their area.
• the main concerns of local authorities in addressing pre-event planning and whether these concerns are similar to those of event organisers.

• whether local authorities took sufficient account of crowd management issues when assessing event plans.

• whether local authority staff had sufficient experience and knowledge of crowd management issues.

• if there was a difference of approach by local authorities and whether that caused problems to event organisers.

• the underlying causes of problems, and to establish whether the introduction of new legislation (the Licensing Act 2003) in England and Wales has improved or worsened this situation.

• how the problems arising from differing approaches could be addressed to improve the situation.

Upton (2007) states that a number of guidance documents have been published to assist both event organisers and local authority staff in addressing issues related to event safety; that guidance is interpreted differently by different local authority personnel; and that inexperienced persons are disposed to treat the guidance as rigid instructions whereas more experienced persons treat guidance as it was intended, a process guide.  

Guidance within the field of crowd safety management (CSM) is available in a number of publications. The “Event safety guide: A guide to health, safety and welfare at music and similar events” (HSE, 1999) is generally acknowledged as the primary document concerning organisation of crowd related events, and particularly events such as open-air concerts and festivals. Nevertheless, this document is now regarded as out of date. More importantly, the document does not make a detailed reference to the requirements placed upon event organisers by the Licensing Act 2003. A more current and relevant document is the “Fire safety risk assessment: Open air events and venues” (Department for Communities and Local Government, 2006). This document focuses on specific elements, such as fire safety. Buildings generally benefit from more relevant and current guidance available in the “Technical standards for places of entertainment” (Association of British Theatre Technicians, District Surveyors Association and Institute of Licensing 2008) and “Guide to Safety at Sports Grounds”, 5th edition (Department for Culture Media and Sport and the Football Licensing Authority, 2008). Upton (2007) believes that the sheer number of local authorities in the United Kingdom produced a situation where guidance is interpreted widely. He also pointed to the existence of a variety of different guidance documents that were specific either to a particular type of event or a particular venue.
Method

Originally, the research design was to seek data from conducting semi-structured interviews based on pre-set open-ended questions. This method of collecting data for qualitative analysis would help achieve greater understanding (Creswell, 1994) than quantitative one. Also, a questionnaire survey, which lends itself to quantitative analysis, was not considered, as it required resources which were not available in the allocated time.

The intention was thus to interview a purposive sample from two groups: Event organisers and security companies involved in event organisation and/or crowd management; and local authority officers involved in event licensing or related regulation and compliance. Attendance at The Event Show at London Olympia on Wednesday 21 January 2009 was identified as providing an opportunity to obtain the required data.

Unfortunately a number of contacted individuals and organisations did not respond to interview requests; in total only three telephone and email interviews were conducted. Consequently, the Institute of Licensing was approached; it developed and hosted, on its website, an on-line questionnaire based on the version intended for use at interviews.

In changing the research methodological design from interviews to an on-line survey format it was not possible to include all the originally intended questions. The on-line survey did not accommodate the question seeking options to address difference in approach to be expanded.

A summary of responses to the on-line survey was provided by the Institute of Licensing. Responses were grouped into particular categories. Data analysis comprised subjective interpretation of these responses, drawing conclusions, and making recommendations. The responses from the qualitative research supported the findings from the quantitative one, acknowledging Ryan’s (1995) view that the two methods complement each other.

Findings

Seventy-nine respondents completed the online questionnaire; not all of them answered all the questions. The majority of the respondents (85%) were from local authorities. Most respondents (88%) felt that the Safety Advisory Group concept worked. One interviewee stated that as an advisory body, the Safety Advisory Group lacked enforcement powers but that generally organisers took heed of the advice given. Another interviewee stressed that the Group would only work if participants were honest and open.

The great majority of respondents (92%) considered the relationship between local authorities and event organisers a good one.

75% of the respondents agreed that local authorities take sufficient account of crowd management issues in assessing event plans. However, in exploring this issue further, only 62% felt that local
authorities had sufficient experience and/or knowledge. One of the interviewees, an Event Safety Officer, commented that the police often claim to have knowledge of crowd management issues but in so doing they are actually referring to crowd control rather than crowd management. The comment was made that police officers with knowledge and experience of events will be aware of reputable crowd management providers. Another interviewee stated that local authorities quite possibly do not have sufficient knowledge or experience.

Comments from the interviewees and the majority (90%) of the respondents to the online survey show that there were differences of approach by local authorities in dealing with event organisers, significantly supporting the central claim of this study by pointing to the absence of standardisation. One interviewee contended that licence conditions for the annual Glastonbury festival had been copied by other authorities, irrespective of whether they were appropriate; while another interviewee indicated that many authorities had produced their own interpretation which clearly differed from other local authorities. Most respondents (64%) felt that this difference caused problems. Experience has again been highlighted as an issue; 87% of the respondents stated that local authorities that regularly host large events were better placed to assess event plans and address associated issues. 67% of respondents further believed that the introduction of the Licensing Act 2003 had contributed to local authorities taking different approaches. This view was also held by the interviewees; they stated that the Act “was an ill conceived piece of legislation”, it “has worsened the situation as events were not considered” and that the legislation is entirely inappropriate for events, as “it does not have the flavour of enabling entertainment”.

Addressing the problem of different approaches by local authorities, the largest number of respondents (35%) suggested the need for increased knowledge and experience. The next most cited option was training (25%) followed by new or revised legislation (22%), and event specific guidance (18%) (see the following chart).

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<th>Options to address lack of standardisation</th>
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<tr>
<td>Increased knowledge/experience</td>
<td>35%</td>
</tr>
<tr>
<td>New/revised legislation</td>
<td>22%</td>
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<tr>
<td>Specific guidance</td>
<td>18%</td>
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<tr>
<td>Training</td>
<td>25%</td>
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These findings were supported by those interviewed; one interviewee felt that legislation was the main problem and guidance would not have alleviated the problem. Another interviewee stated that whilst relevant training was important it was not a substitute for experience. These interviewees were aware of the increasing number of Event Safety Officers holding a recognised health and safety qualification; they felt that although these officers might be suitable to undertake the role of event safety, however, they had no event experience. Addressing further the matter of training one interviewee, whilst supporting the Foundation Degree in Crowd and Safety Management, suggested that local authority staff would not necessarily require a full Foundation Degree, that a tailored course focusing upon issues of direct relevance to local authorities would be more appropriate. All interviewees expressed the view that publication of a revised version of The event safety guide (HSE, 1999), commonly known as the “purple guide”, was long overdue, and would assist both event organisers and local authorities. They also indicated that there would be occasions when the advice contained within the guide may not be appropriate.

Conclusion

The findings of this study suggest that: there are differences of approach by local authorities in dealing with event organisers; the relationship between local authorities and event organisers is, in general, good and any differences are largely due to differences in expectations; local authority staff takes account of crowd management issues in assessing event plans but not in all cases; they may not always be competent to address crowd management issues; the introduction of the Licensing Act 2003 has partly caused the situation where event organisers are faced with different approaches by local authorities; and that possible remedies to the problems caused by the different approaches of local authorities might reside in increased knowledge and experience of events, training, event specific guidance and legislation.

The findings point to a degree of satisfaction with current arrangements, where the majority of respondents felt that the Safety Advisory Group concept was both prevalent and effective. The findings, nevertheless, indicate that the lack of standardisation is a concern for both local authorities and event organisers. It is suggested that remedying this situation might require a joint approach by all appropriate parties and involve establishing an appropriate multi-agency forum, to include local authorities, event organisers, and others. Further research is required into the role of this forum, which may focus on: a) producing an event safety guide which includes reference to staff competencies, training, the role of local authorities and crowd management; particularly, as it is widely known that the Health and Safety Executive are aware of this need; b) reviewing the Licensing Act 2003 to incorporate specific reference to crowd related events and/or legislation; c) developing
an event planning and training programme; d) developing a mentoring scheme that would enable those with minimal experience of events to obtain and build knowledge and experience.

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ANTI-SOCIAL BEHAVIOUR AT MAJOR OUTDOOR EVENTS

Tara Connell - Australia
May 2009

Abstract
There is much confusion around the topic of anti-social behaviour at events, and there is no one single definition of this behaviour. This exploratory study provides an opportunity to gain insight into how anti-social behaviour is perceived at major outdoor events in Sydney. Both quantitative and qualitative approaches were used in an attempt to obtain an understanding of this phenomenon and to suggest ways of minimising its impacts. Although the survey’s findings showed no clear definition or perception of what constitutes anti-social behaviour; ‘aggression’, ‘rudeness’ and ‘idiots’ were mentioned as examples of anti-social behaviour; and alcohol and drugs were perceived as the major causes of this behaviour. The stakeholders who were interviewed suggested that anti-social behaviour was not a new phenomenon, and that what changed was community perception of, and media interest in, the phenomenon. They cited intoxication, assaults, urination, fence jumping and ticket scalping as forms of this behaviour.

Introduction
Over the past few years the number of reported anti-social incidents has increased. Headlines such as “Mayor of Gosford City takes action against anti-social behaviour on Australia Day” in the Gosford City Council News and The Sydney Morning Herald’s “600 Music fans caught in wild brawl” highlight not only the impact of anti-social behaviour (ABS) but also the media interest in this topic. According to the 2006-2009 National Alcohol Strategy, Australia has moved from a ‘drinking’ culture to a ‘drunken’ culture. Drinking to get drunk is increasingly seen as a normal activity with Australians aged 20-29 who are most likely to participate in ‘binge’ drinking.

In addition to the new liquor laws that came into effect on 1 July 2008, a further crackdown on “trouble spots” associated with alcohol related violence and anti-social behaviour saw additional licensing conditions regarding the Liquor Amendment (Special Licence Conditions) Regulation 2008, come into effect on 1 December 2008. Forty-eight liquor licensing venues came under new restrictions on the service of alcohol, such as, lockouts from 2am to 5am and no shots after midnight.

There is a debate as to whether these control strategies are reducing or in fact encouraging binge drinking. ASB is still part of Australian society despite new legislation and Responsible Service of Alcohol (RSA) program being implemented. ASB can impact not only the individual but also the community, and is also having a greater impact on the way events, both ticketed and public, are being delivered in Sydney.
ABS is not a new phenomenon, and its presence in the event industry may be considered as an extension of the culture witnessed in pubs and clubs.

Kemp et al. (2007) identified alcohol and drugs as a major factor in determining crowd behaviour in Europe. A study undertaken by Ireland (1993) revealed that 77% of street violence, such as, assault, offensive behaviour or language, was alcohol related. However, alcohol and drugs are not the only factors responsible for ASB. As suggested by Berlonghi (1990) there are also a number of areas that need to be considered in crowd management, such as, the timing of the event, transport, audience demographics, capacity, and concessions. Miller (1997) suggests other factors, such as toilets, egress and site design. Insufficient transport to and from the venue can result in boredom, which can lead to vandalism and assault; insufficient facilities can result in urinating in public; poor sightlines may cause crowd agitation and disorder. Allen et al. (2005) noted that there are both positive and negative impacts associated with events; whilst events play a role in maintaining social cohesion, confidence and pride, which can go beyond the values of tangible and economic benefits, they can also act as an attraction for ASB.

Additional resources such as increase in security and ‘user pay policing’, secondary perimeter fencing and stricter liquor licensing conditions are becoming the norm. It has yet to be determined if these control strategies assist in the reduction of ASB or if they can inadvertently lead to ASB. ASB at events, whether ticketed or public, is a crowd safety management issue for all key stakeholders involved, not only the behaviour of the crowd but also the behaviour of the organisers, police, security and landowners. The main purpose of this exploratory study is to provide insight into how key event stakeholders perceive anti-social behaviour at major outdoor events in Sydney. The study provides the opportunity to obtain an understanding of ASB; it also offers potential areas for further research, which may result in greater understanding of ASB and assist in reducing it.

**Methodology**

The purpose of the study is to obtain descriptive and explanatory accounts (Miles and Huberman, 1994) of anti-social behaviour. The focus of the study derives from the researcher’s personal and professional experience (Marshall and Rossman, 1989). Over the past few years, empirical data was gathered from attendance at various ticketed and non-ticketed events and from discussions with industry colleagues. This data, along with an increase in media interest, formed the basis for the study. Initially, informal discussions with work colleagues took place to introduce the idea of the research and to seek their participation. This process assisted in defining the questions for this study.
Qualitative research is recognised as more suitable in seeking the perspectives of key stakeholders in the industry. Two representatives from each of the following stakeholders were invited to participate in informal interviews: Event promoters, landowners, police, security, local government councils and work colleagues. A list of questions, some pre-specified and some open-ended, was developed and issued along with an introductory email explaining the aim of the research. The list also helped to guide the interviewees and obtain relevant data that lends itself to interpretation.

Sampling for quantitative analysis, also known as ‘people sampling’ (Miles and Huberman, 1994), was undertaken. A questionnaire was administered to a random sample of 20 event patrons at two events in Sydney. Permission via email was sought and obtained beforehand from each of the event promoters to conduct the research on their event site. Event 1 was a one-day dance festival and Event 2 was a one-day rock festival. The purpose of conducting surveys at two ticket events was to ascertain if there are any contrasting views in relation to ASB. Audience members from both events were approached and provided with the purpose and context of the research being undertaken. In administering the questionnaire in Event 1, it was discovered that a couple of the survey questions were inappropriate because of the young age of the crowd and their limited exposure to those types of events. These questions were removed from the survey questionnaire in Event 2. Various newspaper articles were also examined and searches on websites undertaken to obtain further knowledge on the subject. This sampling strategy was designed to allow a credible understanding of ASB within the event industry to be formed. As such, this study can be seen as one of theory generation rather than theory verification. Responses received from the questionnaire survey were analysed using a spreadsheet, and some descriptive statistics were produced.

In analysing the qualitative data, coding as a method of analysing data was considered impractical, as it is too complex for the purpose of this study. Instead, interpretation in the form of narrative was adopted for its ease of use. Also, time constraints had a large impact; interviews were postponed thus pushing all deadlines back leaving less time for analysis.

**Findings and conclusions**

In their study of visitors’ motivation to attend festivals, Uysal et al. (1993) find that socialisation, escape, excitement, novelty, and family togetherness, as the main motivators. This study found that 40% of event patrons attended Event 1 because of the music line up; the remaining 60% attended for a day out experience.
The corresponding figures of patrons attending Event 2 were 65% and 35% respectively. There is much confusion around the topic of ASB at events, not only in Australia but also overseas and from the outset it became evident that ASB was quite elusive; for example, under the NSW Crimes Act 1900, there is no definition of anti-social behaviour. There is also insufficient published data on the effectiveness of various strategies within the event industry to combat ASB, and insufficient published data on the perceptions of ASB (Patterson, DeBaryseh, Ramsey 1990).

Similarly, the event patrons of this study did not have a clear idea of ASB. The audience surveyed at Event 1 came with the following words as a first example of ASB: ‘aggression’ (45%), ‘rudeness’ (20%), and ‘idiots’ (20%). It should also be noted that 30% of respondents could not provide a second example of ASB. The average age of patrons questioned was 22 years old, 70% of whom were aged 18 to 24 years and 5% aged 31 to 39. Those surveyed at Event 2 mentioned ‘aggression’ (30%) and ‘drugs’ (30%) as examples of ASB; their average age was 28 years, 35% were aged 18 to 24 and 30% were aged 31 to 39. Their second example was more concerned about ‘idiots’ (45%), followed equally by ‘drugs’ (15%), ‘drunkenness’ (15%) and ‘aggression’ (15%).

The above findings show that, regardless of the level of exposure to major outdoor events or the age of the audience, ‘aggression’ and ‘idiots’ rates high as examples of ASB. It is also evident from the findings that there is no clear definition or perception of what constitutes ASB. The majority (60%) of respondents from Event 1 and 65% from Event 2 saw alcohol as the major cause of anti-social behaviour. The other cause, respondents (40% at Event 1 and 50% at Event 2) felt, was illicit drugs. Although alcohol and drugs were perceived as the major causes of ASB, the stakeholders who were interviewed noted that ASB, especially related to drugs and alcohol, is a complex model and there is no one single cause. The majority of these stakeholders believed that ASB had not increased over the past few years. They gave examples of ASB, such as: intoxication, assaults, urination, fence jumping and ticket scalping. ABS is not seen as a new phenomenon; what seems to have changed, they argued, is the perception of ASB in the community and an increase in media interest. Nixon et al. (2003) view ASB as subjective, based on a number of factors, such as: location, life experiences and expectations and the level of community tolerance.

The perception of ASB being linked to any one particular demographic varied amongst the stakeholders. This was largely dependent on the type of event, ticketed or public, alcohol license or alcohol free, duration of event, location, and the programming content.
However, what was consistent in the responses was the importance of conducting risk assessments to evaluate the level of risk associated with each event.

