

VENUE SAFETY & SECURITY

Protecting Lives. Protecting Assets.

June 2009

MEGA EVENT SAFETY

PLUS:
Protecting Your Visitors
from Enteric Pathogens

Contents

June 2009 | VOL/3 | NO/2



10

10 | Planning for Life Safety at a Mega Event

Keeping an eye on life safety technology and techniques at mega events can help protect venues of all sizes. By Mark Henricks

13 | When Does an Animal Become a Petting Zoo

Prevention of and protection from enteric pathogens can help keep your visitors safe. By Stephen Neel, Ph.D

PERSPECTIVE

16 | Miracle on the Hudson

Emergency preparedness can lead to a successful outcome.

By A.J. Slaggert

17 | Take a Good Look at Your EMP

If it's been awhile, now is the time to evaluate and update.

By Bram L. Bottfeld

IN EVERY ISSUE

2 | Command Center

From Print to the Web

4 | This Way In

>> Advanced AVSS Courses >> Survey Finds More Americans Chose Security as Most Important Building Feature >> Fire Equipment Manufacturers' Association Releases Portable Fire Extinguisher Training on YouTube™ >> ASTM Amusement Rides Committee Approves New Netting Standard

6 | Product Focus

>> Xtra-Duty Folding Security Gates from Illinois Engineered Products (IEP) >> SafetyNet from Intelligent Safety Solutions

7 | Crowd Management

Venue Experts Analyze "Top Model" Mayhem
Crowd panic and the resulting injuries and arrests at a "Top Model" audition provide an opportunity to learn from the mistakes.

VS&S Editorial Board

Jerry Aldrich
General Manager
Amusement Industry Consulting

R.V. Baugus
Editor, Facility Manager Magazine
International Association of Assembly Managers

Harold Hansen
Director of Life Safety & Security
International Association of Assembly Managers

Dave Horsman
Member, Life Safety Council
International Association of Assembly Managers

Nia Forster Hovde
Vice President/Director of Marketing
& Communications
International Festivals and Events Association

Rebekah Lee
Managing Editor, Fairs & Expos Magazine
International Association of Fairs & Expositions

Frank Poe
Academy for Venue Safety & Security Dean
International Association of Assembly Managers

A. J. Slaggert
President
Classic Convention Services

Magazine production provided
by Missy McCormack.

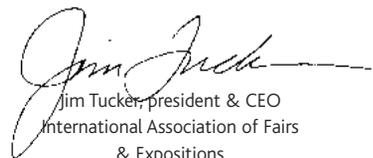


From Print to the Web

You are most likely looking at this publication on a computer screen for the first time. If not, you are one of a growing number who has already transitioned to receiving cutting edge educational information on an Alliance Partners website where Venue Safety & Security has previously been posted. ▶ Here in the command center, there is unanimous agreement that the content of this publication is unlike any other. State-of-the-art practices and procedures for protecting life and assets are presented to the Alliance Partners members in a unique manner. The articles are written by or contributed to by your fellow “in the trenches” event and venue professionals. Real-life experiences are shared. Best Practices are revealed and explained. Our communities of interest(s) relating to the public trusts we all share are explored, dissected, analyzed, and better understood. ▶ We also agree that remarkable savings to all of the Alliance Associations can be achieved by this e-zine approach. Those savings are welcomed in these demanding economic conditions and they allow us all to serve you better, with the resources you provide us. As we strive to make the best decisions for all of you, let us know what you think of this approach.



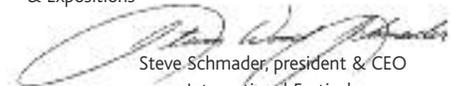
Dexter King, CFE, executive director,
International Association of
Assembly Managers



Jim Tucker, president & CEO
International Association of Fairs
& Expositions



Bob Johnson, president
Outdoor Amusement
Business Association



Steve Schmader, president & CEO
International Festivals
& Events Association



**2603 Eastover Terrace
Boise, Idaho 83706
Phone: (208) 433-0950
Fax: (208) 433-9812
Web: www.ifea.com**

Founded in 1956, the International Festivals & Events Association (IFEA) today is The Premiere Association Supporting and Enabling Festival & Event Professionals Worldwide. In partnership with global affiliates under the umbrellas of IFEA Africa, IFEA Asia, IFEA Australia, IFEA Europe, IFEA Latin America, IFEA Middle East, and IFEA North America the organization's common vision is for "A Globally United Industry that Touches Lives in a Positive Way through Celebration." With a target audience that includes all those who produce and support quality celebrations for the benefit of their respective "communities," the IFEA's primary focus is identifying and providing access to the professional resources and networks that will, as stated in our mission, inspire and enable those in our industry to realize their dreams, build community and sustain success through celebration. The IFEA exists to serve the needs of our entire industry, all those who share our core values of excellence and

quality; the sharing of experience, knowledge, creativity and best practices; and the importance of "community" building both locally and globally. Our success lies in the success of those we serve through professional education, programming, products and resources, networking and representation.

President & CEO: Steven Wood
Schmader, CFEE, schmader@ifea.com

Senior Vice President/Director of Communications & Marketing:
Nia Forster, nia@ifea.com

CFO, Assistant to the President:
Bette Monteith, bette@ifea.com

Creative & Publications Director:
Craig Sarton, craig@ifea.com

Director of Convention Production & Communication Technologies:
Tom Frazee, tom@ifea.com

Director of Membership Services:
Beth Petersen, beth@ifea.com



**PO Box 985
Springfield, MO 65801
3043 E Cairo
Springfield, MO 65802
Phone: (417) 862-5771
or (800) 516-0313
Fax: (417) 862-0156
Web: www.fairsandexpos.com**

The International Association of Fairs and Expositions (IAFE) is a voluntary, non-profit corporation, organizing state, provincial, regional, and county agricultural fairs, shows, exhibitions and expositions. Its associate members include state and provincial associations of fairs, non-agricultural expositions and festivals, associations, corporations, and individuals engaged in providing products and services to its members, all of whom are interested in the improvement of fairs, shows, expositions and allied fields. The IAFE began in 1885 with a half dozen fairs. Today, the IAFE represents more than 1,300 fairs around the world, and more than 1,300 members from allied fields. Throughout the years, the IAFE has remained true to its purpose of promot-

ing and encouraging the development and improvement of fairs, shows and expositions. Its mission is "To represent and facilitate the interest of agricultural fairs, exhibitions and show associations."

