

Staying ahead of the Storm Front: Planning for Severe Weather Events

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Session Overview

- Recap: Session #2 security situational awareness and de-escalation protocols
- Severe weather risk analysis
- Severe Weather: Situational Awareness & Decision-Making
- Emergency Response Plans & Evacuation Planning Principles
- Break-out session exercise: planning for severe weather events
- Severe Weather Risk Management Matrix
- Event safety management plans
- 5 take-aways
- Wrap-Up & questions





Learning outcomes

- (1) Revisit and consolidate key takeaways/learnings from session #2: security situational awareness & de-escalation
- (2) Develop an understanding of severe weather and evacuation planning principles
- (3) Take –away and apply/adapt severe weather risk analysis and mitigation protocols for your concert series







Recap Session # 2: Safe and secure events: how to enhance your team's security awareness & culture

...talking about risks is not risk management. Nor does it mean that you have properly and adequately managed risk if you have a certificate of insurance.

Berlonghi, 1990





Berlonghi, A. (1990) The Special Event Risk Management Manual. Dana Point, CA: Alexander Berlonghi

Employee Vigilance through the Power of Hello

Alert employees can spot suspicious activity and report it





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Stay vigilant of your











ELICITING **INFORMATION MISREPRESENTATION**



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The Power of Hello: 5 reasons why should 'bake it' into your teams DNA

- 1) Lays down the foundation for your team's safety & security culture we all have a part to play
- 2) Fosters 'friendly and positive' interactions between your team members and your guests
- 3) Enhances your team's situational awareness of their environment what's normal & what is not
- 4) Deterrent effect increases the 'perceived risk' to potential threat actors
- 5) A positive interaction may make the difference between ' bad day' and a 'good day'

https://www.dhs.gov/nationwide-sar-initiative-nsi/if-you-see-something-say-something-public-awareness-video https://www.cisa.gov/resources-tools/resources/power-hello-slick-sheet





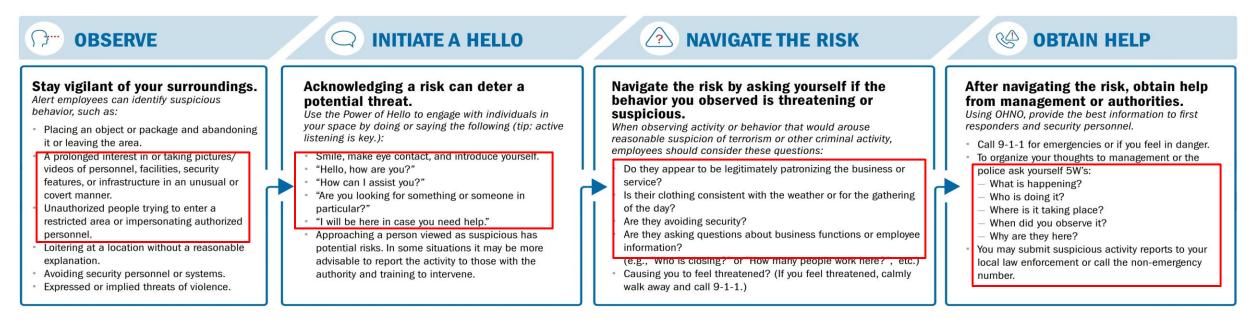
Employee Vigilance through the **Power of Hello**

Alert employees can spot suspicious activity and report it



Used effectively, the right words can be a powerful tool. Simply saying "Hello" can prompt a casual conversation with unknown individuals and help you determine why they are there. **The OHNO approach – Observe, Initiate a Hello, Navigate the Risk, and Obtain Help** – helps employees observe and evaluate suspicious behaviors, empowers them to mitigate potential risk, and obtain help when necessary.

The **OHNO** approach to risk prevention relies on reasonable persons to make these observations to properly detect and report terrorism/criminal-related suspicious behavior.



For additional Power of Hello resources please visit cisa.gov/employee-vigilance-power-hello.

DHS' "If You See Something, Say Something®" campaign provides additional information on how to recognize and report the indicators of terrorism-related suspicious activity.