60% of those who attended Event 2 thought there were too many police at the event compared to 35% at Event 1. The difference may be explained by the music genre at these events and the fact that older crowd were at Event 2, the rock festival, than at Event 1, the dance festival. Event organisers felt vulnerable and exposed regarding safety due to the escalating presence of police at events, especially User Pay Police, and the role they undertake. While they all agreed police advice and guidance are required and taken seriously, there are many inconsistencies and a lack of event industry standardisation in its management and roll out. Many saw the increase of police on site, from a safety perspective, as high risk. Goldbatt (1990) argued that the lack of standardisation within the event industry could result in distrust, speciousness and lack of creditability. The concern of event organisers was the perception that the police working on site do not have event experience and may be unfamiliar with the crowd management strategies implemented to ensure safety. In relation to event site safety, 32.5% of patrons considered event sites to be very safe compared to 7.5% who rated it at 2 on a scale of 1 to 5. Furthermore, in requiring help or advice, 62.5% of respondents said they would approach security, 17.5% would approach friends, and 12.5% would approach the police. This suggests that security have a greater role in liaising with event patrons with regards to their wellbeing.

This exploratory study shows that there is no one single definition of ASB. Millie et al. (2005 p. vii) looked into the concept and perceptions of ASB in the UK; their aim was to strike “a balance between enforcement and prevention”; they suggest that “more care is needed in defining ASB and in deciding the limits on the use of civil remedies”. The main concern surrounding ASB is not the actual control strategies but how decisions are reached and the lack of consistency in these decisions between events. Those who attend events perceive them to be in safe environments, and those working in the event environment continually strive to improve and develop strategies to ensure a safe environment is maintained for all.

As the reason for developing a better understanding of ASB is to minimise its negative impacts, further more comprehensive research into ASB at events is required.

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Work based projects
Abstract
This paper investigates the relationship between artistes’ performance behaviour and set lists/song tempos, and their respective audience behaviour, using a pre-event, concert audience prediction system. The purpose of the study is to determine whether this prediction system can enhance crowd safety at concerts. A case study approach was adopted, and qualitative research was conducted by systematically observing audience behaviour. Sampling was purposive, and audiences at two concerts were conveniently chosen. Secondary statistics regarding audience demographics were also used to aid in the analysis. The findings suggest that the pre-event crowd prediction system is a useful tool that can aid crowd safety efforts at these events. They also point to the need for properly qualified safety management personnel to conduct such a prediction system. Further research is suggested into crowd behaviour within a concert environment incorporating data on queuing systems, crowd arrival/dispersal, event specific ingress and egress patterns, and artistes’ behaviour.

Introduction
The purpose of this research is to investigate whether a proposed pre-event audience prediction system can work alongside an event general risk assessment to inform crowd managers, security providers and emergency services, and help them plan for a more effective deployment of resources in a concert environment. The proposed system is based on artistes’ performance behaviour, set lists/song tempos and their respective audience behaviour.

In the course of Muse performances (world wide 2002-2009), it was very difficult to convince promoters and security providers of the potential extreme audience behaviour that Muse performances might generate. There was no distinct method for conducting risk assessments taking into consideration the psychology of crowds in a concert environment. In the UK it became necessary, as event guidance and legislation proliferated and to reduce the potential for vicarious liability at events, to obtain more detailed information on potential problems that may occur based on the artiste’s previous performances.

Current literature on the subject of predicting concert audience dynamics caused by the artiste’s performance is limited, with very few articles dealing with the psychology of “rock concert” crowds. Upton (1997) argued that accurate risk assessments undertaken by qualified personnel using relevant data is absolutely necessary to reduce the potential of adverse crowd behaviour. He stressed that the term “qualified personnel” did not necessarily include the safety
officer role, which is normally occupied by individuals whose training
was more in the field of crowd control than crowd management. Upton (2008) further argued that numeric risk assessments were
opinion based and, therefore, potentially flawed. Although, 
emphasising the need for specific event related information, he, however, felt that crowd managers compiling this information usually
had no real training in crowd dynamics or any specific knowledge of
the performing artiste. Kemp, et al. (1997) advocated the concept of
proactive crowd modelling; they integrated the command and control
elements of event planning with past experiences, audience and
event profiling, and best practice.

Toft (1996) stated that personal and general risks of attending an
event were viewed in a subjective way, where the concern about risk
was less than the more casual and objective observer. Fruin (1994: p?) found that “extreme crowding results in individual loss of control,
and both psychological and physiological problems.” This led him to
devishe the FIST (Force, Information, Space and Time) system of
modeling of the psychology of crowd. Fruin (1993) also examined the
relationship between crowd dynamics and venue design.
This paper will illustrate a categorisation system which condenses a
large amount of hard data, and match it to subjective artiste
performance characteristics. The system could be manipulated to
reflect changes in crowd behaviour and other event specific factors in
order to give a more accurate, performance based, concert prediction
tool.

Study Method
A case study approach was viewed as most appropriate for this
research. Qualitative research was conducted by observing audience
behaviour within concert environments. Sampling was purposive,
where audiences attending the performances of Muse and Keane
were conveniently chosen and systematically observed. These
artistes, their set lists and song tempos, and the audience reactions
were observed over a period of time. Secondary data and statistics
regarding audience demographics were also called upon to aid in the
analysis.

The observations were presented in a numerical style with song
tempo and audience reactions to the tracks given a numerical rating
of 1-10 on an ordinal scale (1 being the lowest and 10 the highest).

Artistes were observed over a period of time and given an audience
behaviour profile category; A, B or C (A: extreme audience reaction,
B: medium audience reaction and C: low audience reaction) based on
systematic observations of their audiences’ behaviour and knowledge
of the bands song tempos and performances. In most cases, the
artistes’ set lists for the performances were reviewed prior to the
event. In all other cases, set lists were obtained immediately after the
performance and observational notes matched with the numerical
value tables. Audience reaction values were then plotted on a graph
where the x-axis shows the set list tracks, in order of performance,
and the y-axis the numerical value scale (1-10).
In order for the resulting graph to be used as a prediction tool, it was necessary that this numerical value is event specific and that a margin of error is incorporated into the measurement to cover changes in event dynamic, such as: differences in outdoor and indoor venues, differences in floor gradients and surfaces, queuing mechanisms and times, lengths of support act performances and waiting time between performances, front of stage barrier system (FOSBS), special effects, and increased/decreased levels of event specific audience behaviour. This information was then illustrated by the use of three prediction line graphs separated by a margin of 1 in the numerical value scale: a higher (line 1, green), normal (line 2, dark blue), and lower (line 3, light blue) predictions to the set list. Furthermore, a colour banding system was introduced to allow the reader to see where the main bulk of the performance set list was on the scale. The highest band, coloured red, was given to values 7 to10 on the numerical scale; the second, coloured orange, was given to values 4 to 7; the third, yellow, for values 1 to 4. These colours highlight increasing level of crowd activity as the numerical values increased.

The line graphs thus offer a visual representation of the crowd's reaction to the performance set list along with a coding system that could be used to describe the performance, for example, a code B2 is given to describe artiste profile B with normal crowd expectations of 2.

**Findings**

**Case study 1: Muse, 2002 – 2009**

In the touring period 2002-2009, the typical Muse audience was very active, with a high level of adverse crowd behaviour incidents, such as; crowd surfing, horizontal and lateral sways/surges, and crowd collapses. The typical demographic of a Muse audience is: age range, 16-26; male to female ratio, 3 to 2; crowd formation, first three rows at barrier predominately females; highest observed crowd density, approx. 0.3m²/person; artiste/performance band: A (worldwide)

The graphs (Fig. 1) illustrates the general prediction reading for the Muse performance in Hamburg on the 26 November 2006, drawing on past experiences and audience reactions to various song tempos.

**Figure 1 Muse, Hamburg, 26/11/06**
Examining the line graphs in Figure 1 shows that this performance had a hard start, where the first song of the set had a fast tempo and rated highly on the numerical scale. Audience members went from a position of relative calm to extreme movement within the first few bars of the song. There was then a decrease in song tempo and crowd movement for the next few songs. This decrease was not dramatic, however, and the crowd remained relatively high on the scale of crowd activity. Even the lowest prediction, line 3, was relatively high as it remained in the orange section. The spikes in the orange and red sections prompted crowd safety managers to resource specific areas of concern, particularly, the first few rows of the audience at the front of stage barrier systems (FOSBS), to monitor crowd movement and to have medical, security and barrier maintenance teams on standby. The beginning stages and other high tempo points of the performance also had a high risk of involuntary body movement.

Audience reaction during the middle section was relatively low with only two sharp rises in tempo/crowd reaction scale. From the middle to the end stages in the performances, other factors began to impact the audience reaction and movement, for example, crowd fatigue might have set in after the initial energy release of the first few songs. This would have resulted in a high number of casualties suffering from conditions such as shortness of breath, feelings of claustrophobia, and heat exhaustion. All of these conditions required crowd safety management to deploy emergency resources around the venue, particularly, and more acutely, the front of stage pit teams. The second last song of the set was a fast tempo song that resulted in high levels of crowd movement. The calmness of the previous song followed by a sudden movement generated high levels of moshing, crowd surfing and lateral/front to back crowd sways/surges. Coupled with crowd fatigue, alluded to earlier, casualties rose dramatically at this point with security staff and first aiders having to work harder to deal with the increased activity.

In this Hamburg performance, the general predictions were based on the fact that the FOSBS was comprised of a primary, non-angled, demountable A-frame barrier, which was positioned at approximately 1.8m from the downstage edge (Fig. 2). Kemp, et al. (2007) identified a direct relationship between the pressure recorded at the barrier and the tempo of the music. The general tempo of the Muse performance recorded in Hamburg (2006) reached 220 beats per minute, which, as stated above, resulted in increased barrier pressure at points where the song tempo was higher.
This direct relationship between the pressure and music tempo prompted a future change (see below) in the Muse concert barrier configurations to a more complex structure, designed to separate sections of the audience. Kemp, et al. (2007) and Upton (2004) found that approximately 5% of the crowd at a rock concert generate approximately 75% of the total energy. These findings were supported by studies of Muse performances worldwide between 2002 and 2009, and helped reduce potential and near miss crowd movement incidents.

The inclusion of a change in barrier configuration after a review of the initial crowd movement prediction rating was seen as a relevant control measure to combat adverse crowd movement and prevent crowd related incidents. In the Muse performances at Wembley Stadium, 16th and 17th June 2007, the set lists were studied and crowd prediction graphs plotted (Fig. 3). Examination of these graphs led to a change in the concert barrier configuration from the simple straight front of stage format to the one shown in Figure 4.
The total standing audience (approx 23,000) was split into three separate sections. Two sections, located immediately in front of the stage primary barrier and separated by the middle “thrust” barrier, held a capacity of approximately 3000 people each. The main bulk of the standing audience were held behind the secondary barrier.

The information gained from the crowd reaction graphs, and the creation of this new barrier configuration, which effectively separated the main energy producing sections of the audience into its smaller and larger proportions of the standing audience, meant that the intense crowd movement was mainly contained within the front two sections. “By removing the hard core fans from the mass crowd and managing these fans in an active way the safety of the mass crowd becomes less of an issue” (Kemp, et al., 2007: p?). The addition of further A-frame barrier formations reaching from the point at the centre of stage to the mixer position (thrust barrier) reduced the likelihood of horizontal crowd sway/surge and involuntary body movement. (It must be noted, however, that this area was used as an artiste walkway and increased crowd reaction at the front of the secondary barrier when the artiste moved along the thrust and approached this area.)
These measures meant that two separate crowd behaviours could be accommodated within the total standing audience; members who attended the performance because of the energetic factors such as 'moshing' and 'crowd surfing' would move to the front sections of the standing audience. Those who looked for a calmer place would aim for a position behind the secondary barrier.

There are, however, areas that contain elements of both sections mentioned above, such as the front three rows at the secondary barrier. To monitor this, a second pit area was placed behind the secondary barrier, which ran parallel to the primary barrier and stretched from the mixer position to the extreme stage left and right hand sides of the pitch (Fig. 4). This allowed security staff, first aiders and barrier maintenance staff who manned the barriers to extend their safety role further into the crowd.

On the days of the show, the crowd prediction illustration shown in Figure 3 was used to brief the site safety officer, the security providers, Wembley Stadium management and the emergency services. Special attention was paid to the spikes in the graphs and an explanation of past crowd behaviour and previously successful crowd management techniques given by Muse's head of security.

The performance prediction for the show on the 17th June (Fig. 3) included special effects. Upton (2004:p?) noted, “At contemporary concert events crowd excitement levels can be maintained and even increased by the clever use of lighting, sound and special effects, and the actions of the artiste to a point where a crowd mass can often appear to act irrationally”. Knowledge of these elements of the performance and their inclusion in the crowd prediction graph, served to update the existing event risk assessments, allowing all involved agencies to become more aware of their working environment and to refine their operations and staff deployment.

Referring to artiste/concert code system outlined earlier, the Hamburg concert was given a rating of A1 (extreme potential audience movement and higher than normal crowd movement - top line graph, Fig. 1) after taking into consideration factors such as: crowd behaviour of Muse fans in Germany, the use of only one main FOSBS, total capacity of the standing audience behind the primary barrier, and the use of special effects. Although the general crowd behaviour of Muse’s Wembley audience was similar to that of their Hamburg concert, the introduction of the new crowd management measures (e.g. barrier configuration, better prepared event agencies) for the Wembley performances (on both nights) has lowered the A1 rating to two separate ratings. Rating A3 was given for audience pens immediately in front of the stage, where extreme potential audience movement (Classification A) and lower than expected movement (line graph 3) were anticipated due to the separation of the main energy releasing audience groups into 2 parts. Rating B2 was given behind the secondary barrier, where medium potential audience movement (Classification B) and normal expected crowd movement (line of graph 2) were anticipated due to the separation of the energy releasing sections of the audience, reducing overall crowd movement and containing adverse behaviour.
Case Study 2: Keane 2008-2009

The typical Keane audience was relatively much less active that of the Muse audience. There was almost no evidence of adverse crowd behaviour in the touring period 2008-2009. The typical demographic for a Keane audience is: age range, 16-50; male to female ratio, 2 to 3; crowd formation, first three rows predominately females; highest observed crowd density, approx. 0.5m2/person; artiste/performance band: C (UK, US, Europe) B (South America)

The crowd prediction graphs were applied in advance to the Keane concert at Antwerp on 26 October 2008. The general audience demographic for the typical Keane audience was much broader in age range than Muse’s, and there was no previous evidence of adverse crowd behaviour. The larger percentage of female fans is thought to have kept aggressive behaviours to a minimum and this being the case, Keane were given the artiste rating C (lowest type of audience reaction). The graphs in Figure 5 illustrates the crowd reaction and song tempos of the Keane set list at that show.

Figure 5: Keane Crowd prediction graph Antwerp, 26/10/08

The Lotto Arena in Antwerp is a largely seated audience in raised, limited access bleachers with approximately 20% of the total capacity of the venue contained within the standing area at the front of the stage. With the small percentage of the audience who may wish to act more energetically being contained within this section, there was no evidence to suggest a need for increased barrier configuration or other control measures. The performance was predicted to be as shown in line graph 2 (normal crowd reactions) due to the calmer song tempos, lack of special effects, shorter queuing times, and close proximity and availability of amenities.

Based on this information two crowd prediction ratings of C2 and C3 were given to this show. Rating C2 was given to the standing area immediately in front of the stage, where low potential audience movement (Classification C) and normal/medium expected movement (line graph 2) were anticipated.
This was due to the separation of the main energy releasing audience groups from the seated groups, the calmer audience demographic, and audience members not operating at high intensity for long periods of time (e.g. higher tempo song was normally followed by a low tempo song). Rating C3 was given to the seated areas on raised bleachers due to: separation of standing and seated audience, audiences potential for movement being restricted by seating blocks, crowd density remaining a constant as per seating and rows distances, and calmer audience demographic. This prediction turned out to be very accurate. There was no crowd surfing or lateral or front to back crowd surges/sways. Stewarding observation points showed no evidence of involuntary body movement and the crowd maintained its maximum approximate density of 0.5m²/person. Song tempos and special effects within this performance were well within the C2 prediction rating with fans content to stand and watch the performance. The only overt crowd reaction was clapping at the end of each song and cheering and singing between the songs and at the end of the performance.

Conclusions
The findings in this study point to the increasing need for experienced and properly qualified personnel to compile and correctly interpret both the quantitative risk assessments for a concert event and qualitative research into the psychology of crowds. It is critical to obtain specific knowledge of the different crowd behaviour patterns, performers’ song tempos and set lists, as well as an ability to accurately observe and translate these elements into usable data.

The findings also suggest that crowd safety managers must have the necessary information, abilities and training to conduct a pre-event, concert audience prediction system, based on an artiste’s performance behaviour, set lists/song tempos and their respective audiences reactions.

Further research is needed into the psychology of crowds within a concert environment. It might also be useful to complement this study with relevant data on queuing systems, crowd arrival/dispersal, event specific ingress and egress patterns, and artistes’ behaviour.

References


Work based projects


Work based projects
5 FESTIVAL CAMPSITES: THE EFFECTS OF TENT THEFT

Nick Dymond
May 2009

Abstract
The purpose of this study is to identify the impact of the recent recorded increase in theft from tents at festival campsites on attendees and security staff at outdoor music festivals. A questionnaire survey was designed and the questionnaire administered to a purposive sample of 750 festival attendees and security staff. Secondary data was also sourced from police reports, published crime records and the media. The findings of this exploratory study do not corroborate the entrenched perceptions of many professionals, which appear to reject the opinion of festival promoters that the majority of theft occurs during the first night of the festival. They also show that the perceptions of festival goers, including those who have been victims of this crime, do not change. The study also offers some insight into how individuals deal with becoming victims of theft, and may have crowd security implications.