President and CEO: Jim Tucker,
jimt@fairsandexpos.com

CFO, Director of Meetings and Publications: Max Willis,
maxw@fairsandexpos.com

Director of Membership, Sponsorship, and Trade Shows: Steve Siever,
steves@fairsandexpos.com

Director of Grants and Special Education: Marla Calico,
marlac@fairsandexpos.com

Meeting Planner/Registrar:
Kate Turner, katet@fairsandexpos.com

Fairs & Expos Managing Editor:
Rebekah Lee,
rebekahl@fairsandexpos.com

Fairs & Expos Design & Production Manager: Missy McCormack,
missym@fairsandexpos.com



**635 Fritz Drive, Suite 100
Coppell, TX 75019
Phone: (972) 906-7441
Fax: (972) 906-7418
Web: www.iaam.org**

The International Association of Assembly Managers is an association whose purpose is to provide leadership, to educate, to inform and to cultivate friendships among individuals involved in the management, operation and support of public assembly facilities. IAAM is the world's largest professional association dedicated to issues relevant to the management of public assembly facilities. Members of the association manage public assembly facilities such as amphitheatres, arenas, auditoriums, convention centers/exhibit halls, performing arts venues, stadiums and university complexes;

or provide products, services or attractions to support the industry. IAAM has more than 3,200 members worldwide.

Executive Director: Dexter King, CFE,
dexter.king@iaam.org

Director Life Safety & Security:
Harold Hansen, CFE, harold-hansen@sbcglobal.net

AVSS Dean: Frank Poe,
frank.poe@dallascityhall.com

Editor, Facility Manager: R.V. Baugus,
rv.baugus@iaam.org

Legal Counsel: Turner D. Madden,
Esquire, tdmadden@verizon.net

Member, IAAM Life Safety Council:
Dave Horsman, davehorsman@twinsbaseball.com



**Phone: (407) 681-9444
E-mail: oaba@aol.com
Web: www.oaba.org**

The Outdoor Amusement Business Association, organized as a non-profit trade group in 1965, is the largest association representing the mobile amusement industry. Our members include carnivals, circuses, independent ride owners, food/game concessionaires, rental amusements and others associated with family entertainment. Our members con-

tract with fairs, festivals, community and philanthropic organizations throughout the U.S. and Canada. Its mission is "To encourage the growth and preservation of the outdoor amusement industry through leadership, legislation, education and membership services."

President: Robert W. Johnson

Chairman: Wayne McCary

Sr. Vice President: Al DeRusha

News Ambassador: Tom Powell

General Counsel: Wayne Pierce



**635 Fritz Drive, Suite 100
Coppell, TX 75019
Phone: (972) 906-7441
Fax: (972) 906-7418
Web: www.iaam.org**

The IAAM Foundation is a 501(c)(3) non-profit charity to which donations are fully tax deductible. Our mission is to increase the positive impact and vitality of the public assembly industry by funding

research, education and resource development. Our vision: that every public assembly venue throughout the world has a professional workforce, a base of knowledge, and adequate resources to ensure safety and enjoyment of the public, security of assets and business results that contribute to economic development and quality of life.

IAAM Foundation Director: Jill Dotts,
CFRE, jill.dotts@iaam.org

IAAM Foundation Chair:
Joan LeMahieu, President, The Parade Co., JLeMahieu@theparade.org

No part of this publication may be reprinted without permission.
Copyright 2009 Venue Safety & Security.

Advanced AVSS Courses

EDUCATION The next Academy for Venue Safety & Security (AVSS), August 16-21, 2009, will offer the following four Advanced Courses, which are open to students who have completed Year 1 and Year 2 of AVSS. A new schedule for Advanced Courses has been designed in response to industry requests. Advanced Courses will start on Aug. 14 and run through Aug. 21, offering students a more concentrated schedule that enables them to complete more than one course during the weeklong AVSS. As additional incentive, students who take two Advanced Courses will receive a 5 percent discount on tuition for the second course. Students who take three courses will get a 10 discount on tuition for the second and third courses.

The August 2009 AVSS schedule for Advanced Courses will include the following:

■ **Certified Aggression Control Manager Training, Aug. 14-16:** Students who successfully complete this course will obtain recognition as a Certified Aggression Control Manager (CACM). Taught by Dr. John D. Byrnes, president and founder of the Center for Aggression Management, Altamonte Springs, Fla., this 2 1/2-day course trains students to identify, measure, manage and prevent aggression; increase productivity by reducing friction between patrons and employees; and provide appropriate documentation after a situation has occurred. Students also will receive a copy of Byrnes' new book, *Before Conflict: Pre-*



venting Aggressive Behavior, a \$32.95 value. All-inclusive tuition (lodging, meals and instructional materials): \$1,400.

Special offer: Ten CACM scholarships, each worth \$280 for an all-inclusive tuition cost of \$1,120, are available to those students who apply for this course by June 1, 2009. Apply online and be sure to enter the special code: **CACMT-A09**.

■ **Safety and Security for Persons with Disabilities, Aug. 15-16:** Students will learn effective strategies to ensure that special-needs patrons have safe and dignified experiences at their venues. The course goes beyond ADA requirements to also focus on how to best serve customers who may be wheelchair-bound, hearing impaired, or who are otherwise unable to follow existing rules and procedures. Lead instructor for this course is Kristi J. Thomas, President/CEO, Accessology, Inc., Dallas/Fort Worth. All-inclusive tuition: \$1,120.