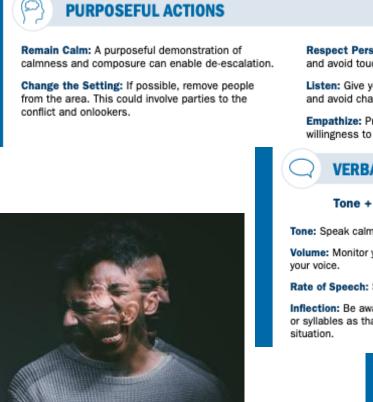
Escalation protocol: a measured response to disruptive/disorderly guests at a concert/event







Purposeful Actions - Verbal Communications - Body Language





Yesterday's Incidentis Tomorrow's Risk™

Respect Personal Space: Maintain a safe distance and avoid touching the other person.

Listen: Give your full attention, nod, ask questions, and avoid changing the subject or interrupting.

Empathize: Present genuine concern and a willingness to understand without judging.

VERBAL COMMUNICATION

Tone + Volume + Rate of speech + Inflection of voice = Verbal De-Escalation

beak calmly to demonstrate empathy.	Instead Of:	Say	
Monitor your volume and avoid raising	"Calm down."	"I can see that you are upset"	
ce. Speech: Slower can be more soothing.	"I can't help you."	"I want to help, what can I do?"	
n: Be aware of emphasizing words	"I know how you feel."	"I understand that you feel "	
les as that can negatively affect the n.	"Come with me."	"May I speak with you?"	







De-escalation Techniques & Tips

- **# 1 Communicate**, listen, be attentive & don't judge
- # 2 Focus on feelings
- **# 3 Silence**, **lack of immediate response** isn't necessarily a negative response
- **# 4 Ask questions**, clarify, don't make assumptions
- # 5 Remain in control of your feelings/response, maintain a safe personal 'bubble' [distance]

- **# 6 Remain positive**, reinforce with non-verbal behaviors
- **# 7 Know your limits** when to step back & handoff (escalation protocol)
- **#8 Know your team back-up** & how to communicate when you need support
- # 9 Debrief ensure you take time to debrief your team members involved in the 'incident'
- **# 10 Identify lessons learned** & incorporate into future training /team briefs







Severe Weather Risk Analysis

.....risk cannot be eliminated: there will be incidents, so we must focus on the resiliency of our infrastructure ("events") under all conditions

Caitlin Durkovic, Asst Secretary, DHS, 2016 Brief to House Committee on DHS, US House of Representatives







Poll Question # 1 : How many times have you had to cancel or postpone your concert/event due to severe weather in the last 3 years:

- Never
- 1
- 2
- 3



Yesterday's Incidentis Tomorrow's Risk™

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Poll ended | 1 question | 19 of 22 (86%) participated

1. How many times have you had to cancel or postpone your concert/event due to severe weather in the last 3 years? (Single choice)

19/19 (100%) answered

Never	(3/19) 16%
1	(1/19) 5%
2	(3/19) 16%
3	(5/19) 26%
More than 3	(7/19) 37%

FOUNDATION

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Risk vs Reality: Levitt Network 5-year trend analysis

Levitt network top 5 risks

- 1. Active shooter
- 2. Severe weather triggers evacuation
- 3. Concert cancellation (weather related)
- 4. People experiencing houselessness or people with mental health conditions
- 5. Funds raised do not meet budgeted expenses

Most frequent incidents

- 1. Concert cancellation severe weather related
- 2. Communicating sudden change of plans to the public
- 3. Engaging people experiencing houselessness or people with mental health conditions
- 4. Artist cancellation
- 5. Severe weather triggers evacuation



Maturity self assessment: Levitt venues & AMP sites

Plans, Policies & Procedures	AMP sites	Levitt venues
Risk management plans	13%	53%
Event security	29%	53%
Emergency response	35%	60%
Evacuation	16%	80%
Shelter-in-place	10%	53%
Active shooter response	10%	80%
Severe weather	58%	73%
Crowd management	13%	40%



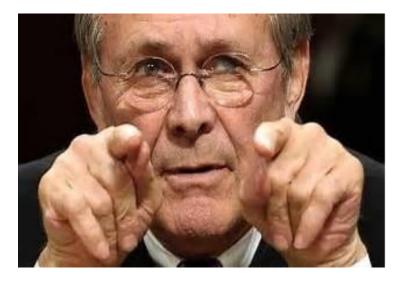
Insights into understanding Risk

...the known knowns; there are things we know we know

...the known unknowns; that is to say we know there are some things we do not know......

But there are also **unknown unknowns** – the ones **we don't know what we don't know**....."