Introduction
During 2008, reports of theft from the tents of people attending many of the UK’s outdoor music festivals increased greatly compared to figures for previous years (reference?). Not only has this increase caused concern among promoters and people attending these events; more alarming were the techniques used to gain unlawful entry to access festival attendee’s belongings. In a recent article, Diver (2006:p?) asks the question: “Is such a crime just a symptom of the success of certain festivals?” He also notes that few thefts occur at a Truck Festival but that many do at larger events.” This study looks at the surge in tent theft at outdoor music festivals and the effect it has on crowd and security management. It explores the perceptions of victims of this rising crime and their expectations of what needs to be done to help reduce its incidence.

Media reports suggest that there has been a marked increase in theft from tents at the majority of the UK outdoor music festivals (reference?). An article on Bristol (2008) website suggests that according to new police figures, crime at last year’s Glastonbury Festival (2008) was the highest since 2003. As with Glastonbury Festival, the Download Festival event has also fallen victim to an increase in reported tent theft. Brown (2008) points out that during 2007, crime on the Download Festival site increased by 58%, from 203 offences in 2006 to 322. He also indicates that a total of 147 offences or 46% of all crime committed during the four-day festival involved theft from tents. To the disappointment of the Leicestershire police, this increase occurred despite numerous campaigns by the police and organisers to encourage visitors to keep their belongings safe (Leicestershire Police, 2008). Coombs (2008) of Avon and Somerset Police singles out theft in general as a key
factor in the significant increase in reported crime at the Glastonbury Festival. He also states that the increase in theft in general is as a consequence of theft from tents. These concerns were echoed by an article in the Western Daily Press (date?), which reported that theft at the festival was carried out predominantly in the campsites, and that tent theft made up the majority of thefts on-site. However, the article also reported that people became victims of pick-pocketing while in large crowds. However, despite recent crime figures, it is known that until recently, tent theft made up very little of the incidents reported to police during a three or four day music festival. Da Bank (2008) states that, “although tent theft at our festivals has always been very low, any theft at all is really upsetting for the promoter and the people involved. Not only is it upsetting for the victims of tent theft, as word spreads around a festival campsite, the whole atmosphere changes to one of unease”. He explains how tent theft can soil the atmosphere of an event, noting that while tent theft only directly affects a small percentage of festival goers, it is extremely distressing for victims and a spoiler of the atmosphere for everyone.

Disturbingly, it is thought that an element of gang culture may also be starting to creep into the outdoor music festival industry, and may have made an impact on crime levels. At Glastonbury Festival 2008, gang related crime was reported by Avon and Somerset Police. Coombs (2008) notes an increase in the number of co-ordinated groups who were able to gain legitimate entry to the Glastonbury Festival site compared with previous festival events. Da Bank (2008), promoter of Bestival, concurs with Coombs; he holds the view that the majority of tent thefts are committed by organised groups, rather than by opportunist thieves. Da Bank is also of the opinion that these groups attend the festival on the first night, specifically to target the campsites. Due to uncertainty accessing cash during a festival, it is not uncommon for attendees to bring enough money with them to last the duration of the event. It is for this reason, Da Bank believes, thieves target the campsites on the first night.

Hicks (1998) believes the current enforcement activities aimed at detection, seizure, and confiscation of assets and the prosecution of offenders is not effectively undermining organized criminal enterprises or reducing the overall threat of organized crime. Data suggests that some of current efforts may be contributing to the problem (reference?).

Study Method

Due to limited information surrounding the increasing effect of theft from tents at UK music festivals and the lack of secondary data, it was decided to conduct a questionnaire survey administered to a purposive sample of victims of theft and security staff. However, as this study was conceived in the spring of 2009, attempting to conduct an onsite survey or interviews would prove very difficult. This is due to the fact that the main festival season runs from June to September.
Therefore, conducting an online survey questionnaire seemed a more practical approach. Responses were received from 570 victims of theft crime and 286 security staff. The response figures were good, considering the time of the year. Two questionnaires were designed and posted on a Facebook page; one to victims of tent theft and the other to security staff and stewards. Key questions solicited data on: the most common day for tent theft at a festival, methods used to gain entry to tents, most common stolen items, and peoples’ perception of festivals. The questionnaires also offered questions which required multiple-choice answers, and others which were open-ended giving respondents the opportunity to elaborate their answers.

The decision to base the questionnaires on Facebook was to create a central focal point, and point of contact. This page was created at www.eFestivals.co.uk and www.downloadfestival.co.uk. Further promotion was sought from the following websites; Virtual Festivals, V Festival, T in the Park and Glastonbury Festival. Access to the questionnaires became available from January 2009 for ninety days, and promotion to all mentioned websites immediately followed afterward. As the questionnaires were accessible via the Internet, there was no control as to who can respond. Without direct form of targeting or control as to who has access to the questionnaire, some doubt is cast over the accuracy of the responses.

### Analysis and Findings

Analysis of the data obtained from the two groups is presented below:

#### Victims

The findings show that the Big Chill festival has clearly been a target of tent theft more than any other festival (Figure 1). This is alarming considering the small crowd capacity of the Big Chill, only 30,000 people, compared to Glastonbury Festival that now has a capacity of 125,000 and Reading Festival which is around 60,000.

![Figure 1. Festivals attended](image)

It is often thought that the majority of tent theft occurs during the first night of a festival. The responses do not support this claim, as Figure 2 shows.
These figures are based on the knowledge that the majority of festivals run from Friday (day 1) to Monday (day 4), and the headline acts playing on Saturday (day 2) and Sunday (day 3). Although some festivals run from Wednesday to Monday (e.g. the Download Festival), headline acts would usually perform on a Friday (counted as day 1). This pattern indicates that the majority of tent thefts occur during the key days of a festival, the days the headline acts are performing. Another factor to be taken into account is the victim’s knowledge of the theft; at what time they discovered they had in fact been a victim of theft. If a theft occurred before midnight on a Friday but the victim did not realise this until Saturday morning, this could impact the results.

During summer 2008, a lot of discussion was based on the techniques used by thieves to gain access to a person’s tent. The most common form of entry according to comments made on-site is the apparent slashing of the tent material with a Stanley knife or other sharp implement. These comments appeared to have been based on hearsay and rumour, as only 4% of the 570 respondents reported theft by cutting the tent open. The vast majority of the responses (96%) reported theft by unzipping the tent. It was also reported by a third of the respondents that being present in own tent at the time of the theft did not act as a deterrent.

The item that was reported stolen by the majority of respondents (58%) was cash, while credit cards were often left behind. This suggests that the theft may not have been carried out by professional thieves. Other items were also stolen, see Figure 3.
The majority of the respondent (68%) who have experienced theft at the festival, nevertheless, did not change their perception of the festival, and 73% will again consider attending the festival. This suggests that for the majority of respondents, theft did not play a role in their perception of the festival.

A great majority of the respondents (452) added further comments. These comments ranged from providing advice to fellow festival attendees, recommendations to the festival promoters and using the opportunity to vent their anger at being a victim of crime. Below are some of respondents’ comments:

Although the items stolen from me were not of a high value, it was still an inconvenience and annoyance not to mention it awakened my vulnerability and safety at this particular festival. I shall not be returning to this festival for many reasons, but being unsafe is one of the main reasons. So many other festivals are well run and have better security with more to offer in entertainment and hospitality.

Many, many tents were stolen from during that night. Some people were awake. The offenders mumbled an apology, saying they thought that this was xyz’s tent, or said they were looking for someone to buy some drugs from.

This was doubly surprising as my tent was inside the ‘secure’ staff camping area! (I was a steward) It was taken while we were at our ten-minute ‘staff briefing’ meeting before shift.

Thieves … have an easy target, which is made easier by the fact that you don’t know if the tent that person is entering is their own, and at night the sites become a maze with little lighting so again making tents easier to steal from.

**Security Staff and Stewards**

The findings show that of the 286 respondents, 54% worked in a security capacity and 39% as stewards, while the remaining 7% worked in both (Fig. 4).
169 respondents attended more than 10 festivals, 78 attended between 5 and 10, and 39 attended less than 5 festivals (Fig. 5). This suggests that the majority of the responding security staff had a good experience of the festival security industry.

In relation to the festival with biggest tent theft problem, 32% pointed to V Festival (Chelmsford), 28% Glastonbury, and both Download and Big Chill attracted around 16% (Fig. 6). These results show a difference of opinion compared to the results of victims of tent theft, where Big Chill received the most alleged incidents of tent theft.

Unlike the responses from victims, security staff respondents consider day 2 instead of day 3 where the highest figure of theft occurred (Fig. 7).
Security staff respondents in their majority (95%) reported that almost all the theft occurred in the midday to midnight period, and over 80% of the respondents stated they were in fact at the theft incident scene. Furthermore, 92% of the respondents did not know whether the victims were subjected to acts of violence. 169 respondents offered views which they felt could help reduce thefts from tents, some examples are shown below:

- Increased security to prevent people breaking in the site, and more security patrols to stop or put off planned thefts from people who have purchased tickets to get in and steal. An idea may be to use mobile CCTV, and their operators to keep watch on large areas of tents.

I think that it’s too hard to control tent thefts due to the size of the fields and the amount of tents in them. It’s too difficult to monitor all tents. More CCTV is unlikely to prevent it, just might give more of a chance of catching people; more security presence may reduce it.

There is a whole raft of countermeasures...It depends on the location/Event as there normally is a number of issues, such as the locals coming over the fence and this needs to be better controlled using a combination of good fencing (not heras) and security patrols, as even with steel shields they will try to come over. In addition there needs to be HV patrols within the campsite to discourage and a zero tolerance of where there is good suspicion that they have indeed tried to steal (there is frequently not enough for prosecution, but it is well obvious. In such cases the decision to evict needs to be made by the senior manager (and clear guidelines etc) or there will be abuse of the eviction policy by some security staff (unfortunately).

Raise awareness of the fact that tent thefts occur, from speaking to festival customers I have found that many people are unaware that there is such a significant level of theft. Offering tips and warnings around the campsite...From experience it is always helpful when people have to have a specific wristband …, which can help with crime prevention and detection. I have heard of people having their wallets stolen from their back pockets whilst they sleep, with people gaining access to their tents by silently slashing the sides with a razor blade. With this level of audacity by the criminals it is difficult to suggest anything that the potential victim can do to minimise their chances of falling prey, it therefore must be down to the control of people in and around the campsites, and providing some sort of identification as to who should be where.

**Conclusion**

The findings highlighted key concerns from festival attendees and provided some insight into their thoughts and concerns. The findings suggest that the overall
perception of theft at outdoor music festivals may not be as bad as originally thought. For the majority of the victims, the theft appeared to have been no more than an inconvenience. This study also highlights a determined intention to steal on the part of the perpetrators, and provides some evidence of an increasing threat of gang related incidents. Contrary to the general opinion that the majority of tent theft occurs during the first night at a festival, the findings indicate that a more common time for tent theft to occur was when the headline acts are on-stage.

Due to the exploratory nature of this study, further research should be undertaken at the end of the festival season. Police reports and statistics presented during September may provide key information as to an increase, or decrease in crime related figures. Although many festivals provide chargeable lockers for their attendees, these are often positioned around the arena areas and not the campsites. Providing free to use, manned lockers positioned within the campsites may help reduce theft from tents; this is an area which requires further research.

References


6 AN INVESTIGATION INTO KEY REQUIREMENTS OF PERSONAL PROTECTIVE EQUIPMENT IN HOSTILE ENVIRONMENTS

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Abstract
This study attempts to identify the key personal protective equipment requirements of close protection operatives in hostile environments. Whilst development has decreased the use of enhanced combat body armour, lighter variants protection requirements have increased. Data was collected from a purposive sample of operatives using an online questionnaire and supported by data from informal interviews with procurement personnel in three different services. The main findings show: a wide variation in what is perceived as personal protective equipment; load carry vest with ballistic armour plates is a step forward; paraclete is preferred to older equipment despite its high cost; fishing jacket and body armour are most suitable for weapon in hostile environments; and that the perceived threat drives the operative’s requirement to use personal protective equipment and to blend with the client. As this study was based on a small sample, it is recommended that a large scale study is conducted.

Introduction
The aim of this study is to establish key personal protective equipment (PPE) requirements of the close protection operative (CPO). For the purpose of the study, PPE is a term referring to items of equipment used to protect oneself in a hostile environment. General items of PPE carried on, or by the CPO also include variants of body armour (BA) and/ or load carry vest (LCV). A hostile environment (HE) is an ‘operational environment in which hostile forces have control as well as the intent and capability to effectively oppose or react to the operations a unit intends to conduct.’ (Milterms, 2009) Countries may be identified as a HE, based on factors that include climatic conditions, remoteness and cultural issues. In Iraq, where security is mandatory for corporate and diplomatic business, over 55 security companies currently operate and the market place or ‘customer groups’ as defined by Kirk (2009) is at a consistently high level.

Current literature on the subject of equipment purchase and use indicates that up to 80% of US Marines killed in Iraq from wounds to the upper body would have survived if they had better BA (Online News Hour, 2006); it also highlights a discrepancy between procured and required equipment. Furthermore, Bonsu’s (2009) survey showed that 43% of police officers killed whilst wearing BA, died due to wounds to the body from the side.
This, along with studies of US soldiers and CPOs, who had purchased their own BA seeking better protection levels (Harvey, 2008), indicates the need for PPE with increased protection.

A report by the Metropolitan Police Authority (MPA) (2007) proposes that considerations for the procurement of equipment should be based on three elements: a response to the threat, using the technology available, and producing a wearable garment. However, Consterdine (1997) suggests that a practical, all purpose BA and vest does not exist. By virtue of bodily mass and vital organ coverage, the ‘complete’ BA would likely be restrictive and cumbersome. A report produced by Defence Update (2007) points out that excessive weight and limited mobility exacerbates weak points of personal BA suits, demanding users and developers to agree and compromise on an acceptable balance between cost, weight, mobility, and protection. Therefore, consideration of PPE for its role specific use and the profile to be adopted with a particular principal (very important person, VIP) is of paramount importance. As mentioned by Thompson (2005), particular vulnerability in transit requires a suitable risk mitigation measure commensurate to the threat. Cairns (2004) stresses that standard operating procedures (SOPs) at both local and organisational level must be adopted, adhered to, and constantly evaluated. Moreover, the use of PPE in a HE, according to Thompson (2005), calls for correct managerial decision making; the need, issue and duration (Fay, 2006) to support the requirement for a professional prospectus regarding PPE; and communication between CPO and management to successfully complete risk mitigation measures.

**Study Method**

Interviews were sought with a cross section of CPOs who have the relevant knowledge and expertise to gain an understanding of why certain items of PPE and in particular BA and LCV are purchased. The sample was thus purposive; first individuals known to be contactable and in pertinent employment positions were chosen and subsequently provided ‘snowball’ sampling (Robson, 2002) through which further CPO’s were identified and contacted. In qualitative research, participants are carefully selected for inclusion, based on the possibility that each participant will expand the variability of the sample (Maykut and Morehouse, 1994). This concept ensured that quality data was obtained from professional and experienced operatives who participated in the interviews. Three informal interviews were conducted with individuals involved in the procurement of PPE. Those interviewed were from the Ministry of Defence (MoD), the United Nations (UN), and from a large multi-national private security company (PSC). The choice of interviewees ensured that information was obtained from diverse sources.
In each case, a personal approach along with an explanation of the purpose of the study, and the fact that the findings were to be made available for the participants afforded a greater trust to impart information and enlisted their support. All interviewees were selected specialists in procurement and all had progressed to CP Team Leader (TL) status and later onto procurement and managerial positions. Information sought was in the areas of personal experience as a CPO and managerial background, market research and equipment selection, financial implications and justification, and procurement deadlines and distribution of equipment.

The quantitative aspect of the study was in the form of an email questionnaire with a number of open questions, allowing more detailed responses. Thirty potential respondents were sought from a cross section of the security industry. Participants were CPOs operating in various HEs. The questionnaire was finally administered to a small sample of 20 respondents. The data obtained helped select four variants of BA and LCV for evaluation; these were: paraclete - all in one BA and LCV, BA and fishing jacket, cobra BA and LCV, and ECBA and LCV. It is arguable that selecting these four designs showed bias, however, these designs were all identified to have been used in a HE. The same questions were asked for each method of protection and carry capability, and the same score system was introduced for each of eight factors regarding each method.

Data from questionnaires was analysed first, data from the interviews was then used to enhance the reliability of the questionnaire’s findings. Anonymity was observed in relation to the identity of the respondents and their exact workplace. Information of a sensitive nature in the questionnaire responses, by e-mail or in the interviews was omitted in consultation with respondents. The general principles invoked in codes of research ethics (Veal, 1997) were followed. It was ensured that no harm would befall the respondents, that they took part in the research freely and on the basis of informed consent. All interviewees were offered the opportunity to proof read the findings.