■ **Facility Management Law School (FMLS), August 17-18:** FMLS is a two-day course that focuses on how the legal system applies to public assembly facilities. Taught by Steven A. Adelman, Esq., an expert in arena/venue law, FMLS enables students to better understand the litigation process, learn about torts and contracts, and focus on risk management and limiting liability for their venues. In addition to learning the meaning and use of relevant legal terms, students will have the opportunity to critically analyze their own venue's risk management plan and participate in role-playing exercises answering deposition questions as their venue's representative. All-inclusive tuition: \$1,250.

■ **Severe Weather Preparedness, August 19-21:** During this 2-day course, students learn how to develop a severe weather preparedness plan for public assembly venues, use forecast and radar information to monitor the weather, and design proper procedures for various severe weather situations. Participants will also review necessary communications, training, response plans, and preparations for operational continuity should severe weather strike. The course will be taught by top weather experts and facility management professionals who will use IAAM's severe weather planning guide as the template for developing an effective preparedness plan. All-inclusive tuition: \$1,250.

For more information about Advanced Courses, contact Harold Hansen, IAAM's Director of Life Safety & Security, at: **Harold.Hansen@iaam.org**, call: **773.973.2049**, or visit the AVSS Website.

H1N1 Flu

INFORMATION <http://www.cdc.gov/h1n1flu/>. This link to the Centers for Disease Control and Prevention (CDC) web site will offer an up-to-date status of the recent H1N1 Flu (Swine Flu).

Survey Finds More Americans Chose Security as Most Important Building Feature

FIRE SAFETY A nationwide survey conducted by Bethesda, MD-based Society for Fire Protection Engineers (SFPE) reveals that building security topped a list of characteristics as Americans' most important feature in public buildings. The list included comfort, fire safety, environmental friendliness, and other amenities.

The results of this survey revealed 28 percent of Americans feel security is the most important feature, while 12 percent of respondents indicated that fire safety is the most important aspect of a building's design. Americans also ranked comfort and amenities higher than fire safety.

The results are similar to SFPE's 2006 survey, in which the same question was asked.

The survey also revealed that when compared to natural disasters, 45% believe fire is the event that will most likely cause harm

to them or their family. Included in this list were lighting strikes (18%), hurricanes (15%), earthquakes (12%) and floods (10%).

These findings support statistics that show people are more likely to be harmed by fire when compared to natural disasters. Although natural disasters such as hurricanes and earthquakes are covered widely in the national news media, many more people die each year as a result of fire.

Another noteworthy finding reveals that over 58% of those surveyed worry about the dangers of fire less than once a year. At the same time, wealthy Americans think about the risk of fire less frequently than those with lower incomes.

The survey commissioned by the Society for Fire Protection Engineers and conducted in February, 2009 by Synovate, polled more than one thousand American



adults. The findings have a margin of error of plus (+) or minus (-) three percent. More information about SFPE can be found at www.sfpe.org.

Fire Equipment Manufacturers' Association Releases Portable Fire Extinguisher Training Video on YouTube™

TRAINING The Fire Equipment Manufacturers' Association recently released a portable fire extinguisher training video on YouTube, furthering its mission to educate the public about the importance of balanced fire protection, a design that uses multiple safeguards to save lives and protect property. The short, yet impactful two-minute video — designed for both professional and lay audiences — guides viewers through the process of assessing a potential fire situation and using a portable fire extinguisher in the event of an emergency.

Portable fire extinguishers are one component recommended by the Fire Equipment Manufacturers' Association for a complete, balanced fire protection design. Other fire safety components within a balanced design may include standpipe rack hose stations, automated suppression systems, and smoke detectors and fire alarms. Incorporating a balanced fire protection design in commercial buildings helps to minimize safety risks by providing multiple channels for fire notification and protection.

To view the portable fire extinguisher training video, visit <http://www.youtube.com/watch?v=BLjoWjCrDqg>. For additional information, including videos, interactive questionnaires and training Web sites about fire safety and protection, visit www.femalife.com or call 216-241-7333.

ASTM Amusement Rides Committee Approves New Netting Standard

RIDE SAFETY Netting is a vital part of many amusement park and playground attractions. Recognizing this, Subcommittee F24.24 on Design and Manufacture has developed a new standard, ASTM F2375, Practice for Design, Manufacture, Installation and Testing of Climbing Nets and Netting/Mesh Used in Amusement Rides, Devices, Play Areas and Attractions.

Subcommittee F24.24 is part of ASTM International Committee F24 on Amusement Rides and Devices.

John Rexroad, president of Pucuda Inc. and Leading Edge Safety Systems Div., as well as an ASTM member, says that ASTM F2375 includes standardized prototype tests which benefit the designers, manufacturers and operators by having a consistent measure for designing the device netting into areas and ordering replacement components.

According to Rexroad, ASTM F2375 will be a core standard that can be included by reference in future standards to ensure that netted areas are considered as part of the subject matter for those standards.

ASTM International standards are available from Customer Service (phone: 610-832-9585; service@astm.org) or at www.astm.org. For technical information, contact John Rexroad, Pucuda Inc., and Leading Edge Safety Systems Div., Deep River, Conn. (phone: 860-526-8004; jr@netting.com). ASTM Committee F24 meets Oct. 15-17 in Toronto, Ontario. ASTM International welcomes and encourages participation in the development of its standards.