...a rare event, with massive impact, which is unpredictable, except in retrospect.. Nassim Taleb,2007



Donald Rumsfeld DOD Briefing, February 12, 2002



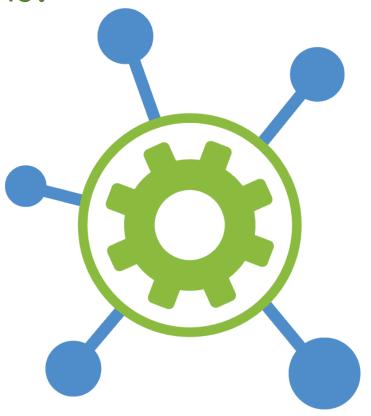
"the impact of highly improbable events"





Event risk management in 5 questions!

- 1) What could happen / go wrong?
- 2) What would **cause** it to happen?
- 3) How **likely** is it to occur?
- 4) What are the potential consequences/impacts ?
- 5) How can we reduce the likelihood [preventive risk control measures] of the risk occurring.... & if it occurs (incident), how can we reduce the severity of impact/harm [preparedness risk control measures response & recovery]



Kaplan, S. and Garrick, B. (1981) 'On the Quantitative Definition of Risk', Risk Analysis, 1, pp. 11-27.





Risk Analysis – Severe Weather



Risk Statement: Severe weather forecast triggers the evacuation of the venue / AMP site during the concert

- What are the sources (hazards) of risk ?
- What are the impacts on your mission / critical success factors for the concert series /event?







Risk Source - Hazard

....a potentially damaging physical event, phenomenon or human activity that may cause the loss of life or injury, property damage, social and economic disruption or environmental degradation

A hazard differs from a threat in that a **threat is directed** at an entity, asset, system, network, or geographic area, while <u>a hazard is not dir</u>ected DHS Lexicon



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Step 1: Event Risk Register – Risk Analysis

RISK CATEGORY	RISK DESCRIPTION	RISK CAUSE/S	BUSINESS IMPACT ASSESSMENT	RISK OWNER
fc e v	Severe weather orecast triggers the evacuation of the venue / AMP site during the concert	 Severe thunderstorms High winds Heavy rain Lightning Tornado Extreme temperatures Winter storms 	 Delay, interrupt, postpone and/or cancel the event (DIPAC) Revenue or financial loss Infrastructure damage Capability loss (e.g. technology) Potential for serious injuries or fatalities Civil liability exposure Brand damage & sustained media interest Insurance claims 	Director of Ops

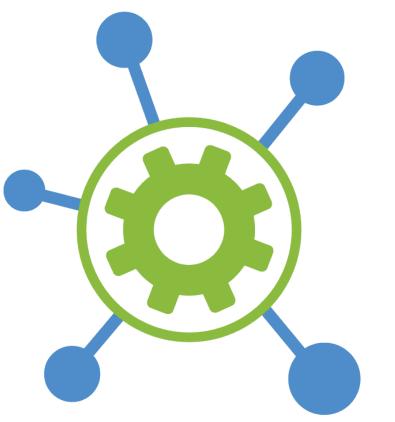




Decision Analysis & Risk Mitigation – the 4"Ts"

WHAT	HOW
AVOID Terminate	Do something different - avoid the circumstances in which the risk event may arise and/or remove the source or cause of the risk (threat or hazard)
REDUCE/MODIFY Treat	Reduce the chance/uncertainty (likelihood) of something happening, reduce the severity and/or the duration of the potential negative effects (harm or consequences)
SHARE Transfer	Share the risk through contracting to 3 rd parties, set contract terms & agreements, waivers, indemnification, insurance etc
ACCEPT Tolerate	Accept the risk – make a conscious decision to manage the risk/incidents if they eventuate / assessed as low as reasonably possible (ALARP), no additional benefit can be gained

Severe Weather: Situational Awareness & Decision-Making











Poll Question # 2 : Who is the decision maker for evacuation and/or cancellation of your concert/event site?