**Findings**

Bell (1999) suggests that identifying similarities and differences for groupings, patterns and items of particular significance are important in research. Respondent CPOs had varied levels of experience ranging from five months to over 21 years and all had been in a hostile environment. From the data gathered, height, build or fitness levels did not appear to be significantly different. However, the individual’s perception of fitness was subjective and unless collectively tested no significant conclusions or comparisons can be made.
It can be assumed that to work in a HE carrying full PPE an above average level of fitness is preferable; as Consterdine (1997) suggests ‘fit people are better able to deal with stressful situations.’

All participants had military backgrounds, with fourteen still serving in HM Forces and six in civilian positions. Fourteen were team leaders, where additional responsibility and a ‘duty of care’ for the CP Team require superior knowledge of PPE. Only six of twenty operatives had been involved in procurement of PPE. Of these, four had bought equipment for personal use and five as business ventures to support operations in a HE. This ranged from individual items of PPE to multiple purchasing. One CPO had procured equipment to set up a full contract.

Analysis of the data (Fig. 1) shows that BA was considered the most important item of PPE and supports D’Annunzio’s (1997) requirement for continual development of armour for all personnel. The belt and holster scored highest for regularity of use and second in importance. This method of weapon carriage provides concealment under a jacket and armed anonymity on task, which is reflected by the high scoring obtained by the fishing jacket/BA. Many respondents stated that profile of the operative is a primary consideration affecting task specific PPE and should reflect the principal’s dress; overt PPE may not always be acceptable for task. Intersec (2006) notes that profile adoption and image can ‘either reduce or antagonise an aggressor, enforcing the need to blend. Elbow and kneepads scored least in both ‘importance’ and ‘regularity of use’ and had the largest difference score. Cairnes (2004) suggests that standard operating procedure for a CPO when attacked are to respond with ‘fast, aggressive action’. Therefore, the argument for the actual need for such items of PPE is minimal, consistent with the responses obtained, as eight out of twenty respondents had not used them. Interestingly the LCV scored evenly for both importance and regularity of use, and was the ‘median’ score of the nine items. Possibly, the design of PPE has moved away from separate BA and LCV on a tactical overt task towards modular all-in-one units that now dominate the market place.

Figure 1. Perceived importance and regularity of use of PPE items
The respondents’ scores of four variants of BA/LCV are shown in Figure 2. The average scores were: paraclete, 16 respondents (53.5%); fishing jacket and BA, 18 respondents (46.2%); COBRA/LCV, 12 respondents (48.9%); and ECBA/LCV, 12 respondents (44%). A maximum score (72) was received for one variant, yet one operative scored this as 37, which highlights how personal interpretation can affect results and the difficulty of discounting subjective personal perceptions. The paraclete and fishing jacket/BA were comprehensively scored above the other two variants. The fishing jacket scored highest for ‘size’, and supports CP SOPs’ emphasis for the need for movement and mobility (Cairnes, 2004). Cost effectiveness scored least for each type of PPE and cannot be measured reliably as there was no evidence to suggest that respondents knew commercial prices of PPE. The MoD and PSC respondents reinforced that cost effectiveness would not override safety. ECBA/LCV scores were the most consistent with least overall difference between highest and lowest scores. It is possible that as the original tactical BA, it is assumed to be average in all ways.

Figure 2. Respondents’ scores of four variants of BA/LCV
All respondents were satisfied with their current protection and load carry capability; additionally interviewees placed emphasis on continued development and research areas. The MoD procurement respondent had a more defined budget and added that as PPE develops, the unit seeks to firstly trial and test PPE prior to placing orders. Respondents also suggested the following enhancements and modifications: the need for lighter ballistic plates, a reduction in overall bulk, durability problems (zips and velcro fastenings that diminished quickly in harsh and extreme climatic environments), and further ability to alternate pouches attached to a load carry capability. They stated that terrain, climate and design had led to downfalls in durability of PPE. PSC and UN respondents added that this led to serviceability or replacement issues in isolated environments, where only local purchase may be possible. This was a lesser problem for the military mainly due to the availability of logistical support in a HE to replenish CP teams. The paraclete system integrates the holster onto the chest area of the vest, which respondents preferred due to its versatility and as it offers no obstruction to access the weapon and to overall freedom of movement. Interestingly, the respondents were divided equally over the position of the holster, whether overt or covert; they felt the position purely depended on the nature of the task.

Different types of PPE are available for use and as stressed by interviewees, security employers will supply one type for all. It could be argued that this practice has a detrimental effect on performance, as ill fitting or non-task specific PPE may have to be used by virtue of company supply, leading to continuing personal procurement (Harvey, 2008).
Procurement is normally subject to financial constraints, requiring presenting a stringent business case, however, once ‘on the ground’ some team leaders could request and be given an open cheque, if safety and operational imperatives demanded. All interviewees believed that any PPE sourced needs to be proven and, therefore, should adhere to strict ballistic protection ratings. The number of respondents who personally procured PPE confirms paraclete as the choice brand. This appears to contradict Fay (2006) who claims that cost measures for replacement and serviceability could pose a threat to CPO safety, as paraclete is the most expensive of those assessed.

Conclusion

PPE differs immensely but all items should fulfill the same roles and a CPO needs to believe that PPE is of sufficient standard for the environment, durable, and serviceable. The LCV with ballistic armour plates is considered a step forward and the findings show that, despite its high cost, CPOs prefer paraclete to older equipment. It provides modularity, large stowage capacity, and a quick release function. However, the fishing jacket and BA is still the proven and most suitable for weapon and BA concealment in a HE. Profile and image naturally reflect the perceived threat, and drive the operative’s requirement to use PPE in general and to blend with the principal. The issue raised against PPE on the whole is mainly concerned with its bulk and weight. Although it is encouraging that the key items of PPE in use appear to be adequate for task, monitoring of new commercially available equipment should continue and may provide stimulus for additional comparison of BA/LCV to find the perfect and complete system. This study is exploratory as it’s findings were obtained from a small sample; a larger scale study should be undertaken, tailored to particular localities or countries. Using probability sampling techniques, a cluster sample of CPOs in an area may identify suitable PPE for specific and different environments and roles. A need for gender specific studies in a HE should also be undertaken as all respondents in this study were males. A female prospectus regarding weight, fitness level, cultural background, and perceived threat in a certain HE may provide results for further PPE procurement and design. Communication is key between the CPO and the security manager or procurer, as well as, between the security manager and manufacturer. In a HE, this is crucial in order that appropriate equipment is supplied for specific tasks. Increased research and direct consultation between manufacturers, suppliers and CP companies to look into current durability and serviceability issues should enhance the design and concept of future body armour.
References


7 ALCOHOL MANAGEMENT: BOON OR BOONDOGGLE?

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Abstract
Amongst the many crowd management concerns, alcohol is possibly the biggest in the US. Thousand of intoxicated fans put themselves and others in harms way on a daily basis. Over the past ten years the major sport leagues in the US have taken steps to reduce the number of intoxicated fans getting into stadiums and develop strategies to minimize the impact on others. This study throws light on the current state of this problem in the US, by conducting an online survey of a convenient sample of events hosting facilities. The findings showed that alcohol is sold at most facilities, most facilities enforced alcohol policies, and most facilities limited beer sales to two beers per transaction. Unique to the US is tailgating which was found at 50% of the responding facilities, but there was significant divergence in who was responsible for monitoring the parking lot where tailgating was occurring. While US facilities were highlighted in the study, the implications impact alcohol policies all over the world.

Key words: alcohol, training, policies, fans, liability

Over the past several years the media in the United States (US) has focused its attention on several events involving drunken fans who attend National Football League (NFL) games. Several episodes led to this increased attention including an incident involving an inebriated fan who after leaving a football game held at the NFL’s New York Giants stadium was involved in a serious car accident several hours later. The vehicle driven by the intoxicated fan struck a car containing a mother, father and young female child. The mother was seriously injured and the two year old child was crippled for life (Coffey, 2005). Some individuals opposed to serving alcohol at sporting events have used this tragic event as a lightning rod to highlight the evils associated with sport and alcohol. On the flip side are those who argue that this was an isolated case involving one fan’s inappropriate conduct. The plaintiff’s counsel in the New York Giants stadium case (Verni v. Harry M. Stevens, 2006), which produced a $105 million (USD) verdict against the concessionaire, successfully argued that a stadium should be held to the same standard as a bar that serves alcohol (Coffey, 2005). The attorney also argued that the stadium fostered a culture of drinking. On appeal, the appellate court overturned the verdict and said it was inappropriate to try and focus on a “drunken culture” at the stadium and that the only relevant issue was whether the intoxicated driver was served when he was visibly intoxicated (Gottlieb, 2007).

One of the biggest concerns with selling alcohol is the impact intoxicated fans have on crowds, whether those sitting around an intoxicated fans or other drivers sharing the road with an intoxicated fan.
This article will examine some of the critical issues surrounding the impact of alcohol at US sporting events with an emphasis on what the US industry does to manage the alcohol sales process and if such attempts are sufficient to provide as safe an environment as possible. While this article focuses on what is being undertaken in the US, it should be specifically noted that numerous countries have already developed significant policies and procedures to handle intoxicated fans. However, the US is burdened by a litigious society that tries to find liability against financially strong companies whenever possible.

Alcohol Management Literature
Sport facility managers need to be concerned about alcohol sales at sporting events due to the potential for inappropriate conduct by intoxicated individuals. Such conduct can range from swearing and fighting to driving under the influence of alcohol. Intoxicated behavior can occur before or after fans enter a facility, which can impact crowd management procedures.

Fan violence associated with sport events and possible intoxication has been around for years. Several well-documented events in the US included a “10-cent Beer Night” during a 1974 Major League Baseball (MLB) between the Cleveland Indians and the Texas Rangers. The game attracted a very large crowd who were allowed to purchase up to six beers per fan each time they visited the concession stands (Steinbach, 2004). Numerous arrests and fights broke out during the game.

Similarly, in 1979, Mike Veeck, the son of Chicago White Sox owner Bill Veeck, created a promotion called “Disco Demolition Night”. Fans who brought a disco record to the game received a discounted ticket and the records were to be blown up in between games during a double-header (two back-to-back games held on the same day) with the Detroit Tigers. The White Sox had hoped the promotion would result in a slight increase in the number of tickets sold, but numerous fans showed up for the game. The game quickly sold out resulting in thousands of people milling around outside the stadium. Many spectators inside the stadium became intoxicated and when the records were blown up these individuals stormed the field. As a result of damage to the field and the thousands of intoxicated fans on the field the umpires forced the team to forfeit the second game.

In 2000, an intoxicated fan at a MLB game between the Chicago Cubs and the Los Angles Dodgers stole a hat from a Los Angeles Dodger pitcher and the ensuing altercation resulted in 16 Dodgers climbing into the stands to fight with fans. The players were suspended for a combined 84 games and fined $72,000 for their part, but the fans were primarily to blame. In response to the incident Wrigley Field changed its policy to stop selling beer in the middle of the 6th inning rather than at the top of the 7th inning (Steinbach, 2004). Baseball games normally last nine innings.
One of the ugliest alcohol related incidents occurred in 2005 during a National Basketball Association (NBA) game between the Detroit Pistons and Indiana Pacers. Ron Artest, a player with the Indiana Pacers, had a cup of beer thrown at him by a fan. Facility managers had prohibited the sale of bottled beer to avoid inebriated fans from throwing the bottles. Therefore, beers were sold in cups and one of these was thrown at Artest. Artest entered the stands to find the person who threw the cup of beer. Additional players entered the stands and a small melee ensued with punches and even a chair being thrown.

As a result of the incident the NBA reduced the size and number of beers a patron could purchase and required teams to announce before each game what is appropriate fan behavior and the penalties for misbehaving ("Directive to take effect after All-Star break," 2005). Teams also communicated their “fan code of conduct” on a regular basis through their web pages, signs, and advertisements to help educate fans concerning appropriate conduct.

Besides fan education, team administrators have undertaken other strategies to deal with unruly fans. In response to some incidents, teams have increased police presence or hired more alcohol compliance officials. For example, MLB’s Boston Red Sox increased their alcohol supervisors from five to nine after an incident involving a fan and New York Yankees player ("Red Sox beef up security," 2005). The NFL, recognizing the need for proactive measures halted alcohol sales at end of third quarter for day games, halftime for night games, but has not stopped alcohol sales in premium seating areas (Curley, 2006). These rules show that while alcohol has played a role in various incidents in the United States, sport administrators are taking steps to minimize alcohol related issues.

In a previous study facility managers reported that alcohol related issues were the number one underlying cause for arrests (48%), followed by assaults (15%) (Ammon & Fried, 1998). A poll conducted in 2009 by Turnkey Sports Polls found that of 1,100 senior level sport industry executives in the US, alcohol abuse by unruly fans was the number one threat to fan safety at major sporting events. The 62.19% of respondents greatly outpaced the next most frequently sited safety concern of “terrorist activity” which had on 18.73% of the responses (Turnkey Sports & Entertainment, 2009).

If the teams or venue operators cannot control fan conduct, fans can try to resolve issues themselves. Some fans confront others, sometimes politely and other times violently, while other fans pursue redress from the teams/facilities. In one case a father sued MLB’s Colorado Rockies and their concessionaire (Aramark) alleging the defendants created a dangerous environment and failed to protect the plaintiffs from two intoxicated patrons who poured beer on the man and his son twice during a game.
During the lawsuit the father requested that the Rockies implement a five-year plan to monitor alcohol sales and provide additional security (Boeck, 2005). Facility operators, team officials, and league administrators from the amateur through the professional ranks need to implement appropriate alcohol management solutions. One way these groups have attempted to address the problem includes researching how others have handled alcohol related issues.

**Industry Research**

**Sport Alcohol Abuse.** Survey respondents have reported that sport fans and college students in the US were more likely to engage in alcohol related activities. Such conduct is not always innocent as alcohol consumption led to 1,700 deaths among college age students in 2001. The results from one study found that 53% of college aged sport fans engage in binge drinking versus 38% for non-sport fans (Wieberg, 2005b).

In the United States millions of fans gather in the parking lots before sporting events eating, drinking and socializing before entering the stadium or arena. This is known as “tailgating.” Tailgating has evolved over the years into an experience that transcends games in the US. Some fans arrive days in advance in recreational vehicles to party with like minded fans. Some tailgaters party the entire day and never even enter the stadium. While tailgating is exceptionally prominent for college football, it is also seen before most NFL games as well. Researchers in a survey conducted at a large university in the eastern US (Virginia Tech), observed 275 individuals before four football games. The survey found that 84% of the tailgaters had consumed alcohol and 46% had a blood alcohol content (BAC) level over 0.08. A BAC of 0.08 is the minimum level in the US that indicates the individual is legally under the influence of alcohol (for operating a motor vehicle). Furthermore, almost one-third of the intoxicated tailgaters indicated that they would be driving after the game (Wieberg, 2005b).

The researchers in an earlier study (1982) concluded that between four to seven percent of all fans at sporting events consumed enough alcohol to be legally impaired. The survey was conducted at one event at Canada’s Exhibition Stadium. Unfortunately there was no indication as to how long the event lasted and what time of day it occurred—which would impact whether people were tailgating, thirsty, hungry, tired, etc. At a large stadium or arena this could represent several thousand fans. The researchers also concluded that the severity of the problem was directly related to the length of the sporting event. If the event was only for a short time there was less likelihood that fans would be drunk versus a double-header baseball game where there was a much greater likelihood that fans would drink more over an extended period (Single & McKenzie, 1991).

The 2004 Safe Celebration Study was undertaken to gauge fan behavior and alcohol concerns before, during, and after a collegiate game. A majority (93%) of the respondents self reported that they engaged
in safe tailgating, 93% did not throw beverages, 92% did not fight with other fans, 82% felt they drank responsibly or in moderation during a game, and 86% did not rush onto the field after the game ("Unprecedented Survey," 2004). Such self-reported results contrast sharply with the same respondent’s feelings of what occurs at games. For example 58% of the same respondents felt that fans fought with other fans, 49% felt that fans threw beverages, 47% thought fans threw items onto the field, 45% thought fans stormed the field, and 24% thought fans rioted at games. The survey of 986 college students also highlighted that more pre-game parties were held at a friend’s house (56%) versus only 30% tailgating in a stadium parking lot ("Unprecedented Survey," 2004).

Alcohol Service Research. Research has also been conducted on the effectiveness of alcohol service training programs. The only published journal article focusing on alcohol service training was published in 1987 (Russ & Geller, 1987). The survey was conducted at two taverns so the findings may not necessarily translate to stadiums and arenas. Seventeen waiters and waitresses were trained and all passed the TIPS post training test. Training for Intervention ProcedureS (TIPS), and Techniques for Effective Alcohol Management (TEAM Coalition) provide training to individuals regarding effective alcohol service. These programs train a variety of individuals who serve alcohol or supervise/monitor those who serve alcohol.

The Russ and Geller (1987) study found that the trained wait staff more consistently and frequently asked for IDs, offered patrons food, offered patrons water and other non-alcoholic drinks, delayed serving patrons between drinks, and made drunk-driving related comments. After the TIPS training program none of the patrons served by the TIPS trained waiters exited the facility with a 0.10 BAC, while almost 50% of patrons served by untrained waiters had a BAC over 0.10. The problem with this study was the environment. A tavern is a more controlled environment compared to a stadium with 60,000 patrons. In addition, patrons were served at tables versus a queue with 10-20 people trying to purchase alcohol and rushing back to their seats.