● XTRA-DUTY FOLDING SECURITY GATES FROM ILLINOIS ENGINEERED PRODUCTS (IEP) IEP's new Xtra-Duty

folding gates provide instant access control and front-line security while providing line-of-sight visibility and air circulation. When locked, they provide a strong physical and visual barrier to potential intruders; while closed or stacked, these vertical bar gates fold discretely out of the way. The gates are reinforced with a minimum of two rows of lattice bars and offer the strongest line of defense against unwanted entry. The Xtra-Duty line of gates has twice the weight of steel found in the standard Heavy-Duty folding gates, yielding twice the durability and security.

www.fgfred.com



● SAFETYNET FROM INTELLIGENT SAFETY SOLUTIONS SafetyNet is a patented emergency evacuation, wireless mustering solution, enabling companies to significantly improve the safety of workers and first responders during an evacuation. SafetyNet™ has been designed on a modular basis to allow easy interoperation with all current security technologies and possible future upgrades. The SafetyNet™ Server is an offsite server that can be remotely accessed by the Internet. The server accepts a "heartbeat" from the facility access control system which identifies the current occupants of the facility, and once the SafetyNet™ stations light up, the server acts as the incident command center which details the location of occupants as well as providing other IC functionality for use in search and rescue or incident control. The SafetyNet™ Static Stations are solar powered stations that are positioned in safe areas

around the facility in all likely routes of evacuation. They remain dormant until "lit up" by an emergency, or for testing. They also include both manual and speaker functionality. Their overall objective is to "read" people as they reach a safe area having fled from the facility. These stations communicate with the server wirelessly. The SafetyNet™ Mobile Station are hand-held mobile units with similar functionality to the static stations. Their primary use is for "Shelter in Place" or triage situations. They can also be used in densely populated scenarios.

www.intelligentsafetysolutions.com



Crowd panic and the resulting injuries and arrests at a “Top Model” audition provide an opportunity to learn from the mistakes.



Venue Experts Analyze “Top Model” Mayhem

In March in midtown Manhattan, thousands of waiting would-be models saw their hopes for stardom trampled amid crowd panic and hysteria.

According to news reports, an open casting call for the reality television program, “America’s Next Top Model,” hosted by Tyra Banks, who is also the show’s executive producer, drew thousands of contestant hopefuls who lined up for hours — and along city blocks — waiting to audition in New York’s Park Central hotel. Police could not confirm what specifically caused the crowd panic that resulted in minor injuries and three arrests for disorderly conduct. *The New York Times* reported that officials “blamed a lack of organization, frayed nerves and a brief panic that erupted when someone screamed that a smoking overheated car was on fire and about to explode.” Captured on YouTube (<http://www.youtube.com/watch?v=VEPN3CehhHE>), the incident raises questions about effective crowd management, risk analysis, crisis communication and other issues pertinent to venue management professionals. *AVSS E-Update* asked the following four experts to view the video and outline some lessons learned:

- ▲ **Steven A. Adelman, Esq.**, Attorney, Renaud Cook Drury Mesaros, Phoenix, AZ, and instructor for the AVSS Facility Management Law School.
- ▲ **Bram Bottfeld**, Director of Safety & Security, BankAtlantic Center, Sunrise, FL
- ▲ **Scott Dickson**, Director of Event Services, Jerome Schottenstein Center, Columbus, OH
- ▲ **Paul Schieck**, Assistant General Manager, Qwest Field and Qwest Field Event Center, Seattle, WA

Based on the impressions you gathered from the YouTube video and news reports, why do you think this situation got so out of control?

Steven A. Adelman (SAA): At some point, people are going to recognize that one of the most dangerous crowd situations is when people are waiting to enter a confined space. This is the original sin of the 1979 Who concert crowd crush outside Riverfront Coliseum, as well as the Black Friday crush outside Wal-Mart last November, this mess in Manhattan, and the crush before a March soccer game in the Ivory Coast that left 19 dead, among others. Once you acknowledge that a big crowd waiting impatiently and without information is a disaster waiting to happen, the analysis can begin of why this particular situation got out of control.

Bram Bottfeld (BB): Lack of communication to the crowd explaining that the car was simply overheated. Police or crowd control personnel could have used bullhorns to advise there was no need for panic and the situation is under control. Crowd under panic becomes a mob as it lacks direction. Communication on an immediate basis could have avoided this.

Paul Schieck (PS): There was no plan in place for cuing the crowd or for response and adjustments as the event progressed. They did not appear to have any communications plan in place.

Scott Dickson (SD): My first impression was that this was another case where the dangers of gathering people in a high-intensity situation were grossly underestimated. When the video first started, it was apparent that there were too many people in an unmanageable space. Add in the hype around the event and you have a very volatile mix. Also, if you watch the video closely, you will notice that the areas that cleared out during the altercation were quickly filled with people trying to improve their place in line. People were just as concerned with their safety as they were about losing their place in line.

What could officials for “America’s Next Top Model” have done to better prepare for such an event? How can you avoid — or minimize — mayhem?

BB: Monday morning quarterbacking is always easier. But, in my opinion, the large turnout should have been a foreseeable event, thus

the show has a responsibility to ensure crowd control from start of line to end of line. Public byway would demand public staff, i.e., police. I would have placed combinations of car, horse and foot patrol units, along with some paramedic units for rapid response to any call. I would have also had at least one staff person with a radio and portable bullhorn. You can’t avoid all situations, but they can be reduced in severity.

SAA: Was it really necessary for everyone to be waiting on a busy Manhattan street all at the same time? Perhaps I misunderstand how these auditions were going to work, but unless everyone was going to parade before the judges at once, some sort of timed entry should have been possible. I’m thinking of how you wait for your number to be called at the deli counter. If there are a lot of numbers before yours, you can walk away and come back later. Was nothing like that possible for this audition?

PS: Follow basic crowd management principles. Prepare for the event by anticipating the demographics and the number of people who will be arriving. Analyze that information, and prepare a plan for managing the crowd while anticipating the possible variables that may result. Use the four elements that shape crowd behavior: time, space, energy and information. By preparing the space with lanes to cue the crowd, the area could have been used much more effectively and the energy built up by a crowd of this type diffused. “Disney” lines snaking through the space would have been ideal in this instance. They also needed to have a communications system and plan in place. All I have seen in the video is police officers trying to contain the mass of people with barricades and no method of communicating with the crowd.

SD: Based on the video, it appeared that the location was not the best possible choice for this event. Facilities that are made to handle staging large crowds without overcrowding and that have staff who are knowledgeable in crowd management concepts would be much better suited. “American Idol” uses stadiums and arenas to hold their auditions which allow for ample queuing and storage space without the chaos.

For events that draw large crowds, what approaches do you recommend to keep people effectively informed?