- Police incident commander (senior officer onsite)
- Executive Director
- Operations manager
- Board member



Poll 2

Poll ended | 1 question | 18 of 21 (85%) participated

 Who is the decision maker for evacuation and/or cancellation of your concert/event site? (Single choice)

18/18 (100%) answered

Police incident commander (senior office onsite)	r (0/18) 0%
Executive Director	(13/18) 72%
Operations Manager	(4/18) 22%
Someone else	(1/18) 6%

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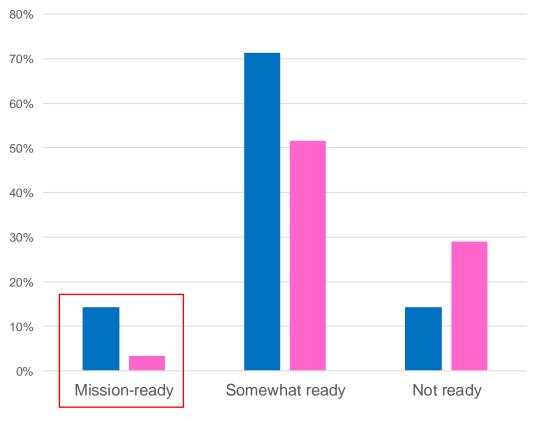
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Mission-readiness & resilience: is your team prepared for the knowns & unknowns?

...the state of team preparedness and capability to assess, respond and recover from unplanned events and major incidents that may adversely impact your ability to successfully deliver your concert/event

...we feel somewhat confident that we have reliable and competent team members that will use best judgement and/or reasonable actions should a crisis arise...

FOL respondent

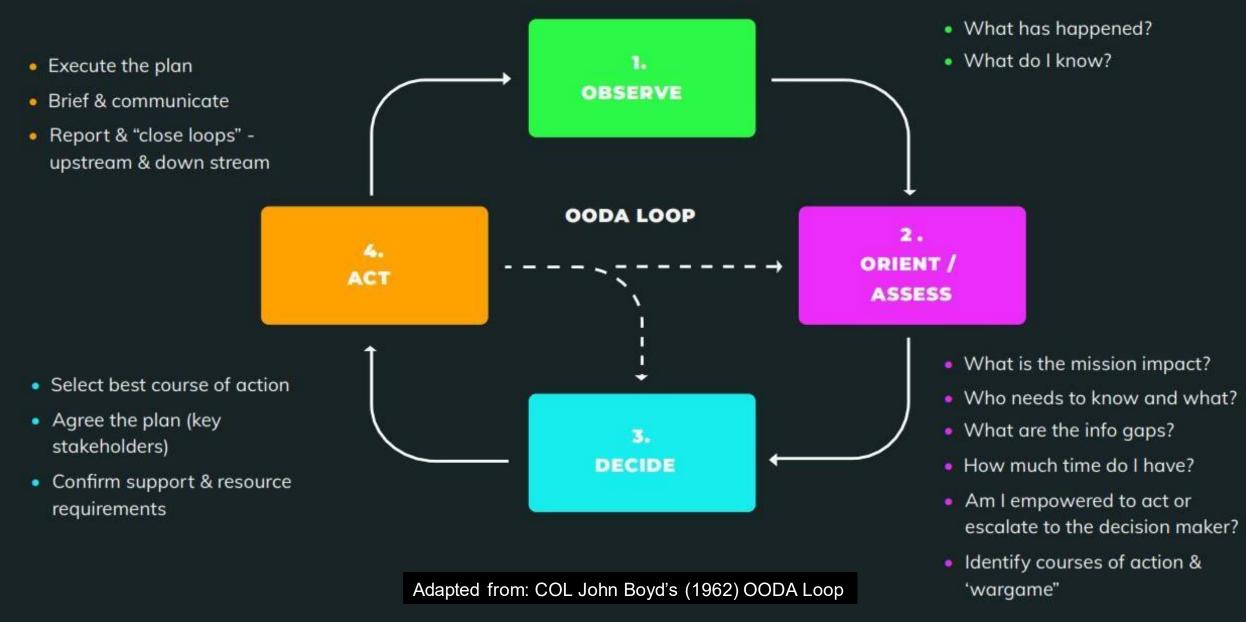


Levitt Venues AMP Sites





Decision Making under Volatility & Uncertainty





Critical Decision Points & Timings

Response

- Alert notification to event staff & move to position
- Evacuation alter to Notifications to all stakeholders & constituent groups
- Move to shelter in place?
- Evacuate (think ADA) to safe shelter?