Research has analyzed various alcohol management strategies implemented to minimize the possibility of alcohol related concerns. Facility managers employ searchers at the gates and doors of sport facilities to prevent alcoholic beverages from getting into the facility. In one survey, 81% of respondents indicated that fans entering the facility were monitored to prevent prohibited items such as bottles and cans from entering the facility (Ammon & fried, 1998). The same survey analyzed how patrons learned about the policy prohibiting items at the facilities and the results showed that 13% of stadiums used signage, six percent used public address announcements, and most facilities utilized multiple strategies (signage, announcements, fliers, and other combined techniques). The surveyed facilities that did not sell or allow alcohol into their facilities utilized security personnel, ushers, searches, uniformed officers, and the threat of revoking season tickets to prevent alcohol usage.
The survey also showed that “dry” facilities, where alcohol was not sold, also had a lower number of alcohol related arrests compared with facilities where alcohol was served (Ammon & Fried, 1998). However, preventing alcohol from being brought into the sport venues will not eliminate all risks.

University campuses in the United States represented the primary area for significant alcohol reform. For example, Oregon State University’s (OSU) football stadium was alcohol-free for years, but in 2005 the university enforced the rule by automatically expelling anyone caught with alcohol in the facility. Such an action reduced assaults and fights dramatically. The effort was supported by 25 police officers and 10 public safety employees. During OSU’s six home games in 2005, 138 fans were ejected and 36 minors were cited for possessions of alcohol, several for assault and harassment, and eight for disorderly conduct. The University of Oregon also implemented the same policy and USC (University of Southern California) decided not to sell alcohol during home games at Los Angeles Coliseum which cost the team about $1.8 million a year in lost revenue (Odegard, 2005).

In 1996 one major US university (University of Colorado) banned alcohol sales in the seating areas (alcohol was still sold in private suites and club areas). The number of game day arrests fell from 20 to 11 and the number of students refereed to the judicial conduct office declined from 58 to 11. However, by 2005 the total game-day arrests rose to 45 and the judicial office had 48 referrals. The number of stadium ejections also doubled from 1995 to 2005. School officials tried to reduce these numbers by attempting to limit alcohol consumption before games, but such an effort can be very difficult to enforce (Steinbach, 2006).

However, on a global basis banning the sale of alcohol is not a new phenomenon. In 1980 Scotland’s government passed a ban on all alcohol inside stadiums. Similarly, international soccer organizations such as FIFA and UEFA banned alcohol sales at their events while the venues could still sell alcohol at certain locations during FA Cup Finals (Frosdick, 1998). While European venue managers sometimes banned alcohol sales and consumption within view of the field/pitch, other facilities allowed sales and some served as many as four drinks per transaction, compared to most US facilities that have policies that limited a maximum of two beverages per transaction (see results section below) (Frosdick, 1998). In 2004 Russia went a step further by banning alcohol consumption in all public places such as stadiums with the only exception being restaurants (Bush, 2004). Even with alcohol bans at most European facilities, fans often drink before an event and are already intoxicated when they arrive at the facility. As previously mentioned, in the United States, this phenomenon can be observed at numerous “tailgate” parties held in the venue parking lots before games where fans can become intoxicated before they even enter the facility.

If alcohol generates so many facility related concerns, why do facilities still sell alcohol? The reason is primarily financial. Alcohol sales generate significant revenue and can make fans happy.
Fans want to enjoy alcohol while enjoying their game or event and alcohol sales often represent 70-75% of all concession revenue (Steinbach, 2004).

A survey of major US colleges in 2003 found that more than 25% of responding schools allowed alcohol sales at their events. Approximately one-third of the respondents also indicated they allowed alcohol advertising in their stadiums and game programs. In 2003, alcohol industry advertising during college sport-related television programs totaled $52.2 million, which increased to $66.2 million the next year (Wieberg, 2005a). Another 2003 US collegiate survey revealed that 70% of the programs had deals with beer companies that ranged from simple radio spots to deals worth almost half a million dollars (Lee, 2004). The beer advertising numbers decreased to 64% the next year which showed that it was hard for campuses to break from the needed alcohol advertising revenue (Wieberg, 2005b). The follow-up survey found that 54% of the top US collegiate programs had alcohol advertisements at facilities, both on and off campus, and at some private suites (Wieberg, 2005b). These sales occurred at various home games, conference championships, and bowl games.

One Washington DC based non-profit health research group, the Center for Science in the Public Interest (CSPI), launched a campaign in 2004 to eliminate alcohol in sports (Campaign for Alcohol Free Sports). Such an effort was launched to combat the over $50 million alcohol manufacturers spent in 2003 to market their products to college sport fans (Lee, 2004). However, the $50 million price tag on college sports pales in comparison to the $291.7 million spent marketing to professional sport fans. By 2005, the CSPI had pledges from 246 institutions to limit alcohol advertising, but only five of the 65 members of the largest college athletics conferences in the United States had made a pledge (Wieberg, 2005a).

Alcohol Training
One of the major strategies for reducing alcohol related problems is training alcohol servers. Such training programs have been successful in reducing alcohol-related problems and increasing overall income. As previously mentioned, the two largest alcohol training programs are TIPS and TEAM.

TEAM Coalition has been working with its member partners since 1985 to make various events safer and more enjoyable through effective alcohol service training. The training attempts to develop a total facility alcohol management approach while working with managers, employees, concessionaires, and fans. TEAM training focuses on variables such as:

- Signs of impairment
- The liability associated with serving intoxicated patrons
- How and why it is important to follow facility policies and procedures
- How to evaluate guests and intervene when necessary
- What are the issues associated with blood alcohol levels
- What are appropriate seller/server guidelines and how to follow them (Team Training Guide, n.d.)
Prior to the 2003 baseball season, TEAM worked with all 28 MLB teams in North America to train an estimated 8,100 ticket takers, parking lot attendants, and security guards—which is part of the 12,000 staffers trained since 2002 ("Stepping up to the plate poster big success," 2003). TEAM also works with some brewers to help disseminate the message promoting responsible beer consumption. For example, Anheuser-Busch, Inc. has a program called Good Sport which presents a comprehensive action plan for promoting responsible fan behavior (Good Sport, 2004).

**Technology to the Rescue**
Technology can also help solve some problems associated with individuals purchasing alcohol when underage or after already purchasing a significant amount of alcohol. QWEST developed a point-of-sale system that utilized data on the magnetic stripe on the back of driver’s licenses. The technology allows a beer server to swipe a card and the machine will automatically determine if the patron is old enough to purchase alcohol and if the ID is valid. It can also be programmed to track alcohol purchases allowing a server to decide if an individual has purchased too many drinks and use the data as the basis for possibly cutting-off the patron. The technology was installed in various facilities such as the American Bank Center, where the concessionaire, Centerplate, adopted the system (Muret, 2006). Technology can help prevent problems because even trained individuals cannot stop every intoxicated fan or driver. Since experienced alcohol users/abusers can hide their signs of impairment, technology can give facilities another option for protecting fans.

A new technology shaping crowd management in the US is texting problems to a control location. In 2009 Every NFL stadium and several MLB stadiums had tapped into the system. The system empowers fans to report incidents from intoxicated patrons to fights so security can respond quickly. Such a system significantly increases the number of eyes monitoring a facility and allows fans to surreptitiously report abuse without confronting unruly fans (Muret, 2009).

**Government Assistance**
One defense that can be raised during a lawsuit is the defense that it is not illegal to have a BAC over 0.08 unless someone engages in illegal conduct such as indecent exposure, disorderly conduct, fighting, or drunk driving. Many fans have a BAC over 0.08. but do not exhibit any physical manifestations of their intoxication. This raises a viable defense that it can be in fact safer for intoxicated fans to be in a stadium or arena since facility employees can at least attempt to control and monitor activities occurring within the facility (Steinbach, 2006). Thus, an intoxicated fan who is sitting watching a game is not doing anything illegal and the facility should not be held responsible for their conduct. However, should the local government be responsible for the inebriate fans conduct after leaving the facility? This philosophy can best be seen in the efforts law enforcement agencies and other groups to reduce intoxicated driving.
For many years a US organization called Mothers Against Drunk Driving (MADD) has been at the forefront of alcohol and driving related safety. From 1980 when MADD was founded through 2003, the number of alcohol related traffic fatalities has decreased approximately 44% from 30,429 to 17,013 (Kanable, 2005). By 2008 the number of alcohol related fatalities in the US declined again to 11,773 (Copeland, 2009). These numbers do not take into consideration all the “drunk driving” accidents and over a million tickets issued to those driving while under the influence. Thus, there are still numerous drivers tempting fate by driving while legally intoxicated.

Approximately 1.5 million individuals were arrested in 2002 for driving under the influence, but the National Highway Traffic Safety Administration (NHTSA) estimates that for each arrest there are 87 other instances of intoxicated drivers who are not caught (Kanable, 2005). One of the strategies that has been useful in deterring drunk drivers and identifying other criminal acts are road-side sobriety and check points. However, ten states (Idaho, Iowa, Michigan, Minnesota, Oregon, Rhode Island, Texas, Washington, Wisconsin, and Wyoming) have ruled that such checkpoints are illegal. Nonetheless, sobriety check points have been proven in at least one study to be more effective than just roving patrols. Even with checkpoints a trained officer only has a second or two to determine if a driver is possibly intoxicated. Such a short time period highlights the difficulty minimally trained concession workers when trained professionals with many years of full-time experience have a hard time spotting those with signs of impairment. To aid officers, new technology such as passive alcohol sensors which can be waved in front of a drivers face, similar to how a person can smell a driver's or a patron's breath (Kanable, 2005).

The involvement of police in the detection and reduction of alcohol related incidents has many facets. Law enforcement officials are often deployed in stadiums to help foster a safe environment. In the same vein, police presence can lead to problems with guests trying to rebel against authority. There is a fine line that team and venue managers, security personnel, and law enforcement officials need to straddle at sport facilities. This does not mean that the parties should not work together in the best manner possible to leverage each other's strengths and jurisdiction. A US television program called “Inside Edition” conducted an expose on “NFL communities at risk from game day boozing” (2003). The program highlighted that only five of the 51 police departments with an NFL stadium in their jurisdiction deployed additional DUI enforcement on game days. Only one of these five departments had ever conducted a sobriety check point in conjunction with a game, even though one-third of all the jurisdictions indicated they had a problem with football fans driving under the influence (Alcohol and sports-an unhealthy mix, 2005). It should be noted that intoxicated drivers is an especially critical concern in the US since few arenas/stadiums in the US are served by significant public transportation systems. That is why there are tens of thousands of drivers going to sport facilities and the emphasis on tailgating in these large parking lots.
Legal Theories
If a facility operator knows that alcohol related concerns might arise and they takes steps to reduce such concerns, the facility's potential liability can be greatly diminished (Ammon & Fried, 1998). Likewise, the failure to monitor alcohol can generate significant liability. The primary legal theory are known as “Dram Shop” laws or “Host Liquor Liability” laws. Under Dram Shop law a commercial seller of alcohol can be held liable if they sell alcohol to a visibly intoxicated person who later gets into an accident. Thus, liability is based on the fact that if the alcohol seller was responsible and knew someone was already intoxicated, they have an obligation to prevent the person from buying/consuming additional alcohol at that venue/establishment (Ammon, Southall & Blair, 2004).

Dram Shop liability can be based on common law or as passed by legislative bodies. In contrast, the host liquor liability law applies to individuals (not establishments) who provide alcohol to guests who are visibly intoxicated. The host can be liable for failing to prevent a person from drinking when they are visibly intoxicated or to allow intoxicated individuals to drive. Liability is predicated on the fact that the host should have known or that it was foreseeable that someone who was drinking could cause injury to others. Under both laws, the proprietor or host will be liable if they sell/furnish alcohol to minors (Ammon et al. 2004). A minor normally refers to someone under age 18, but due to the minimum drinking age in the US being 21, it also refers to a drinker under age 21.

New Jersey Statute 2A:22A-5 (New Jersey Statute 2A:22A-5) forbids commercial establishments from selling alcohol to those who are visibly impaired and damages could be paid to both the intoxicated individual and a third party. If a social host serves a visibly intoxicated individual they are liable only to the injured suffered by a third party. For example, if someone who is intoxicated becomes involved in a traffic accident. The passenger/driver in the other car can sue the social host. The New Jersey legislature envisioned commercial (bar and restaurant) workers, not stadium concessionaires when they passed the legislation. Furthermore, the statute’s language does not clearly define an alcohol service establishment.

The liability issues associated with selling alcohol at a sporting event were challenged in *Verni v. Lanzaro, et al.*, which was filed in a US court in October 2003 against a number of defendants including the NFL, New York Giants, New Jersey Sport & Exposition Authority (who manages the Giants’ stadium), and Aramark (the concessionaire). Mr. Lanzaro was a fan who paid to attend a Giants football game. Lanzaro claimed he consumed 14 beers at the game. Lanzaro claimed that around half-time he bribed a concessionaire at the game to sell him six beers in violation of stadium policy regarding the maximum number of beers a person can purchase at one time. Lanzaro left the stadium during the second half of the football game and hours later was involved in a car accident that left the Vern’s 2-year old daughter paralyzed. Lanzaro’s blood alcohol level after the accident was .266 (more than three times the legal limit). The suit was brought pursuant to the New Jersey dram shop laws.
The plaintiffs during the initial trial attempted to convince the jury that the venue manager and its concessionaire (Aramark) promoted a culture of intoxication. During the appeal the Court of Appeals concluded that this was a mistake. The Appellate court concluded that the only relevant issue was whether or not Aramark served Lanzaro while he was visibly intoxicated. By allowing the jury to consider the alleged drinking culture rather than whether a specific customer was served while visibly intoxicated, the trial court misinterpreted and expended the New Jersey dram shop law (Gottlieb, 2007).

The Verni case is not an isolated incident. A 2002 case involved an intoxicated fan who, while driving home from a National Hockey League (Minnesota Wild) hockey game, crashed his vehicle rendering him a paraplegic. The plaintiff’s BAC was measured between .27 and .37. Minnesota law prohibits a person from recovering medical costs for their own injuries sustained while driving under the influence of alcohol. The plaintiff’s wife, however, attempted to recover household costs due to her husband’s disability by using a Minnesota law that prohibited the sale of alcohol to someone who was obviously intoxicated. The plaintiff would have to prove that the defendants were liable for selling alcohol to a visibly intoxicated plaintiff (Steinbach, 2004).

**Alcohol Management Survey**

The previously discussed information identified a tremendous need within the facility management industry to better protect ticket buying spectators from the risks associated with the sale of alcohol at sport/entertainment events. Benchmarks are necessary in order to determine appropriate industry practices. Once these alcohol management practices are identified, industry benchmarks can be created and implemented by concerned facility managers. Only by surveying those individuals working in the facility management industry will these benchmarks be identified.

**Population/ Procedures**

The intent of this study was to assess current alcohol practices in sport/entertainment venues throughout the United States. Through this investigation data were analyzed with regard to facility size, classification of management, and geographical factors. A convenience sample of over 113 U.S. sport and entertainment venue managers were encouraged by industry publications and web notifications to fill out a multi-item questionnaire posted on the Internet by the International Association of Assembly Managers (IAAM). Seventy-four responses (65.5%) were collected. Upon completing the review of literature and communicating with representatives from venues managers responsible for sport and entertainment events, crowd management personnel, as well as athletic department representative several areas of concern in stadium facility management were identified. These areas were “alcohol policies”, “training of alcohol servers”, “tailgating issues” and “search procedures”.
Instrumentation
A previous study (Ammon, 1993) investigated risk and alcohol policies in selected municipal football facilities located throughout the US. His survey was selected by the researchers due to the similarities between the current study and Ammon’s 1993 research. A small number of changes were made to the older survey to make it compatible with the current study. The edited survey was piloted by a panel of twenty experienced facility managers for their critical review. The edited survey instrument was analyzed to determine if it accurately and reliably measured alcohol management issues and to determine face validity. In order to accomplish the purpose of this study all data was collected, analyzed and reported using descriptive statistics. The survey was divided into six sections. Section A asked for demographic information while section B pertained to information about the specific facility. Sections C, D, E, and F were components of a larger heading: “risk management.” Section C pertained to alcohol policies, section D focused on training alcohol servers, section E identified problems with tailgating, and section F asked for information regarding patron search procedures.

Results
Respondent Information. Of the survey’s 74 respondents 45 (60.8%) identified themselves as “facility managers,” while seven (9.5%) selected the “operation manager” option. “Owners” were self-identified by two (2.7%) respondents while one (1.3%) listed himself as a “concessions manager”. Nineteen of the respondents (25.7%) classified themselves as “other.”

Facility Information. Six types of facilities were identified by the respondents as to where they worked. Thirty-one (42%) of the respondents said they managed an arena, whereas 17 (23%) managed a stadium. Sixteen (21.6%) worked in a variety of facilities such as convention centers, performing art centers, theaters and “Sportsplexes.” An additional 10 (13.5%) identified their work place as “other.”