BB: Bullhorn users can ask people to please keep moving as the line moves and to be patient otherwise. Questions need to be answered consistently and correctly. Responses for any assistance, whether it is a question, first aid, water requests, etc., need to be as rapid as possible. This kind of communication response shows organization and professionalism. It engenders respect for those controlling and directing the line.

The new texting devices that allow venues to inform cell users via text are remarkable communication resources. Use of LED displays on closed channels within a venue can be most effective when offering guidance. Public address systems via fire panels or “capture” units can be a great help, too. And especially for concerts, get the talent to work with you. As the lights come up, the talent can tell attendees to please walk out. Those are the fans’ heroes on that stage, and the fans will likely want to behave well.

SD: Since information is a key element in crowd management, having proper delivery systems in place to get the message to the masses is imperative. Public address systems, elevated message boards and other signage, line-control staff with proper information and media are all effective ways of communicating with large groups.

What are some of the risks and liabilities that any venue could face in the wake of crowd pandemonium?

SAA: The first problem is the negative publicity, which could damage the show’s ratings or cause it to go off the air. The second problem is lawsuits from injured contestants. I haven’t heard of serious injuries, but a major TV show is obviously a deep pocket. At the very least, it seems unlikely that the networks’ risk managers will let the producers do a cattle call audition like this again.

PS: Obviously, negative publicity has a major impact. There could also be huge exposure over the risk of injuries, which may have occurred. I am not sure, but would assume they also will have issues with those who may not have been able to participate in the program due to the poor management of the crowd.

SD: The impact of incidents like this reverberates throughout our industry and raises the expectations that things like this should never happen again. An event organizer or venue that

“All I have seen in the video is police officers trying to contain the mass of people with barricades and no method of communicating with the crowd.”

does not take reasonable preventive measures in the future will be held to a higher accountability should this happen to them.

BB: There are no complicated issues here. The critical aspect in any operation of this nature is to deal with the situation calmly. Have your plan laid out; rehearse it. Go over it and do so several times. To not plan, to not be prepared, that is criminal, and that becomes a venue’s greatest liability.

Can you offer any lessons learned from your experience with similar situations?

SAA: Every disaster breeds litigation. On a societal level, the fear of getting sued encourages people to take precautions, which reduce risks. At least that is the idea. But recent events suggest that the danger of waiting crowds is insufficiently appreciated. After each disaster, the organizers will be asked not only about their own planning, but also about why they failed to learn the lessons of the similar preceding incidents. Each incident will become more costly until the lesson sinks in. The law is very Darwinian in that respect.

BB: I was involved in a bomb threat deemed credible. We evacuated over 1,500 people from the venue, then held 19,000 people in parking lots while K9 units and staff checked the venue for a device. We rerouted traffic, kept the crowd calm and were finally able to start the concert and get everyone in without incident 2 1/2 hours later. During those 2 1/2 hours, we ran surveillance with cameras to ensure the building was clear, provided detailed maps to law enforcement, had a media relations location set up and specific comments cleared for release. Life safety units were set up for possible triage in the event of the worst case scenario. During this, we

constantly updated tour management (it was a Bon Jovi concert) and safely transported them to a nearby waiting area outside the venue. We had a plan and it ran without incident.

You prepare for an urgent situation, you practice the manual instructions you have written for an emergency. It’s great and everyone pats themselves on the back. Then, the real thing hits and you watch people yelling and screaming. It’s hard to be understood, some orders are not followed, and you discover whom you can truly rely upon. If there is any one lesson to consider, it’s that you need to move forward quickly and decisively. You can afford to be compassionate and consider feelings later when the emergency is over — but not during it.

PS: Every day, event venues manage groups much larger than this effectively and efficiently by following the simple process of: investigate, analyze, plan, communicate, execute, supervise and crisis management.

SD: Everyone who has a responsibility to manage public gatherings could benefit from the lessons learned through past experiences. The answers we provided to your questions are not only based on reviewing incidents like this, but also on experience. Use any opportunity you have to work on your procedures and get your staff used to always preparing for the worst. **VSS**

All of the contributors who commented for this story are members of the Faculty for the IAAM Academy for Venue Safety & Security (AVSS). The next AVSS is scheduled for August 15-21, 2009 at the American Airlines Training & Conference Center in Fort Worth, Texas. To apply, visit <http://www.iaam.org/schools/AVSS/index.htm>.

Keeping an eye
on life safety technology
and techniques
at mega events
can help protect venues
of all sizes.

Planning for **Life Safety** at a Mega Event

By Mark Henricks



For President Barack Obama's inauguration, those responsible for the safety of the million-plus in attendance deployed 20,000 law enforcement officers, 5,000 surveillance cameras, metal detectors along much of the parade route, multiple command centers, armored assault vehicles and even sharpshooters atop nearly every roof in a three-and-a-half square mile area around the Capitol in Washington D.C.

The inauguration passed without any untoward incidents, unless you count the fact that the security — reportedly the tightest ever for an inauguration — came close to overshadowing the swearing-in itself. But there's no discounting the impressive nature of safely bringing so many people so close together. And, now that the ceremony is over, it's natural for assembly safety professionals to ask whether anything was learned that they can apply to smaller, local venues and events.

It's not unusual for developments in security relating to the President of the United States to filter their way down to more prosaic environments, says Mark Camillo, a former Secret Service agent who is now director of public safety and security for Lockheed Martin Corp. in Rockville, Maryland. For example, says Camillo, "10 years ago we started to see a paradigm shift, and rightly so, where the prevention and preparedness approach was added into the equation to the left of or ahead of the reaction and contingency operations."

That was followed by executive orders and legislative actions formalizing the new emphasis on identifying vulnerabilities and assets ahead of time, and then working methodically to eliminate the chances of negative outcomes. "That increased the life safety environment immeasurably," says Camillo. "Immeasurably" is, of course the exact right term, since it's hard to measure the success of safety initiatives at a large event when nothing happens.

Be that as it may, lessons passed down from past mega-event security efforts include not only performing advance vulnerability and asset assessments, but expanding them to previously unconsidered areas. These include looking at threats both inside and outside structures, considering risks posed by hazardous chemicals, paying more attention to the danger of vehicles moving among or near large pedestrian throngs and even, in some cases, the possibility of injury or death from large or dangerous animals such as parade horses, rodeo livestock and circus animals.