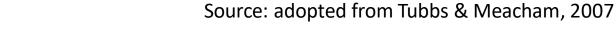
Recovery

- Re-entry & resume operations
- Decision to authorize re-entry
- Prepare, brief & deploy event team
- Notification to guests (how?)
- Resume event

Critical Decision Trigger: Evacuation Timings

- $F_{\text{Evacuation}} = (t_{a \text{lert}} + t_{d \text{ecision}} + t_{n \text{otification}} + t_{r \text{esponse}} + t_{t \text{ravel}})$
 - 1) t(alert) to decision maker <mark>3</mark>mins
 - 2) t(decision) to initiate evacuation <mark>5 mins</mark>
 - 3) t(notification) to security & event team <mark>5 mins</mark>
 - 4) t(response) notification to guests & time to respond/act 3 mins
 - 5) t(travel) = 200ft/min (ADA @ 100ft /min) 10 mins [2,000 ft]







Risk Velocity & Critical Decision Pathways



Time to impact' (TTI) - the length of time taken for a risk to move from cause to impact





Risk Velocity: Severe Weather Decision Triggers for Notifications

Severe Thunderstorm Warning	0 to 40 minutes before storm (average is 22 minutes)	 Immediately move all people indoors If wind 70+ mph, hail 1.75+ inches: also immediately move to shelter areas, closing
<i>Thunderstorm with hail quarter size or larger and/or wind over 58 mph is imminent</i>	via web page, email, text alert, Weather Radio, TV	all doors behind you. For duration of storm: • Remain indoors or in shelter • Monitor information sources for updates
 Tornado Warning or tornado spotted nearby Tornado is likely or imminent 	0 to 30 minutes before tornado (average is 11 minutes)	 Immediately move to designated shelters, closing all doors behind you. While in shelter:
	via web page, email, text alert, Weather Radio, TV	Try to find a location that will protect you from debris. Monitor information sources for updates

Source: NWSDVN eventplanning guide.pdf (weather.gov)





Severe Weather Decision & Action Matrix

THREAT	ALERT METHOD	FIELD (STAGE)	PARKING	MARKETPLACE	SPECTATOR SEATING	VIDEO PRODUCTION	TICKETING
TORNADO ACTIVITY	1 long air horn blast + staff radio communication with PA announcement		IMMEDIATE RETREAT TO NEAREST DESIGNATED SHELTER AREA				
SURFACE WINDS IN EXCESS OF 40 MPH OR TORNADO WARNING	1 long air horn blast + staff radio communication with PA announcement	o	ORGANIZED EVACUATION IN ACCORDANCE WITH EVENT EVACUATION PLAN				
WINDS 30 MPH OR GREATER	Text, radio, PA	Move under stadium	Return to bus	Move under stadium	Move under stadium or return to vehicles	Add bracing cables or prepare to lower to floor/ground	Stay in box office
LIGHTNING PER ASSESSMENT CRITERIA	Text, radio, PA	Move under stadium	Return to bus	Move under stadium	Move under stadium or return to vehicles	N/A	Stay in box office
WINDS 26-30 MPH	Text, radio	Move under stadium	Return to bus	Move under stadium	Move under stadium or return to vehicles	Check rigging	Stay in box office
VINDS 20-25 MPH	Text	Move under stadium	Return to bus	Move under stadium	Move under stadium or return to vehicles	Check rigging	Stay in box office
TORM/LIGHTNING TRACKING TOWARDS SITE WITHIN 20 MILES)	Text	Monitor	Monitor	Monitor	Monitor	Check rigging	Monitor
RAIN EVENT TRACKING TOWARDS SITE WITHIN 20 MILES)	Text	Monitor	Monitor	Monitor	Monitor	N/A	Monitor
ALL CLEAR	Text, radio, PA	WE	ATHER IS ALL	CLEAR, RESUME	NORMAL SHO	W ACTIVITIES	

Table note: Refer to A3.5.4 for guidance on coordinating the hazard threshold triggers with time-based limits.



Severe Weather: Emergency Response Plans & Evacuation Planning



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Poll Question # 3 : Have you prepared a severe weather emergency response plan for your concert series:

- Don't know
- No
- Yes



Poll 3

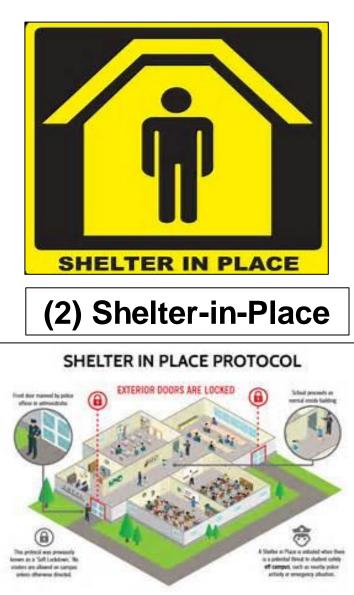
Poll ended | 1 question | 14 of 21 (66%) participated