Three distinguishing features about the venues were identified by the respondents. First, when describing the number of events scheduled per year 30 (40.5%) had less than 50. Twenty-seven (36.5%) scheduled between 51 and 100 events, while seventeen (23.1%) booked more than 100 events per year. Second, the total annual attendance at these events varied tremendously. Forty (54%) of the facilities had less than 500,000 spectators per year. Sixteen (21.6%) of the facilities had between 501,000 and one million fans attend events in their facilities. The remaining 18 (24%) had over 1,000,000 fans attend their events on an annual basis.

The number of full-time employees was the third distinguishing feature that distinguished the facilities. Twenty-eight (37.8%) of the facilities employed between 21 and 30 employees. Twenty (27%) utilized between 31-40 full-time employees. Nineteen (25.7%) retained twenty or less full-time workers and seven (9.5%) hired over 40 full-time employees.
Alcohol Policies. The respondents indicated that 62 (83.8%) of their facilities sold alcohol at their events, while 12 (16.32%) did not sell alcohol. Respondents were also asked to report the type of alcohol sold at the facility. Fifty-seven (77%) of the respondents indicated they sold beer, and 68.9% (51) reported they sold wine. Forty-one (55.4%) of the respondents answered they sold hard alcohol, while 12 (16.2%) again reported that they did not sell any type of alcohol.

While 12 of the respondents did not sell alcohol the alcohol policies at the other facilities was enforced through training in 23 (31%) of the facilities while 20 (27%) used written policies. Twelve (16.2%) mentioned that the policy was enforced by managers or supervisors. Another seven (9%) listed “other” and “undercover investigators” as their response.

When asked about the maximum number of beers sold during any transaction fifty-seven (77%) said two. Three (5%) said three, and one (1.4%) said one. Twelve stated “non-applicable” since they did not serve alcohol. Twenty-four of the respondents (32.4%) stated that the largest sized beer sold at their facility was 16-ounce. Eleven (14.9%) of the respondents sold beers in 20-ounce cups and plus an additional eleven used 12-ounce containers. Nine (12%) sold 24-ounce beers, five (6.8%) sold 32-ounce and one (1.4%) sold 64 ounce beers.

Fifty-two (70.2%) respondents indicated that alcohol sales are halted at a specific time during an event, while 10 (13.5%) responded that they do not have a specific shut-off time. The policy was enforced by managers or supervisors at 30 (40.5%) of the facilities. An additional 12 (16.2%) responded that the policy was implemented through “written policy.” Only seven (9.5%) stated that the policy was enforced through “training.” The remaining three (4%) facilities reported that the policy was enforced by “other” methods.

Training of Alcohol Servers. Results of this study revealed that 44 (59.5%) of respondents answered alcohol sellers were certified by national organization, whereas 18 (24%) indicated alcohol sellers were not certified by any national organization. Twelve (16.2%) responded “not applicable” to this question. The respondents were also asked to indicate what type of certification alcohol servers were required to have. Of the respondents whose alcohol servers were required to have certification 30 (40.5%) responded that alcohol servers are required to be TIPS trained and 22 (29.7%) indicated that alcohol servers must be TEAM trained. LEAD (Licensee Education on Alcohol and Drugs) training and Good Sport Program training were required by three (4%) of the respondents. Only one (1.4%) facility required their servers to be trained by the Safe Ride Program. It was interesting to note that 23 (31%) of the respondents listed either “other” or “not applicable” as their response.

Thirty-six (48.6%) of the respondents indicated they provide additional training than previously mentioned to their alcohol servers while 24 (32%) did not. Fifty (67.6%) of the respondents utilized
inspectors, such as supervisors, undercover investigators and police to monitor alcohol sales, while 25 (33.8%) reported they utilized undercover alcohol compliance personnel to monitor the sale of alcohol.

**Tailgating Issues.** Respondents indicated that 37 (50%) allowed tailgating in their parking lots. Forty-six (62%) of the respondents stated they patrolled their parking lots before each event, and forty-five (60.1%) responded they patrolled their parking lots after each event. Twenty-nine (39.2%) of the respondents indicated that police are primarily responsible for patrolling the facilities parking lots while 16 (21.6%) revealed that “facility personnel” are responsible. Private security or crowd management companies were used by 10 (13.5%) of the respondents, four (5%) used the sheriff’s department and 14 (18.1%) used “other”.

**Search Procedures.** Sixty-four (86.4%) of the respondents indicated that alcoholic beverages were confiscated before a patron entered the facility, and 60 (80.8%) reported that intoxicated fans were denied entry into the facility. Four (5.5%) responded that no attempt was made to prohibit inebriated patrons from entering their facility.

**Discussion of Results**

American society is thoroughly enamored with sports. Millions attend sporting events each year and most enjoy these popular events without incident. For many fans watching an athletic contest provides an opportunity to get out of the house, cheer for their local team, and socialize with similar minded individuals. The sale of alcohol has also become an important revenue generator for many sport and entertainment facilities. As previously discussed the sale of alcohol has been engrained in the fabric of our sport culture and alcohol sales have been estimated to represent 70-75% of all concession revenue (Steinbach, 2004). The results of this study provide supporting evidence as the respondents indicated that over 83% of sport facilities sold alcohol at their events.

Most of these “social” drinkers are responsible sport fans. However, a small minority is irresponsible and their social outings have become troublesome burdens for facility managers. Inebriated fans may not only create safety concerns for themselves, but their disruptive actions may also endanger others around them and create a crowd management nightmare. Legally, a land owner has a duty to supervise and monitor their premises (Restatement (Second) of Torts § 402A 1965). While it is impossible to shield a fan from all dangers, attempting to prohibit the interactions between intoxicated individuals and innocent spectators must become an integral component of any crowd management program.

A variety of policies have recently been enacted that may assist facility managers in trying to protect their fans as much as possible. Based on terrorism concerns the NFL began requiring fans to submit to pat-down searches before entering any NFL stadiums during the 2005 season. One NFL team (the Tampa Bay Buccaneers) became embroiled in a lawsuit with a disgruntled fan (Johnston v Tampa Sports Authority, 2007).
The only other NFL stadiums faced with problems implementing the policy were the Chicago Bears and the San Francisco 49ers who both were sued for having searches. These strategies, and new techniques being developed on a regular basis, will impact alcohol and crowd management practices for years to come.

**Alcohol Policy.** The respondents indicated that policies have not changed dramatically since an earlier study conducted 16 years ago (Ammon, 1993). The majority of the respondents served beer in 12-20 ounce containers, limited the number of beers to two per transaction, and ceased the sale of alcohol at a specific point during events.

**Alcohol Training.** One item not discussed in previous research pertained to the type of training used to enforce an alcohol policy. While the majority (60%) indicated that their alcohol servers were certified by a recognized national organization nearly a quarter (24%) stated that their trainers were not trained. In light of recent litigation (Boeck, 2005; Verni v Harry Stephens, 2006) involving properly training alcohol servers it becomes paramount for all facility and concession managers to implement sport facility specific training policies.

**Tailgating.** The results from this study indicated that half (50%) of the respondents allowed tailgating. This data is noticeably less than found in a previous study (Miller & Gillentine, 2006) which found almost 70% of the surveyed facilities had alcohol consumption related tailgating policies. One explanation for the discrepancy is the current study surveyed municipal public assembly facilities while the previous study only reviewed NCAA Division-I university athletic facilities. The intercollegiate facilities all had programs that played football. Only 23% of the current study’s respondents managed a football stadium, while 40% managed an arena. Little, if any, research exists on the prevalence of tailgating at various sporting events, but it is safe to assume that tailgating occurs more often at football games.

The current respondents also indicated that over 60% had individuals patrolling their parking lots before and after the athletic events. A similar number (60%) mentioned that the patrols consisted of uniformed police or facility personnel.

**Entrance to facility.** Similar to previous studies (Ammon, 1993; Ammon & Fried, 1998) over 80% of the respondents indicated alcoholic beverages were confiscated at the facility entrance and intoxicated patrons were denied admittance. A previously mentioned study (Miller & Gillentine, 2006) found that 47% of the surveyed intercollegiate stadiums prevented fans from being readmitted to the game once they have left the facility. Enforcing these policies will help to promote spectator safety, increase revenue generation for the facility and assist in limiting potential litigation.
Through screening patrons, a facility can reduce the number of weapons, projectiles (such as bottles and fruits), and reduce the threat of a terrorist attack. However, 20% of the facilities unnecessarily exposed fans to additional risks by not checking patrons.

**Recommendations**

Insight gained from this study may provide facility managers with relevant information when designing and implementing benchmarks for the sport facility industry. However, further studies of risk factors at sport facilities should be conducted. Perhaps these studies will provide additional areas for facility managers to investigate. After reviewing the data from this study the researchers propose the following recommendations:

1. Petition elected officials to alter “Dram Shop” laws so that stadiums, arenas and other large public assembly facilities have more defined criteria than commercial bars or restaurants.
2. During the specific season (football, basketball, hockey, etc…) conduct weekly meetings between facility managers, law enforcement officials and concessionaires to create seamless overlapping areas of responsibility. This will help to ensure that intoxicated patrons are identified and reduce problems in the crowd.
3. Utilize hand stamps to identify those fans that begin to exhibit signs of intoxication. Any attempt to purchase additional alcoholic beverages would alert concessionaires and law enforcement officials.
4. Provide inebriated individuals with an area where they could sober up. It takes approximately one hour for the average fan to metabolize the alcohol found in two 12-ounce beers (Steinbach, 2004).
5. Demand appropriate identification from all fans to prevent serving minors.
6. Limit each person to a maximum of two alcoholic beverages served at any given purchase time.
7. Begin the sale of alcohol no earlier than one hour before the event starts. In addition, select a specific time before the event ends to cease the sale of alcohol. This type of policy provides fans with less time to buy alcohol and additional time to possibly sober-up before leaving the facility.
8. Place closed circuit television (CCTV) cameras in the parking lots as well as at each facility access point to monitor the ingress and egress of the fans. These cameras will assist in identifying inebriated individuals as they enter or leave the facility. If an intoxicated patron attempts to enter the facility an official monitoring the camera can notify the gate personnel to refuse admittance. If the patron is leaving the facility the same monitor can notify parking lot personnel to restrain the intoxicated fan from driving.
9. Establish check points on major roadways outside the facility. These check points would serve as a proactive reduction technique to decrease intoxicated drivers.

Conclusion

Sport facility managers have been forced to recognize that the sale and consumption of alcohol can create significant crowd related concerns. Even though alcohol consumption is an integral component of sport/entertainment scene in the US, alcohol is abused by many fans. In addition, spectators can become intoxicated due to poorly trained vendors and some become inebriated outside the venue without ever purchasing alcohol from a facility vendor.

The arguments initially proposed by the plaintiff’s attorney in the Verni case highlight the potential liability faced by facility and concession managers. A successful appeal would have made facility managers liable for the unlawful actions undertaken by patrons who arrived at the facility in an intoxicated condition or who brought alcohol into the facility.

Litigation permeates the facility management industry in the US. During the course of these lawsuits a variety of experts testify about “industry standards” with no proof that the industry actually follows the claimed standards. For example, an expert witness may claim the industry practice is to conduct facility inspections on a daily basis. However, very few facilities may actually conduct daily inspections and most might only have weekly or pre-event inspections.

Therefore the intent of this study was to collect specific data that would identify current industry practices in the area of alcohol management. Understanding these practices will allow facility managers to establish benchmarks pertaining to proper alcohol management and determine the appropriate risk management strategies to reduce the liability from the sale of alcohol at sport/entertainment facilities.

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Organisational assets, which support business objectives, require protection. This, I argue, calls for security management procedures based on linking together crisis management, risk assessment management, and business continuity plan in an overarching Risk Management Plan. Risk assessment management is driven by what the business objectives are, prioritisation of potential threats, and the probability and impact of their occurrence. Once risk assessment has been made, a way forward can be found on how to deal with potential risk. Risk treatment process requires research, thought, and detailed planning and, if carried out properly, will allow security management to be incorporated into corporate planning, and influence the corporate direction.

The potential loss to an organisation from a threat occurring can be incalculable. For example; the incidence of fire may cause a loss of network IT capability and inability to communicate; this is a direct loss. However, there will also be other consequential losses. These might include: loss of business, investigation costs, salaries for staff who cannot work, loss of customers and customer confidence, increase in insurance premiums, cost of replacement equipment, loss of data, reprogramming costs, reinstatement costs, loss of reputation, loss of market share. The list is long and mostly avoidable if risk management process had been carried out to protect the organisation’s IT facilities.

Staying with the theme of fire; it is a requirement that fire prevention measures are in place in the workplace. Most fire risk assessment measures are designed to ensure that all boxes are ticked as far as possible; that does not, however, prevent fire from starting and businesses burning down. Normally, during fire, crisis management procedures in the form of evacuation and other measures are activated. However, in most cases, little thought is given to the organisation’s ability to continue doing business – i.e. business continuity. In this article, I draw attention to the importance of thinking of crisis management, risk assessment management, and business continuity management as interlinked, complementary and synergistic; their successful combination in an overall Risk Management Plan is, in my view, essential for the organisation’s survival and continuing operation. This proactive and cyclical risk management approach, I posit, allows an organisation to be as well prepared as possible for a risk event to occur.

Once a risk event (e.g. fire) has happened, and whilst it continues, a crisis management plan will alleviate the impact of the event.
The focus of the plan will be to survive the progressing crisis and to ease its effects. It is essential that the risk management process has clearly identified the risks, that the crisis management plan is changed and amended to reflect changes in the business management process and associated risk factors, and that it is tested regularly to ensure its currency and efficacy. The crisis management plan will include measures such as evacuation procedures, and the establishment and maintenance of information flow as the crisis unfolds. Dealing with the consequences of the risk impacts is what links the crisis management plan to the Risk Management Plan.

Business continuity planning is the third phase of the security management plan. Its focus is to maintain the delivery of services to ensure the organisation's survival. As with the other plans, the business continuity plan encompasses policies, procedures, protocols and information to allow rapid response and to prevent service interruption. The business continuity plan follows a similar path to risk management planning; typically consisting of analysis, implementation and testing, and maintenance and review. The business continuity plan requires analysis, assessing the impact of an event and providing scenarios allowing an appropriate solution to be chosen. It looks at critical and non-critical functions and provide for the continued provision of the critical ones. The solution may, for example, involve relocation to alternate facilities, provision of additional personnel and the establishment of secondary communications with contacts and other agencies. In the case of IT services, data back up systems may be put in place and equipment replicated at a secondary location if necessary. The ideal business continuity plan allows the organisation to continue to operate as seamlessly as possible in as short a time as possible following a crisis.

The plan should be implemented and tested. Testing may include the practice call-out of personnel, physical and technical transfer to alternative facilities, and testing of the organisation's core business processes under business continuity arrangements.

As with both crisis and risk management, the business continuity plan must be kept under constant review and updating. Linkage to the Risk Management Plan must be maintained to ensure that the hub activities initially identified can continue in the event of disaster or disruption.

The cyclical nature of the Risk Management Plan is reflected in both crisis management and business continuity plans. The effectiveness of all three depends on their flexibility and anticipation of changes in either the organisation itself or the threats to it. All the three plans must be linked with the Risk Management Plan at the centre, informing changes to the other two plans and influencing their development.
This synergistic linkage can be illustrated by the following scenario, focusing on a risk identified within an organization, using the annotations: R (risk), C (crisis) or B (business continuity), as they apply to the appropriate security plan.

‘A corporate insurance company’s claims processing department is responsible for a turnover of £50 million each year. Located in the City of London, it has 30 staff and is IT reliant. The company deals with many high profile clients around the world who rely on it solely for the provision of this service. The Corporate Security Manager has anticipated all eventualities and has ensured that the plans have been cleared and put in place. He has consulted widely and assessed the company’s business priorities (R, B) and has ensured that the plans to deal with an event (C, B), emergency response (C) and recovery and continued service (B) have been widely disseminated, tested and exercised. The Manager has been made aware that there is a high terrorist threat to financial centres in London and has assessed the risk of a bomb explosion and the impact that it will have upon the business (R,C,B). His planning has accepted that the business will inevitably be disrupted in such an attack (R, B) and having made his assessment has ensured that:

The risk can be accepted. A conventional non-hardened building cannot withstand an explosion and the cost of relocation or upgrading the building is prohibitive. The threat can be mitigated by the provision of a cleared zone around the building and by a strict access control system. The threat has been balanced against the company’s need to continue to operate in this location and the risk to personal safety. It is essential that this continuity is maintained and that service to the company’s customers is not disrupted. (R, C, B).

Unfortunately, the worst happens and a large truck bomb is detonated some 100 metres away from the building. There are some minor injuries to personnel and the IT systems are damaged or disrupted. Immediately the Manager puts into operation his well rehearsed plans and a team of 4 designated first aiders begin to treat the casualties after a rapid evacuation of the building to a designated assembly point well away from the point of explosion under the direction of nominated marshals (identified by dayglo vests). His designated Emergency Assistant (the Company Secretary) has contacted the emergency services on a telephone issued to him for that purpose (C).