Having advanced life support on hand is another idea that has filtered down. "With mega-events that draw mega crowds, the larger the crowd the larger the chances of life-changing situations," explains Camillo. Whether it's a heart attack, a birth or another medical emergency, when a crowd

grows beyond a certain size, it becomes difficult for medical transport to get patients to hospitals quickly. That means having more than the usual EMT-staffed ambulance or two on site.

While addressing the need for on-site advanced life support, mega-events have also pioneered the requirement for creating lanes to allow emergency vehicles to more rapidly get where they need to. Establishing and maintaining easements for emergency access can benefit life safety in more ways than one. "That also helps for crowd egress in an emergency," says Camillo. "If you don't have that, that's how stampedes occur."

Offering attendees a quick and safe way to leave is one way to handle emergencies. Another is to have a shelter-in-place plan. When fast-moving storms or other emergencies threaten mega-events, having attendees leave is not always the best idea. "Sometimes it's in the best interest from a life safety standpoint to keep people in a contained environment to reduce their chances of injury should they go outside, say, in a parking lot where there are high winds," says Camillo.

Very large events such as an inauguration overwhelm the resources of any single safety and security agency, requiring multiple agencies to operate together in a coordinated manner. At the inauguration, the Secret Service oversaw a joint force composed of federal park and capitol police, as well as police from Washington and several outlying areas. Advance planning plays a critical role here, as operational jurisdictions and other matters need to be ironed out well before the gates open. Ensuring life safety at mega-events requires months of meetings to make sure everyone knows their roles and nothing is being left unattended.

Communication presents one particularly sticky coordination problem, and a solution exemplified by the recent inauguration. There, the thousands of video cameras and radios carried by police, emergency vehicles and other safety and security workers were fed into several intelligence nerve centers. The installation called for special high-capacity wireless links to allow real-time video to reach monitors in the nerve centers, as well as a great deal of work networking all the different entities' communications together.

Colin McWay is president of Mutualink, a Wallingford, Connecticut,

“Sometimes it's in the best interest from a life safety standpoint to keep people in a contained environment ...”



company that help link together Department of Defense protective units, U.S. park police, Washington transit and city police and even New Jersey transit police. “They all have different types of communications assets,” McWay said of the challenge. “And whether it’s 2-way radios or video feeds or data to share or texting, they all operate on their own vertical networks.”

While the technology is challenging, McWay says the people problem in such a setup is even tougher. “People don’t want to participate in these networks if they feel they’re losing any control whatsoever of their communications networks,” he says. Part of Mutualink’s approach is to give agencies the ability to allow in only the people they want to use their networks. They’ve been able to deploy the inauguration technology in smaller venues, including a mall in New Jersey where local police can allow mall security to share their network if circumstances call for it.

When life safety technology and techniques can moved from the Washington Mall to Paramus Mall, the potential for smaller venues and assemblies to learn from mega-events seems clear. But not everyone is convinced. “I think the inauguration won’t translate over to music folks,” says Merek Swaim, operations director for Memphis in May International Festival.

Swaim says the festival, which consists of several music, cultural and

food events held over four weekends in May, does share several life safety approaches with mega-events. Similarities include an emphasis on preparedness planning and crowd control features such as keeping two lanes of traffic open for egress. Still, Swaim, who said he attended January’s inauguration, counts less on seeing what goes on at mega-events than on networking with colleagues to stay up on cutting-edge life safety innovations for his festival. “It’s a terribly different animal,” he says.

Even if mega-events don’t directly feed the need for improved life safety technology and techniques at smaller venues and events, the almost unbelievably sharp focus on security at very large assemblies does push forward the state of the art. At least some of those ideas spread throughout the industry, ultimately allowing safety officials at all venues to profit from the advancements. It’s inevitable, in fact, because life safety is always critical, whether the gathering is for a few million or a few dozen.

“It’s all in relation to who’s hosting it,” says Camillo. “In a one-redlight town, having 50 participants coming from other towns is a major event and should have the same attention paid to it as the Macy’s Thanksgiving Day Parade or the Tournament of Roses. And some of the same methodology would apply.” **VSS**

“In a one-redlight town, having 50 participants coming from other towns is a major event . . .”



When Does **AN ANIMAL** Become **A PETTING ZOO?**

By Stephen Neel, Ph.D.

Prevention of and protection from enteric pathogens can help keep your visitors safe.

How Did This Happen?

It wasn't your intent or desire; it was just a single animal set out for display, attention or learning. But all of a sudden there is a cluster of kids swarming around, over and under the animal . . . touching, feeding, kissing, petting, and perhaps licking the beast, and you have an impromptu petting zoo. It happens in an instant, but can result in long-term, complicated and perhaps expensive results should somebody become ill with an enteric pathogen such as Salmonella or E.coli.

Unfortunately, original intent or desire does not absolve the person or persons responsible from blame, legal liability or potential loss due to an impromptu petting zoo. As a result, anybody who provides space or animals that may contribute to an impromptu petting zoo should be aware of the risks and be prepared to do what they can to prevent or minimize injury or illness.

Petting zoos come in all shapes and sizes, from the large-scale commercial venture with full staff and a compliment of animals to the single bunny, chick or goat that is available for close contact, petting or feeding at your event or your facility.

Some helpful hints are provided below for those professionals who may be wondering what to do with animals at events or on their facilities as part of rental activity, especially when those animals may be in close contact with visitors.

Be Aware!