1. Have you prepared a severe weather emergency response plan for your concert series? (Single choice) 14/14 (100%) answered

Don't know	(2/14) 14%
No	(1/14) 7%
Yes	(11/14) 79%

Emergency Response Decision Matrix







(3) Lockdown





Egress & Evacuation Systems Planning Guidelines

...designed to allow people to move from a real or perceived location of hazard to a location of relative safety during a hazard... event Tubbs & Meacham, 2007

Tubbs, J. and Meachan, B. (2007). Egress Design Solutions: A Guide to Evacuation and Crowd Management Planning





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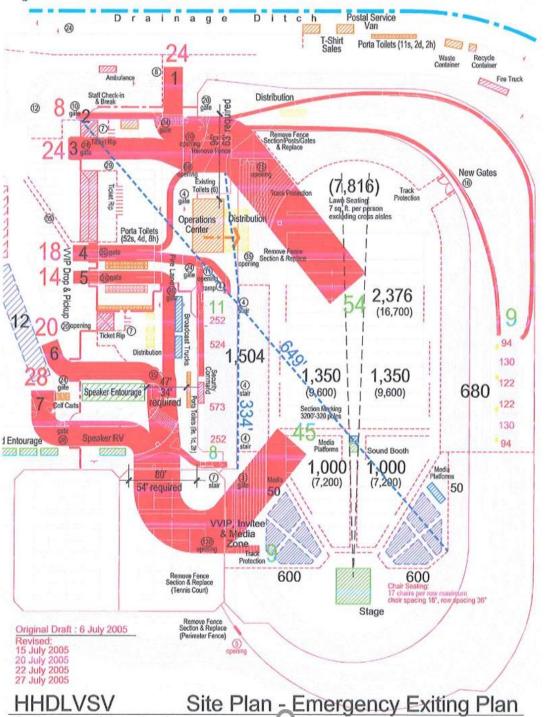
....a strong relationship exits between normal circulation routes and the exit paths most used during emergency evacuations, as people tend to use familiar routes during emergency evacuations (Simes, 2001)¹

¹Simes, J.D. (2001) 'Advancing Human Behavior Theory: Visual Access and Occupancy Research, Modeling & Applications '. Human Behavior in Fire: Proceedings of the 2nd International Symposium. London: Interscience Communications





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Egress & Evacuation Systems Design Considerations

3 key elements to planning an egress & evacuation system design:

- 1) Design
- 2) Information
- 3) Management



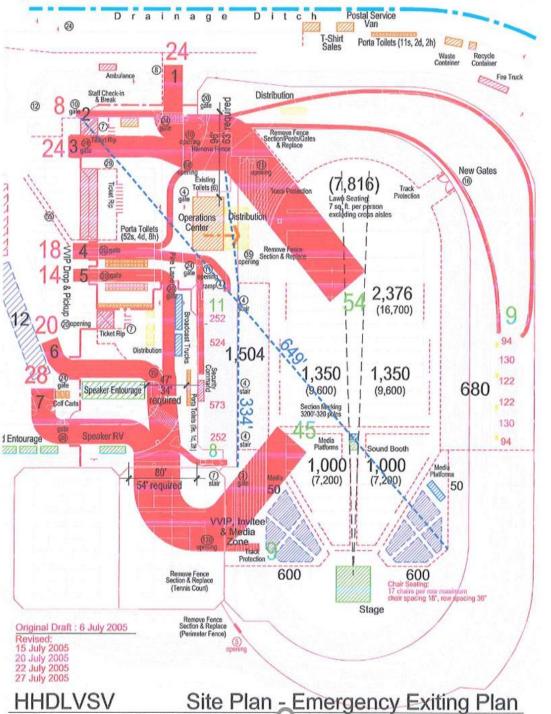
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Egress & Evacuation Systems Design Guidelines

- Emergency exit routes aligned to circulation & egress routes
- Exits & entrances: clearly marked, identifiable
 & numbered
- Exits & egress gates staffed / unlocked before gates open
- Elevated signage clearly visible (day & night)