Concurrently the Manager has used his own dedicated mobile telephone to contact a subsidiary company based in Pimlico. He has activated the plan to open a small office within their building which is fitted with IT equipment and has a back-up server to that in the main office.
The office is basic but suitable for interim operation. Staff in the subsidiary company have been trained in the procedures for continuing the parent company's business, albeit in a reduced role. Within 30 minutes, a basic, but functioning business is again operating (B).

Recovery from the incident takes several weeks and the Security Manager has de-briefed and consulted at all levels to check the efficacy of his plans. He discovers that his Risk Management Plan functioned as required and that the measures that he put in place did mitigate against more extensive damage to the Company’s operations (R). The evacuation and first aid treatment of casualties went well, however, the use of mobile telephones proved to be difficult after the explosion and plans (R, C, B) will need to be reviewed to identify a more robust system. Finally, the alternative office arrangements did allow work to continue, however, there was a need to further develop working rosters and cross-pollination of staff between the two companies to ensure a smoother transition (B). The company has allocated funding to upgrade and extend the alternative office to further reduce the impact of similar incidents in the future (R, B).

The above scenario shows how the Risk Management Planning function is at the core of the company’s survivability, and crisis management and business continuity are complementary to it. All three planning processes underpin the company’s ability to conduct its business and to provide a physically secure environment for its staff. The cyclical nature of the planning process is illustrated by the actions taken by the Corporate Security Manager after the company has recovered from the effects of the attack; Seeing it through to the end (note the title), looking at all aspects of the business and the threat to it. Success depends on accurate identification and assessment of risk impact, backed up by a maintained Risk Management Plan, along with well thought out and detailed Crisis and Business Continuity plans. There are some similarities between these planning processes, and whilst interdependent, their aims are fundamentally different. Whilst all plans must be formulated and implemented separately, their linkage and review processes must be maintained and monitored in order to ensure that when the anticipated risk becomes a reality business can continue, security can be maintained and improved; and more importantly, human life is protected. This ‘belt, 2 pairs of braces’ approach involves a hell of a lot of work - but if you keep everything tight you won’t be ‘caught with your pants down’.
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The Station nightclub fire began just after 23.00 on February 20th 2003 and ended with the deaths of 100 people, the fourth deadliest nightclub fire in US history. The club, in West Warwick, Rhode Island, in the United States of America, was host to the rock band Great White and the fire began when sparks from pyrotechnics set off by the band’s tour manager Dan Bichele ignited low cost, unsuitable and flammable sound insulation foam in the walls and ceilings around the stage, creating a flash fire which engulfed the club with astonishing speed - in less than five and a half minutes the entire venue was ablaze (Pollstar Vol 23, Issue 10). Today the site where the one story wooden building once stood has been cleared and is empty, apart from numerous small crosses remembering the dead.

Indeed February 2003 was a dark month for safety in US nightclubs as just four days earlier (on the evening of September 17th) twenty one audience members had died at the E2 nightclub in Chicago when security staff set off pepper spray to break up a fight, causing the crowd to panic in a venue which had failed fire checks. Indeed the earlier disaster was one of the reasons why there was a cameraman at the Station nightclub on the 20th; WPRI-TV news from Providence were reporting on a story on nightclub safety which was presented by Jeffrey Derderian, one of two brothers who owned the Station nightclub and who was also a presenter for WRPI.

The flames from the burning venue were first thought to be part of Great White’s act and it was only after they had reached the ceiling did the audience (and the band) begin to realise the severity of the problem. The WRPI video shows the band’s lead singer walking up to a microphone some twenty seconds after the pyrotechnics had finished saying “Wow...this ain’t good”. In less than a minute, the entire stage was engulfed in flames and the tragedy was described by State Governor Don Carcieri as “a real disaster. The building went up so fast no one had a chance”. Some 330 people were killed or injured in the fire, with the causes of death and injury ranging from burns and smoke inhalation to trampling as stampeding fans ran to and then blocked the main (front) entrance when they tried to exit. Among those who perished in the fire were Great White’s lead guitarist Ty Longley and the show’s compere, local radio station DJ Mike “the Doctor” Gonsalves. 132 people escaped uninjured. A number of facts are important to note:

A National Institute of Standards and Technology (NSIT) investigation into the fire using computer simulations concluded that a sprinkler system would have contained the fire long enough to give everyone time to get out safely.
Because of the building's age (built in 1946) and small size (4,484 square feet or 404 m²), many reports at the time stated that the Station was exempt from sprinkler system requirements. In fact, the building had undergone an occupancy change when it was converted from a restaurant into a nightclub and should have had sprinklers installed, although it seems West Warwick fire inspectors had neither noticed nor enforced this requirement (Boston Globe, May 10th 2006).

The foam installed as sound proofing was to appease neighbours who had complained about noise. The material is said to have resembled packing material rather than professional wall cover. It is important to note that the foam was not installed by professionals and indeed evidence showed that the material chosen by co-owner Michael Derderian lacked proper soundproofing qualities and was ineffective, in particular in quieting bass noise. The chosen foam was less than half the price of that similar flame-resistant material.

There remains some dispute about whether or not the band (or Bichele) had verbally told the Derderians that they would be igniting fireworks on the night but the fact remains that the Great White tour contract was silent on the matter of pyrotechnics and Bichele in turn admitted deploying the pyrotechnics without first obtaining the permit required by Rhode Island. The Deridians have said that as they were unaware of the pyrotechnics they would have been unable to obtain the requisite permit certainly in advance, and indeed it is arguable that the lack of this basic information prevented the owners from warning the band against igniting pyrotechnics on the night of the fire (Ballestrieri, 2007)

After a ten month investigation following the disaster, the Grand Jury issued criminal indictments. In these indictments, the former Great White tour manager Dan Biechele, and club owners Michael and Jeffrey Derderian were each charged with 100 counts of involuntary manslaughter with criminal negligence (resulting from a legal act in which the accused ignores the risks to others and someone is killed) and 100 counts of involuntary manslaughter in violation of a misdemeanor (resulting from a petty crime that causes a death). The Derderians also were charged with failing to carry workers compensation insurance for their employees, four of whom died in the blaze. The three defendants were separately arraigned in Kent County Superior Court and all three pleaded not guilty (innocent). Bail was set at $50,000 for the Derderians and $100,000 for Biechele, who then lived in Florida.

In February 2006 Biechele pleaded guilty to 100 charges of involuntary manslaughter and admitted in court that he set off the fireworks that accompanied Great show. Four months later both Michael and Jeffrey Derderian pleaded no contest to 100 counts of involuntary manslaughter and at the conclusion of the trials the court handed down the following sentences (Tucker, 2007):
Michael Derderian received a four year prison term and three years probation to follow his release on the grounds that he authorised the installation of the flammable foam that fed the flames.

Jeffrey Derderian received 500 hours community service and three years probation.

Dan Biechele received a fifteen-year sentence at a minimum-security correctional institution (eleven of those suspended), with three years of probation to follow his release.

The Derderians were also fined £1.07 million for their failure to carry employer’s insurance. Both Michael Derderian and Dan Biechele served less than half of their prison terms (16 months) and were freed on parole although there was public anger from many victim’s families at the time of release as some (although not all) believed that the full term should have been served (Frehsee, 2007).

The human cost of the tragedy is immense and it is perhaps prudent to note the following:

- Half of the fire victims who were hospitalized had no health insurance
- At least sixty children lost one or more parent in the blaze
- Twenty-three people lost a spouse (Arsenault, 2007)

In the short term, the Station Nightclub Fire Relief Fund (SNRF) raised $3.2 million from private donations and paid out relatively small sums of money to cover medical bills, food, rent, funeral costs, ambulance costs and counseling amongst other things, but the sum is dwarfed by the cost of medical care in the US, with one survivor calculated her (insured) medical bills at over $2 million to date. Nine months after the fire, having distributed about $2.2 million, The SNRF announced that the remaining $1 million would be earmarked for mental-health aid and the future needs of the 141 children whose parents died or were badly hurt at the Station; Governor Carcieri has estimated that the cost of the fire will total more than $100 million, when the victims' long-term care, for both rehabilitation and counseling, is factored in. Many of those who survived received injuries and trauma which will be with them for the rest of their lives and, along with the families who lost a loved one; they launched over $1 billion in civil law suits.

The civil law suits have, in the ensuing six years, made some progress and a plethora of potential defendants have settled with survivors and victim’s relatives. At the time of writing these settlements now exceed $175 million and those who have settled include both the State of Rhode Island (£10 million) and Town of West Warwick ($10 million). Others who have settled include:
Providence television station WPRI who made an out of court settlement of US $30 million. It had been alleged that their video journalist was obstructing an escape and not helping people exit (projo.com, February 2008);

- In late March 2008, sound company JBL Speakers settled out of court for $815,000. JBL was accused of using flammable foam inside their speakers. The company denied any wrongdoing (Associated Press, 2009)

- Brewer Anheuser-Busch has offered $5 million and McLaughlin & Moran, Anheuser-Busch's distributor has offered $16 million (International Herald Tribune, May 23rd 2008);

Home Depot, Inc and insulation company Polar Industries have made a settlement offer of $5 million (prosoundnews.com);

Sealed Air Corporation, who manufactured the soundproofing foam, agreed to pay $25 million in settlement (Associated Press, 2007);

- US radio conglomerate Clear Channel has agreed pay $22 million. Clear Channel’s WHJY-FM had pre-promoted the concert by running ads, giving away tickets and providing their DJ Mike Gonsalves to MC the night although WHJY-FM pointed out neither itself nor it’s employee had any control over activities in the Station club that night, nor did they hire, pay or have any control over Great White or their performance.

In September 2008 the insurers of the surviving Members Great White agreed to pay $1 million to survivors and victims’ relatives. The band did not admit any wrongdoing as part of the settlement: Tour manager Biechele is covered under the settlement, as are lead singer Jack Russell and other members of the band at the time of the fire. The settlement also covers the record label, manager and management company of the band at the time of the fire (Wenner, 2008; Challis, 2008)

The $1 million is the extent of the band’s insurance cover but at least two lawyers representing victims and their families have said that they will not further pursue individual band members and have dropped them from a list of potential final defendants (Wiederhorn, 2003)

Club owners Jeffrey and Michael Derderian have offered to settle for $813,000, which is to be covered by their insurance plan. There seems that little more can be gained from civil action against the brothers as the pair now have bankruptcy protection from lawsuits. There are other named defendants who have not yet made a settlement offer at the time of writing including the American Foam Corporation who sold the insulation to the Station Nightclub (Tucker, 2008)

Alongside the criminal prosecutions and the ongoing civil actions, the
State of Rhode Island set up a Special Legislative Commission to “Study all Aspects of Law and Regulations Concerning Pyrotechnic Displays and Fire Safety”. In less than four months of research, investigation and public hearings, the 17 members of the Commission presented to the Rhode Island legislature, the governor and the people of Rhode Island their final report on June 5, 2003 titled, “Making Rhode Island the Safest State”. On July 7th 2003, state legislators passed every recommendation in the report which pays particular attention to “special amusement buildings” requiring them to:

- adopt the National Fire Protection Association (NFPA) codes NFPA1 (Uniform Fire Code) and NFPA 101 (Life safety Code)
- have sprinklers installed in all special amusement buildings of 150 persons or more and fire alarms connected to municipal authorities in accordance with strict timelines (with certain exceptions such as places of worship)
- for special amusement buildings with less than 150 capacity use fire retardant paint or coverings or have a sprinkler system
- for all buildings a requirement to reduce capacity where sprinklers are not present (20%) or where there are no fire alarms and/or fire officers in attendance (10%) when they are being used for special amusement.

The legislation also restricts the use of pyrotechnics, gives fire marshals extensive new enforcement powers and requires that special amusement buildings must have better signage and must have an emergency plan (Wertheimer, 2003).

Legislation enacted in haste is often poor legislation – and poor regulation at its worst is often counter productive – and often routinely ignored. And legislation enacted without enforcement, particularly health and safety legislation – can put new burdens on responsible operators whilst allowing rogue operators to effectively ignore new laws and carry on regardless – with significant commercial advantage. Here the state legislature really do seem to have made every effort to enact sensible and practicable new rules – but even so some business owners in the State have balked, citing the costs of improvement as prohibitive, whilst others cited the cost of enforcement, wondering how the State would fund the new regime. Indeed State officials, already grappling with huge budget deficits and a reputation for cronyism, acknowledge that Rhode Island needs a new corps of fire inspectors if the mandated changes are to have any real impact.

I write from a United Kingdom perspective and we too have had our fair share of tragedies, two of the most well reported were directly connected with disasters at football (soccer) stadia. In Bradford in 1985 a flash fire engulfed one side of the Valley Parade stadium and 56 people lost their lives. The inquiry by Sir Oliver Popplewell led to new legislation and new wooden stands were banned.
Four years later the appalling scenes at Hillsborough 1989 when 96 Liverpool fans lost their lives in Sheffield through overcrowded fenced in pens and police mistakes led to the Taylor Report which itself led to many all seater stadiums and the crowd control fencing in front of fans removed – and a safer environment for soccer fans (HMSO, 1990) and yet on a global scale, frighteningly, similar incidents repeat themselves with unnerving regularity. You will remember at the start of this article I mentioned that the Station nightclub tragedy was only the fourth worst in US history – in 1940 at the Rhythm Nightclub in Natchez, Mississippi, 209 died; in 1942 at the Cocoanut Grove Fire in Boston, Massachusetts, a fire left 492 dead; in 1977 the fire at the Beverly Hills Supper Club in Southgate, Kentucky, left 165 dead; and remember too that just four days before the Great White tragedy twenty one people had died in part of a venue that should have been closed to the public having failed a fire check and which had locked fire exits. To add to these tragedies there have been nightclub fires in Eire, Spain, China, Argentina, The UK and Sweden to name but a few. And the basic facts often remain the same and mistakes are repeated – and then repeated again – often with fatal results. Even after The Great White fire, which received massive international publicity, two more incidents happened that deserve attention.

On the 30th December 2004 a fire at the in Buenos Aires, Argentina left 194 dead. Here a fire swept through a crowded Buenos Aires nightclub during a rock concert, killing and injuring more than 700 people as young concert-goers scrambled for the exits. The building quickly filled with smoke, setting off a stampede for the emergency exits and television images showed the bodies of youngsters curled up on the sidewalk as bystanders and shirtless teenagers carried people out of the burning building. There is also the Bangkok Nightclub fire on the 1st of January 2009 in Watthana, Thailand: here a devastating fire at a New Year’s event in a Bangkok nightclub left 66 dead with more than 212 injured in a stampede to escape from the blaze which broke out at the Santika Club just after midnight when the band Burn were performing. This was the second Asian club tragedy in less than a year after the Wuwang Club fire on the 21st September 2008 in Shenzhen in the People’s Republic of China - which left 43 dead. In Thailand Police Lieutenant Colonel Prawit Kantwol said “It appears that the fire started from the area of the stage where a band was playing. There were some pyrotechnics and it appears that they started the blaze", adding: "Most of the victims died from suffocation, but some were also killed in a stampede when people were trying to get out". Fireworks, a packed venue, panicking audience …. It sounds horribly familiar doesn’t it ?In October 2003, in my article “Regulated to Death: Safety Regulation in the Live Event Industry” I argued that “improvements in health and safety will only take place where governments and authorities involve those in the live concert industry. At the same time it is pointed out that those in the live concert industry must be pro-active on health and safety issues – or they will find their industry "regulated to death"(Challis, 2003)
It seems almost unbelievable that the two recent US tragedies could have happened in one of the most modern and regulated nations on the planet: In Chicago, how could the venue not have been shut down after it failed fire checks? How could fire doors be locked? How could security staff create such a panic? In West Warwick why did no-one consider the effects of pyrotechnics? How could there be no sprinkler system? How could a venue ignite in seconds? But since then I worry even more – how can similar tragedies still happen so frequently? And how can we effectively improve matters.