The first step in preventing injury or illness is a basic awareness of the potential risks associated with animal contact and the simple steps that can help mitigate those risks. Over the past several years we have seen an increasing amount of information in trade and popular press about the potential risks associated with close contact with animals, mostly due to the potential for illness from fecal contamination containing harmful pathogens like E.coli O157:H7 or Salmonella. A simple Internet search using the terms "E.coli and animals" brings forth close to two million hits. Modify your search to "E.coli and festivals" and result is over 53,000 hits. Searching for "E.coli and fairs" and the number of hits still exceeds 28,000. This tells us that the issue of E.coli at fairs, festivals, carnivals and other public gathering events that may feature animals brings forth a real risk of exposure to these potentially harmful contaminants. While we do not know enough about the science behind some of these illnesses, we do know that livestock can harbor harmful pathogens without themselves being sick, and that those organisms can create serious and potentially fatal illnesses in humans if the pathogen gets into the gastrointestinal tract of humans at risk. Although less is known about other animals and the pathogens they may carry, the US Centers for Disease Control (CDC) has issued guidelines for handling of turtles and reptiles due to potential contact of the pathogen Salmonella.

This article does not propose to educate about the technical nature of pathogenic illness, since there are many other sources of learning at our disposal. Our goal here is to provide some simple advice and recommendations for future actions that may protect visitors from illness or injury as a result of close contact with farm animals at your event, or on your property.

So, be aware, and understand that a single animal made available for petting or close contact can produce the same outcome as a commercial petting zoo.

Don't Point!

Most of us in the arena, fair, festival, theme park, and carnival industry do not own animals and haul

them to events for public petting, so our nature is to consider the potential threat of E.coli or another harmful pathogen somebody else's business. Think again! As the owner or manager of a property, or the group who leases or sub-contracts with others to provide petting services, you share in some of the exposure to negative press, as well as potential liability associated with how the facility is configured and operated. There have been several instances of injury and litigation associated with third-party providers of petting zoo services at fairs, only to see finger pointing, lawsuits and counter-suits between the facility and the service provider. As a result, it is important that anybody who may find themselves associated with animals on their grounds, especially if those animals are available for close contact with visitors; understand the potential risks as well as the potential steps that can be taken to mitigate those risks.

Get Help!

While there are a lot of sources available for education, it is also very difficult to filter through all of the information to clearly understand the proper steps to take to protect yourself, your company, your site, and most importantly your visitor from illness or injury.

There are two excellent sources of information you should consider when trying to learn more about this important topic and determine which preventative measures work best for your property or business. The International Association of Fairs and Expositions (IAFE) has devoted many years and resources towards improving the body of knowledge associated with this issue, and has even launched a comprehensive and very successful Consumer Protection training program for members and support organizations. The IAFE has taken a proactive approach to outreach, training, awareness, and proactive prevention that are to be applauded. Contacting the executives at the organization (www.fairsandexpos.com) will put you in touch with the leaders in the industry with regard to this topic.

A second source of information is the US Centers for Disease Control and Prevention (CDC) in Atlanta, Georgia. The CDC has endorsed and is distributing a document titled "Compendium of Measures to Prevent Disease Associated with Animals in Public Settings." The Compendium was originally authored by the National Association of State Public Health Veterinarians (NASPHV), and is available on the CDC web site at: <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5805a1.htm>.

““ Sadly, awareness is not enough to prevent problems and potential injury.””

The document has a solid discussion about the issue of enteric pathogen disease and public contact with farm animals, and provides some useful recommendations for minimizing risk and injury. The latest updated Compendium was released by the CDC on May 1 and we are pleased to report that one of IAFE's best technical minds worked with the committee to provide input pertaining to control measures at fairs, festivals, carnivals and other public events.

Follow Through!

Sadly, awareness is not enough to prevent problems and potential injury. Implementation of simple prevention and control steps is necessary to protect consumers and visitors from potential illness, and your company or organization from potential loss due to claims of negligence or liability.

Prevention and protection plans should include an effective combination of information and cleaning. Information is one of the keys to raising awareness with visitors that close contact with animals should be closely followed with hand washing and other cleaning efforts to protect themselves and their families. Information plans should include signage to in-

form visitors of the rules of contact with animals, including keeping “comfort items” like sippy cups, pacifiers, and bottles away from animals and contaminants, as well as the importance of hand washing after the event. Insuring that visitors have the opportunity to take charge of personal hygiene for themselves and their children through readily accessible hand washing stations is important. Additionally, directional signage to the closest hand washing station is an effective way to empower visitors to take responsibility for their own health and safety. Cleaning efforts to maintain a safe and pleasurable environment where animals are located will help reduce dust, remove contaminants and present a wholesome area for animal contact. Cleaning should include sanitizing, as necessary, to reduce contaminant loads when appropriate and as needed.

A final key to success is effective and timely record keeping efforts to document when services were performed and provide written proof that reasonable efforts were taken to provide a secure environment for visitors. Simple records to document when hand washing stations were serviced; the frequency of sanitation or cleaning efforts; as well as other cleaning procedures will provide a useful paper trail for any manager or operator.

Reach Out!

Protecting consumers from illness resulting from contact with enteric pathogens in an animal contact setting is a team effort, involving the owner/operator of the event or property, the third-party service provider or owner of the animal(s), and the visitor. If you outsource the animal event, we encourage you to share as much information as possible with the provider, and come to a clear understanding of what will be done to protect the consumer and who is responsible for the implementation of those efforts. If you are renting your facility to others, be sure that you are aware of any animals to be present and who will be responsible for protecting the consumer.

Providing a safe and pleasurable event is our goal, and working in harmony with all parties involved will raise awareness and action to the level that should greatly minimize the risk of injury or illness from harmful enteric pathogens that may be naturally associated with animals and livestock that are sometimes affiliated with public events at arenas, fairs, festivals, theme parks and carnivals. **VSS**

Dr. Stephen Neel is a technical consultant to the livestock and meat industry, and has a long history of developing programs to minimize bacterial contamination. Dr. Neel is currently working with the IAFE to raise awareness within the industry for the need to implement programs and procedures designed to protect consumers at fairs, expositions and petting zoos. Dr. Neel conducts consumer protection technical training, site consultations, and has served or is serving as a technical expert on the E.coli litigation in Oregon, North Carolina, Texas and Florida. For more information about Dr. Neel or his company, TSI, please visit his web site at: www.TechSolutionsInt.com



Miracle on the Hudson

Emergency preparedness can lead to a successful outcome.