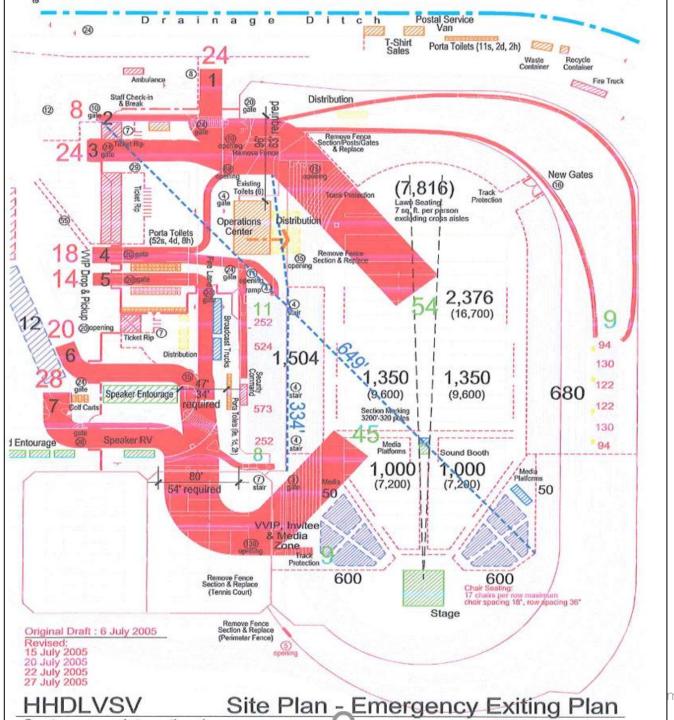


Egress & Evacuation Systems Design Guidelines

- Plan alternative exits and routes
- Emergency vehicle gates no less than 20 ft wide
- Pedestrian egress gates no less than 10ft wide
- Life Safety Code NFPA 101 (outdoor venues)
 - 6,000 min. 3 exits
 - 9,000 min. 4 exits



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Evacuation Plans

- Identify primary & alternate routes
- Route capacity & movement
- Target time for evacuation 8 mins
- * Egress gates (linear ft) = 25 persons per min / 8 mins / crowd capacity
- Location & capacity of evacuation assembly areas (EAA)
- Plan for workforce & delivery partners evacuation ?
- Communications & updates
- Venue re-entry protocols
- *Guide to Safety at Sports Grounds " The Green Guide" (2018)



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BEALE STREET ENTERTAINMENT DISTRICT EVACUATION PLAN OVERLAY







Poll 4

Poll Question # 4 : Do you conduct a 'talk-through' / rehearsal of your severe weather plan with your event team prior to the commence of your concert series ?

- Yes
- No
- Don't know

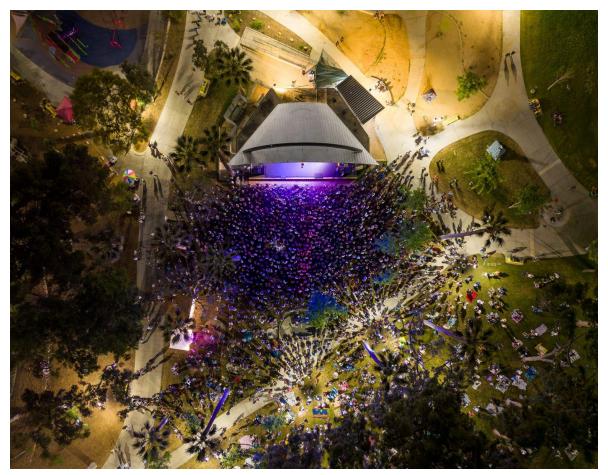


1. Do you conduct a 'talk-through' / rehearsal of your severe weather plan with your event team prior to the commence of your concert series ? (Single choice) 19/19 (100%) answered Yes (11/19) 58% No (8/19) 42% Don't know (0/19) 0%

Poll ended | 1 question | 19 of 21 (90%) participated



Breakout group exercise: Severe weather planning & evacuation



- Dagmar will allocate you to room (groups of 5-6)
- In your 'break-out room groups, you have <u>10 mins</u> to discuss what you consider to be the essential elements of a severe weather emergency response plan (ERP)
- Designate a spokesperson to brief your key discussion findings back to the main group
- Identify a representative from your group who would like to share an example of how their team response and managed a severe weather incident & /or evacuation – what worked & what could have been improved





Severe Weather Risk Mitigation Plan

Preventative Controls (reduce likelihood)

- 1) Programming to avoid seasonal weather patterns
- 2) Pre-Event critical decision points - postpone, delay or cancel
- Access to timely & accurate weather forecast data – website / meteorologist
- 4) Weather decision matrix

+ Resilience +

Sh · 🚱

...