Evidence from these cases and others shows that it is not the basic legislation or regulatory infrastructure that is at ‘fault’; it is the implementation (or lack of) and enforcement of those provisions that seem to be the root cause of the real problems. The Station nightclub did require sprinklers and the foam insulation should never have been installed. In Chicago the part of the venue where the deaths occurred should not have been in use and clearly fire doors should not have been locked shut; In Argentina audience members had brought in flares into a overcrowded venue where four of the six exit doors were improperly locked shut; In Thailand the venue did not have valid building safety certificate, had been illegally modified, was operating without a valid licence, had only one marked exit and had no third party insurance – but nevertheless was operating as a music venue (Prasomsap, 2005; Miliken, 2005; Bell, 2009). No one wants unworkable or counter-productive regulation. This can be self-defeating, and corners can be cut. Surely, what the industry needs to do is be pro-active: formulate workable policies; ensure the whole industry adopts basic levels of safety and welfare for all live events; ensure that staff have the right levels of training; think about health, safety and welfare when planning events and when implementing change. It can work. The Event Safety Guide, the health and safety bible used by most in UK concert industry is produced by the Health and Safety Executive with substantial and real input from the UK concert industry. But one only has to look at the “complex, restrictive and expensive” licensing regime regulated for by the Licensing Act 2003 (HMSO, 2009), the impracticable provisions found in the Control of Noise at Work Regulations 2005 or the 2005 Conduct of Employment Agency and Business Regulations to see what damage, poor and ill considered regulation can cause to the live events industry. Modern day legislation, certainly in the UK, is partially governed by knee jerk reactions to media pressure. Certainly when looking at the Rhode Island State legislation on event safety one can only but admire a competent effort, but the fact remains that the previous laws should have prevented the tragedy. But these laws didn’t prevent the death of 100 people. Passing more and more laws is the natural reaction of modern day legislators to problems; in the UK we have ever increasing tidal wave of initiatives, guidelines, regulations and expensive regulatory authorities nominally set up to improve our lives, but often having the reverse effect.
Whilst governments publicly bemoan the number and ever increasing cost of new quangos (non governmental bodies), rather than rid themselves of them, it seems they would rather create yet more bodies and authorities to “review” and report on the other’s efficiency and purpose – which ultimately produces a never ending vicious circle of bureaucracy, cost and waste. Equally and globally, modern day politicians seem to be perfecting the art of unintended consequences – passing laws which have the opposite effect to often well meant legislation. Crowd safety is quite simply too important to be left solely to politicians and the live events industry needs to maintain a professional watching brief and proactive approach to audience safety if it is to proactively prevent future tragedies - or the death of our industry by incompetent legislation.

I always say one thing to a friend’s teenage children - if you go into a club and you see any instance of poor health and safety management – get out and stay out! Poor door management, overcrowding and locked fire doors are just some of the examples of poor safety management and a dangerous – and frankly sometimes, lethal attitude to health and safety. It's sad to point out that such practices are often the tip of the iceberg – so the only real advice is to take responsibility for yourself and get out of danger – get out of the club and don’t go back. But what the live entertainment industry can do to make itself safer for paying patrons remains an ongoing challenge.

References
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Postscript
Postscript: After Professor Challis submitted his article; news reached the Journal of the tragedy at the Lame Horse Nightclub in Perm Russia where at least 118 revelers were confirmed dead after a fire. Initial investigations showed that the fire was started by pyrotechnic fountains let off inside the venue which ignited the ceiling. Many of the dead were crushed as patrons tried to leave the crowded venue in thick black smoke. Russian premier Vladimir Putin accused officials of being negligent in failing to enforce fire regulations at the nightclub telling reporters he also suspected corruption saying that officials had failed to follow up a warning issued to the club owners a year ago.

http://www.google.com/hostednews/ap/article/ALeqM5hZ43nJGNHd1rJ3EBVRFt1GsiFraEiQD9CD24680

http://news.bbc.co.uk/1/hi/world/europe/8396587.stm
The following are some key questions that need to be examined during a sport or music industry crowd management case. The questions can be asked of witnesses, parties, and/or expert witnesses. There is no one correct way to manage a crowd and every crowd will be different. The crowd at a concert will be different than a crowd at a sporting event. The crowd at a daytime football game will include significantly more alcohol related concerns compared to a night game or a baseball game.

Numerous experts try to establish an industry standard using the National Fire Protection Association’s (NFPA) Life Safety Code. It should be specifically noted that the Life Safety Code has not been adopted as law and in fact is not an industry standard since most stadium, arenas, and concert venues do not follow the purported standards.

One of the keys to handling a crowd related case is to know the difference between crowd management and crowd control. Crowd management refers to the proactive steps that can be taken to prevent potential problems at a facility. Crowd control refers to what happens after a crowd has gone wild and police or others are needed to try and prevent further harm or danger.

It should be noted that most crowd management front line staff members are part-time employees. They often are very dedicated and passionate about their work. They often focus on the patrons in their section, and not on the game or concert. Nonetheless, there sometimes are conditions that they could have or should have identified as possible concerns. Like any organization, there might be some employees who fail to follow protocol or were not well trained. When a large facility (such as a stadium) is expecting a sell out they might have to contact 1,200 part-time staff members, with 700 agreeing to show-up for the event, and having only 500 actually arrive. All these employees often will need uniforms, pre-event briefings (possibly written post orders), proper equipment, appropriate leadership, and appropriate training.

Appropriate training is a key concern. Crowd management training cannot be learned from a book. You can never document all the various issues that might be seen in a crowd. The key to proper training is real world experiential learning. The best crowd managers I have ever seen have a strong foundation in actually working events, monitoring crowds (proper visual scanning), talking with fans and colleagues, and have taken the time to learn from other experienced crowd managers.
Some states mandate that crowd managers need a “guard card” issued by a legislative body, but these training programs that last several hours often only minimally cover crowd related issues. I personally would take a crowd manager with several years experience without a card over a rookie card holder who has never worked with a crowd (even if this resulted in a technical violation of the law as the guest would be in much safer hands with the experienced crowd manager).

Some facilities utilize unionized staffers and there might be some unique issues such as deployment ability, training, ability to reprimand/punish, etc… All facilities utilize a layering approach where they have front line workers, supervisors, managers, and others who can help supervise and monitor safety issues. Similarly, there are police, sheriffs, fire marshals, and others who work together and staff a command room/booth where they monitor radio calls, CCTVs, phones, and more recently text messaging from fans reporting misbehaving.

It should also be noted that many facilities do not have their own staff, and hire third party personnel providers who provide ushers, ticket takers, and front line security personnel. Some companies in the industry include Contemporary Service Corporation (CSC), Staff Pro, Securitas, Alpha & Omega Services, Argus Event Staffing, Elite Show Services, Tenable Protective Services, Landmark Event Staffing, Per Mar Security Services, National Event Services, and Reliance Security Group (England).

Furthermore, crowd management is not conducted in a vacuum. As I testified in the Aramark/Meadowlands drunk driving case for the concessionaire and license holder Aramark (produced the largest dram shop verdict in US history ($120 million) later overturned on appeal), crowd management is not conducted in a vacuum. It is not just the ushers or bouncers who need to be vigilant. Everyone at a facility needs to be involved from concessionaires not selling visibly intoxicated patrons, to security monitoring the crowd with CCTV, and ushers physically walking their area whenever possible (without interfering with fan enjoyment).

Most facilities work with a team, band, or event to develop proper deployment strategies and an event script that will highlight what is going on before, during, and after an event. When everyone works together an event can be great and if there is a break in the communication there could be a disaster. Documentation is a very important component of tracking what happened at an event. However, during the mad rush of an event it is often hard to document what occurs and often hard to find witnesses that can highlight what happened.

The following are the questions I would like to know and have answered when handling a crowd management case and were developed after reading over 100 depositions from different crowd managers.
Training

- What specific crowd management training have they received? (i.e. International Association of Assembly Managers (IAAM) or other government (FEMA or NSA) or non-profit (ARC (American red Cross), CAP (Civil Air Patrol), and or similar disaster assistance groups)
- Was training provided by industry professionals (Training Assembly Managers, and Employees (TAME)) is one such provider but there are others.
- Did the security company ever train with and prepare with local police or other authorities
- Are the police and other authorities present at an event have any specific crowd management training
- Were employees trained in alcohol management? The two most frequently cited training groups are TIPS or TEAM. If they have been trained they should have a certificate of completion and they need to be recertified ever several years.
- Have they conducted any drills? (Have them explain what type of drills - whether table top exercise or live drills). If yes, what was the purpose of the drills, what activities did they engage in, and did they develop a report afterwards (what is the resort called, and where can a copy be found)?
- Did they receive any training manuals?
- Who wrote the training manual?
- Did they actually read the manual?
- Were they tested on the contents of the manual?
- Do they know where their manual is currently located?
- When was the last time they reviewed the manual?
- Was the manual custom written for their facility/event?
- Has the manuals ever been updated?
- Who instructed them (managers or police officers)?
- How long did the training last?
- What was involved in the training? Did they just focus on pat downs or alcohol liability versus how to monitor a crowd?
- Were they taught key industry terms and how did they define them (i.e. crowd rush, crowd movement, moshing, crowd migration, etc…)
- What do they remember from their training?
- Were they trained in how to defuse disputes?
- Were they trained in how to spot problems? (Explain what they do to find problems)
- Were they trained on how to call/communicate with others?
- Were they trained in how to use non-verbal communication to resolve disputes?
- Were they trained on how to document disputes and their resolution?
• Have they been trained on how to visually scan a crowd?
• Are they licensed as a security guard? If yes, what requirements does their state have and are they keeping current with their certification (most state training rules are very weak involving just several hours of training and a background check)

**Equipment**

• Do they have proper equipment?
• Are there uniforms given to employees? Some typical equipment include: flashlights for those working in dark concert venues (security communicates using flashlights to ID problems or summon help since no one can hear a phone/walkie talkie over the noise)
• What communication devise are used such as phones, Nextel, walkie-talkie?
• Who is assigned such equipment? A follow-up question is what policies and procedures are in place regulating equipment use?
• Do employees know how to use the equipment they are given?
• What crowd management equipment do they use? (i.e. do they utilize barricades and if they are placed in the correct area and in the right style as appropriate for the event)
• Does the facility have a texting or phone system where patrons can instantly communicate inappropriate conduct by other fans?

**Resources**

Do they utilize any of the following resources from being members of an association to reading industry publications in order to know the latest trends or possible industry standards?

**Organizations**- are they members, do they attend conferences, have they purchased any training materials, utilize any resources from any of the following organizations?

- International Association of Assembly Managers (IAAM)
- Venue Managers Association (VMA)
- Stadium Managers Association (SMA)
- National Collegiate Athletic Association (NCAA)
- National Association of Collegiate Directors of Athletic (NACDA)
- International Facility Managers Association (IFMA)
- National Fire Protection Association (NFPA)
- National Association of Concessionaires (NAC)
- European Stadium Managers Association (ESMA)
- Venue Managers Association (VMA) Australia and Pacific
- Building Owners and Managers Association (BOMA)
Publications
Do managers/employees at a facility/event read key publications, do they save any articles, do they share articles with colleagues, do they keep key articles in a folder (whether online or hard copy), and do they regularly revisit articles to update what they do and how they do their job? Also does the facility staff share articles with low level employees to make sure they are kept up to date? Key publications found in the facility management industry include:

- Venues Today
- Facility Manager
- NCAA News
- Athletic Business
- Athletic Management
- Recreation Management
- Stadium Managers Newsletter
- Street and Smith’s SportsBusinessJournal
- Pollstar
- Stadia
- Stadium and Arena Management Magazine
- Venue Safety & Security – it used to be hard copy, but now is an electronic publication by the IAAM.

Conferences- Do employees/managers attend any major conferences such as:
- International Crowd Management Conference (ICMC) annual
- International Association of Assembly Managers (IAAM) annual plus specialized learning tracks such as the Academy for Venue Safety and Security (AVSS)
- Sport Recreation and Law Association (SRLA annual conference)
- Sport lawyers Association (SLA) annual conference
- Stadium Managers Association (SMA) annual conference
- European Stadium Managers Association (ESMA) annual conference

Internet Resources- There are numerous resources available online. Not every source is reputable and sometimes there are web pages that have agendas or are trying to sell products/services. I am just listing some of the sites that will be useful in tracking down information or helping in the research process.

http://www.iaam.org/CVMS/CVMSsafety.htm- The IAAM’s web page for their Center for Venue Management Security
http://www.crowdsafetymanagement.co.uk/ This site is for the only university based program (at Bucks New University in England) studying and researching crowd management issues.
Risk Management Protocols
The following questions focus on risk management strategies before or during an event. It should be noted that there are no concrete industry standards since every event, facility, event, and crowd will be different. However, through taking basic steps to understand and minimize risk the event/facility can help reduce the likelihood of crowd incidents. The key is to understand that it is impossible to control everyone in a crowd and one bad apple can help cause a stamped, fight, etc…

- What uniform(s) do they use so they know how to sport each other?
- If there are multiple parties involved such as police, fire, EMTs, and outsourced service providers are they involved in planning for the event?
- Do they conduct a pre-event meeting?
- What is discussed at the pre-event meeting (normally discuss deployment and re-deployment after the entry gates are closed)?
- Who attended the pre-event meeting?
- Do they document any notes or decisions from such meetings?
- What actions were taken as a result of the pre-event meeting?
- Do they do a pre-event facility inspection?
- Do they document any problems identified in the inspection?
- Are staff members trained in how to identify risks?
- Are staff members trained in how to correct or communicate risks to others?
- Do they post warning signs for patrons warning about potential risks?
- Are potential risks communicated through flyers, PA announcements, video screens, scoreboards, or similar strategies?
- Do crowd managers speak with patrons and try to discuss potential concerns?
- Do employees know how to respond to a risk? (ask them to go through specific detail as to what they were trained to do and what they actually did)
- Are employees equipped with necessary tools to help if there is a situation/incident (such as water for those stuck by a barricade)?
- Do they complete a pre-event risk management checklist?
- What happens with the checklists when they are completed?

**Alcohol Management**

One of the key concerns with any crowd is alcohol. Individuals who may be intoxicated can cause disturbances, fights, and impede in the evacuation of patrons. Some of the key questions that need to be asked for any witness associated with the alcohol management side of crowds include:

- Are all servers trained in alcohol management (whether TIPs, TEAM, etc...)?
- Are any certifications monitored and updated on a regular basis?
- Are servers provided additional site specific training to address issues specific to their facility?
- Are servers encouraged by management to deny patrons who show any signs of impairment?
- Are the facility's alcohol policies and procedures clearly posted?
- Are all personnel educated about alcohol related issues as servers are not the only personnel responsible for monitoring alcohol related behavior?
- Are there levels of monitoring such as undercover police, secret shoppers, concession supervisors, etc... who monitor alcohol servers and make sure there is compliance with all policies and procedures?
- Are major incidents documented- it would be impossible to document every instance where someone was denied a drink or not served due to a bad ID- but there can be some documentation which can help show what personnel are doing?
- Are ushers and security personnel monitoring crowds to identify inappropriate conduct that might be linked to alcohol?
Are security personnel trained to identify patrons who are drinking from unauthorized containers (whether in person or via video cameras)?

Does the facility have a program to reduce alcohol related issues whether a designated driver program, free coffee, or allowing people to leave their car in the parking lot and return the next day without any penalty?

Is security present in the parking lot before and after the game to monitor tailgating and individuals having problems/issues in the parking lots?

**Documentation**

Not every event documents every meeting or any meetings for some events. Some events develop a deployment chart (Dot Map) but they might not have any other information. This does not mean that with documentation an injury would have been avoided. Documentation just provides the proof needed to highlight what actions were taken, by whom, and when.

- Do they have any command posts or job descriptions given to employees?
- Do they complete incident reports?
- Under what circumstances do they complete such a report?
- Who completes the reports?
- Who do they give the report to when completed?
- Are they taught how to complete the report?
- Do they take pictures? (easier to do with cell phones now and a strong recommendation to document maybe what has occurred)
- Do they follow-up to evaluate reports and change practices in the future based on past incidents?

The following represents a sample line of questioning I used in one crowd management case where the training protocol was not well defined and ushers were required to run to a radio when facing a potential incident.

- What is the content of the crowd management (CM) educational unit? Do they have a written curriculum for CM?
- What videos do they use to teach CM?
- Did they test employees on specific CM concerns?
- If employee had wrong answers would they re-teach them material to make sure they understand the material?
- Was there a formal mechanism in place to educate/re-educate employees who might not know what to do or how to respond?
- Have they had any complaints about the quality of the ushering service?
- Is there a mechanism for fans to complain about ushering and/or concession services?
Should ushers have cell phones to call in case of an emergency?
Can a situation get worse by having an usher leave the scene of a potential confrontation?
Does he/she know about any other incidents at the facility where the situation became worse due to an usher leaving a conflict to get help?
Is there a mechanism to evaluate ushers who are not watching their assigned area, but watching an event?
Does the facility run live drills to see how ushers and others respond to an emergency?
Would that be advisable (running drills)?
Do they have an emergency action plan?
How can they tell if such a plan works if they do not do live tests?
What should be the response time to respond to an emergency?
How can they make sure any critical staff will respond in a timely manner?
Do they track emergency calls made over the security/first aid radio?
Would it be advisable to track such information to make sure they are providing the highest quality service?
If an usher does not listen to their supervisor what should be their punishment?
In this case when the usher failed to listen to her supervisor (went to the wrong location when she was told to go to the catwalk), should she have been punished and was she punished?

I hope the questions highlighted above give you a perspective on the thought process used in analyzing those involved in crowd management cases. Crowd management cases can often become he said/she said issues so it is important to focus on the key identifiable issues such as training, deployment, communication, meetings, and similar facts that might be able to show problems or highlight that everything possible was done to try and prevent an incident.

Gil Fried is an expert in facility risk management and has worked as an attorney and expert witness handling several dozen crowd management related cases ranging from concert crowd conditions to injured sport fans. He has worked on cases both on the plaintiff and defense side including cases from multiple patron injuries to death and paralysis matters over the past 18 years.
DISCUSSION FORUM

The next issue of the Journal is due to be published in the spring of 2010. Contributions are invited from readers to this discussion forum in the form of:

- Industry views (perspectives from practitioners)
- Essays
- Book reviews
- Commentaries
- News, events, education fora, conferences, seminars

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Other articles, research notes, and commentaries

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