By A.J. Slaggert

Every time I look at this picture I become more and more aware of our responsibility to those patrons who have entrusted us with their safety and well-being. I get a chill thinking about what could have happened —

A What IF!? What IF the responders were careless? What IF the radios failed to communicate with each other? What IF the airplane crew were not alert and lost control? What IF the passengers lost control and panicked? What IF the weather had been the typical winter in New York? What IF the incident occurred at night? What IF the incident occurred somewhere other than The Hudson River? What IF? What IF?

An incident of this magnitude just doesn't happen. A rescue of this type requires Planning, Pride, Professionalism, and above all, Practice. We know how good the Pilot Captain Sullenberger was! We have been made aware of the Pride and Professionalism manifested by the pilot, his crew, and the first responders. The news media from the time the incident occurred to long after, kept us aware of this Pride and Professionalism. Planning and Practice is another matter.

Just how do you Plan? Just how do you Practice for a catastrophic event? Please remember that there were a multitude of jurisdictions involved. We have two states, the Harbor Authority, police and fire departments, both private and public watercraft, airline and FAA protocol. Just think of the conflicting priorities and potential conflicts of interest that had to be overcome. This is where a pre-planned emergency scenario must be in place, must be understood by all potentially involved parties and rehearsed and rehearsed to insure instant, cohesive, and instinctive response.

The actions that most impressed me were the ability of the ferry boats to approach the scene and remove the passengers that were on the wings. This was done in a swift, safe, and efficient manner. Captain Lucas of the Ferry Boat Athenia was quoted as saying, "You train so much you don't think about it! I didn't have to give orders to the crew." These boats have man overboard drills once or twice a month in which a life-ring is thrown into the water. The Captain must maneuver the boat while the deck crew affects a rescue.

Another area of great importance is the ability to communicate. Remember that all of the involved parties would have different radio frequencies. As we learned from 9/11, communication was the weak link in rescue attempts. A single common channel available to ALL units eliminates con-



"An incident of this magnitude just doesn't happen. A rescue of this type requires Planning, Pride, Professionalism, and above all, Practice."

fusion, conflicting orders, costly time, and erroneous casualty reports.

Amusement parks, auditoriums, carnivals, circuses, fairs, and festivals have a lot in common with airlines. In order to be successful, we must attract large crowds of people. We place them in crowded conditions, in unfamiliar surroundings. They come to be entertained; they come to have fun. They expect a lot from us. Have we done our best to instill professional pride in our employees? Have we planned for contingencies? Do we frequently review our plans? Do we practice and practice as a group? Have we worked with our local authorities in realistic drills?

Look at the picture again — Was it really just a miracle? **VSS**

A.J. Slaggert is the president of Classic Convention Services Corporation, which specializes in trade shows and major outdoor events. He has designed and taught EMT courses focusing on environmental emergencies. He currently serves as a loss control and safety planning consultant for Mobile Midway Safety Institute.



Take A Good Look At Your EMP

If it's been awhile, now is the time to evaluate and update.

By Bram L. Bottfeld

The call comes in through your main switch board. They mumble something about a “device” and a time. Your receptionist hears the click as they hang up. There is that look like the deer staring in the headlights. What do I do now?

This scenario is not unusual, nor rare. The concern is, though, that as part of an overall emergency management plan, it is not practiced and rehearsed with staff sufficiently. And while we are using a bomb threat as an extreme example, it nonetheless clearly demonstrates the need for continued reviews of emergency management plans in general.

Every facility, no matter the size, must have an EMP. While they vary from venue to venue, most are comprised of similar subject matter. Areas of concern should and do respond to crisis communications, evacuations, hazmat response as well as defined points of responsibility for identified building staff representatives in each covered situation.

An EMP is a living document. It needs to be taken out at least once a year and preferably twice a year. It needs to be reviewed not only by those who work directly for the facility but it needs to have support vendors and municipal, county, or state involvement as well depending on the jurisdiction of involved public agencies.

To that end, invite those support vendors such as cleaning and security/event staff to your EMG (emergency management group) meetings. Give them copies of materials you feel they need to have. Orient them as to their roles in the event of an emergency. Understand their resources, which become YOUR resources. If this is in-house, it's still the same. The critical aspect frequently not covered is to review your support vendor's emergency plans as well and ensure that they match with your own. Each must support the other. In some cases, you will find that some support vendors do not have their own emergency plan and thus, they rely on yours alone.

First Response staff is typically from the venue. They control the situation until the arrival of law enforcement/life safety personnel. Is your staff prepared to assume such roles? Do you have threat responses evaluated and have you pre determined what to do? Have you gone over this with your staff? If you have not, identify those people whose job functions match the

needs. i.e., Crisis Communications should be handled by . . . your public relations/media manager, etc.

Training, which can be done in-house and inexpensively on the job, can involve simple procedural memos to follow (what did the caller say? what did they sound like? was it a man or a woman?) and so forth. Review of these formats for procedure can be done during less busy moments where this is greater opportunity to accomplish same. However, scheduled training responses need to take place. Even in this time of great budgetary restriction, we must find the time and dollars for staff orientation so they are comfortable in an emergency response. A great source of training at little or no cost is through product manufacturers. Generally eager to assist, they can help in training on all manner of areas inclusive of bloodborne pathogens, First Aid, CPR, and so forth. Training in life safety can also be requested through Fire Departments that work with your venue.

“The critical aspect frequently not covered is to review your support vendor's emergency plans as well and ensure that they match with your own. Each must support the other. In some cases, you will find that some support vendors do not have their own emergency plan and thus, they rely on yours alone.”

The EMP saves lives, allows for response, which is both centralized and directed and is the ultimate expression of safety for your staff and the guests who come to your facility. What better way to show your care for all involved?

This commentary has been a simple overview to reach out and make you pay attention to a living breathing entity . . . your EMP. Take it out, blow off the dust, perform CPR and introduce yourself to each other. **VSS**

Bram L. Bottfeld is Director of Security & Safety for Sunrise Sports & Entertainment, Sunrise, Fla.