X

La Santa Cecilia concert has been cancelled due to severe weather. Please stay safe and stay indoors. We apologize for any inconvenience this has caused.



Preparedness Controls (reduce impact and harm)

Response

- 1) Emergency Response Plan
 - First aid & medical support plan
 - Event Evacuation Plan
 - C3 Plan / test comms prior to event
- 2) Public communications & messaging plan

Recovery

- 1) Insurance policy/s
- 2) Business continuity plan
- 3) Incident debrief
- 4) Draft after action report (AAR) & identify lessons learned

Indiana State Fair Stage Collapse: Saturday, Aug. 13, 2011

Incidents (risk events) rarely occur because control measures <u>were</u> <u>not identified or implemented</u> but rather designated risk control measures <u>were ineffective or</u> failed due to lack of oversight & quality assurance James Reason, 1990



Credit: AP Photo/The Indianapolis Star, Matt Kryger



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His Holiness the Dalai Lama Visits Sun Valley

Event Safety **Management Plan**

Wood River High School Football Stadium

Hailey, Idaho 11 - 12 September 2005

Information Security

The content of this document is strictly confidential and is intended for use by the HHDLOC Event Management Team, the Wood River Valley Public Safety and Law Enforcement Agencies and other Local Authorities / Agencies as deemed necessary by the Event Security & Operations Integration Manager.

HHDLOC Event Safety Management Plan for Wood River High School Football Stadium

Version: 2.0 (Final) - 9 September 2005

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Page 1 of 24

HHDLOC Event Safety Management Plan

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TABLE OF CONTENTS

Distribution List
Glossary of Terms
EXECUTIVE SUMMARY
ntroduction
/ision Statement7
Event Safety Management Plan7
OVERVIEW OF EVENT OPERATIONS
Operational Phases
Event Safety Strategy
Event Safety Management Stakeholders9
HHDLOC Event Operations Structure
/enue Safe Holding Capacity10
Overview
Spectator Sections
The Stage
VENUE TEMPORARY FIT OUT & IMPROVEMENTS - EMERGENCY EGRESS & SAFETY
Emergency Egress
Tents & Fire Code
Signage and Banners
ADA Accessible Amenities
Fire & EMS Plan
Fire
EMS
Emergency Response
EVENT COMMUNICATIONS
/enue Operations Center (VOC)14
Communications Plan
ncident Reporting
Annexes:
1. Venue Emergency Egress Plan (attached CAD)
2. Event Incident Response Management Plan15

HHDLOC Event Safety Management Plan for Wood River High School Football Stadium Page 5 of 24

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Version: 1st Draft - 8 August 2005

5 key take-aways

- 1) The relationship between risk velocity and decision making
- 2) Severe weather & evacuation decision based on timings – the time to allow your guests to move to a place of reasonable safety
- 3) Evacuation plan doesn't have to be complex plan on a page !
- 4) Train & practice
- 5) Develop your own severe weather risk matrix your halfway there !



..resilient organizations are those that are able to survive adversity, and to thrive in a world of uncertainty

DHS (2011) Risk Fundamentals





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Online Training Resources & References

https://www.eventsafetyalliance.org/the-event-safety-guide/

NWSDVN_eventplanning_guide.pdf (weather.gov)





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Upcoming Levitt Network Trainings and Sessions

EDI SPEAKER SERIES

TUESDAY, MAY 21 | 1PM ET / 10AM PT

Inclusive Engagement Practices with Individuals Experiencing Homelessness: Part II – De-escalation

PUBLIC SAFETY & SECURITY TRAINING SERIES

TUESDAY, MAY 28 | 1PM ET / 10AM PT Developing your Event C3 (Command, Control, and Communication) Plan TUESDAY, JUNE 11 | 1PM ET / 10AM PT Part I Levitt Network Safety & Security Forum

IN CONVERSATION: ARTIST ROSTERS AND BOOKING Q&A

TUESDAY, JULY 23 | 1PM ET / 10AM PT Booking Talent Virtual Fireside Chat and Q&A with Anne Sturm

TUESDAY, OCTOBER 22 | 1PM ET / 10AM PT

Booking Talent Virtual Fireside Chat and Q&A with Anne Sturm



Thank you for joining us!