

**Welcome**

# Emergency Preparedness

APPA Institute for Facilities Management  
January 2019

Dr. Joseph Han, APPA Fellow, CLEE

AIA Continuing Education Provider

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## Your Facilitator

Then: 3/1989 – 10/2018

NOW: 10/2018 - TBD

**THE NUNCHI GROUP**  
*Realize Your Aspirational Future*

Richard E. & Sandra J. Deuch  
COLLEGE OF BUSINESS & ECONOMICS  
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Credit(s) earned on completion of this course will be reported to American Institute of Architects (AIA) Continuing Education Session (CES) for AIA members.

Certificates of Completion for both AIA members and non-AIA members are available upon request.

Questions related to specific materials, methods, and services will be addressed at the conclusion of this presentation.

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### Course Description

Higher education campuses must have a sound emergency prepared program. Facilities management professionals play an integral part in the preventing, preparing, responding, and recovery phases of an all-hazards incidents. This course will utilize a participatory process to focus on the *prepare* phase, covering in detail, the four-step cycle evaluate, plan, train/equip, and exercise. Participants will apply their learnings through in-class knowledge and tabletop exercises.

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### Learning Objectives

- (1) Become familiar with emergency preparedness terminology
- (2) Review requirements related emergency management programs
- (3) Assess the readiness of your home campus
- (4) Participate in several Table Top Exercises

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What's your emergency preparedness why>

1. It's the right thing to do
2. \_\_\_\_\_ Best practices



3. Required by \_\_\_\_\_ / \_\_\_\_\_
4. Required by state or board mandate

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## FEMA & U.S. Department of Education requirements



- ✓1) EOP, COOP, Mitigation Plan
- ✓2) Audits and table top exercises.
- ✓3) Sufficiently trained staff members
- ✓4) Develop coordinated plans with first-responder agencies.

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## Four Phases of Emergency Management




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## Emergency Preparedness - Terminology Game



- Each table is a team
- *Select a team name.*
- Using your laptop or smart phone, go to *Kahoot.it*
- *Type in the code on the screen*
- *What are you playing for?*
- *Get ready!*

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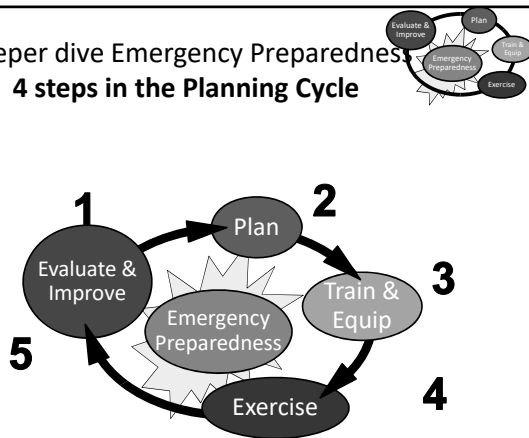
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## Deeper dive Emergency Preparedness 4 steps in the Planning Cycle




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Some of the worst disasters of (1-4)

Some of the worst disasters of (5-8)

In the US, what are some of the worst disasters?

On your campus, what are some of the worst disasters? Were they

- Natural?
- Human – Non Malicious?
- Human – Malicious?

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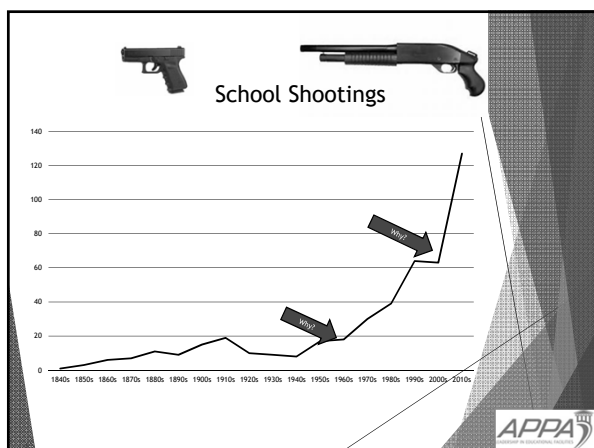
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Campus  
preparedness  
is a game changer



## WHAT MAJOR INCIDENTS HAVE TAKEN PLACE ON OR NEAR YOUR CAMPUS?

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## Major incidents



- 1992 Hurricane Andrew- U. of Miami, \$17 Million.
- 1994 Northridge earthquake-CSU Northridge \$380 Million 1997 Flood-Colorado State, \$100 Million.
- 1999 Heat Wave/Power outage-Columbia U. research lost \$Millions.
- 2000 Residence Hall fire-Seton Hall, 3 died 58 injured
- 2000 Fire Bloomsburg U./Millikin U. student deaths.
- 2001 Tropical Storm Allison-U. of Texas Houston Medical \$205 Million.
- 2002 Student shooting-U. Arizona 4 died.
- 2003 Airplane crash kills 2 Clemson Students and 1 from Bob Jones.
- 2004 44 students involved in mass casualty at Lehigh U. "Rave Party"
- 2005 Hurricane Katrina-Largest Natural Disaster in recorded History.

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## Major incidents



- 2006 F3 tornado hits Volunteer State Community College, 19 killed
- 2007 Student shooting-Virginia Tech 31 died.
- 2008 Man with a gun on Ferrum College campus.
- 2009 H1N1 Pandemic
- 2010 UT Austin gunman on campus
- 2011 Fukushima Nuclear Accident Tsunami/Earthquake
- 2012 Shooting Sandy Hook Elementary School
- 2013 27 shootings on college campuses
- January 19, 2014 Shooting at Purdue University
- January 22, 2014 Oklahoma false report
- 2014 – OHIO - Active shooter lockdown (x3)
- 2014 – CSU - Bldg. shut evacuation (2); 3 campus shutdown/cancellations.
- 2017 – Evergreen protest.
- 2017 – UVA – protest.
- 2017 – Hurricane Harvey, Irma, Maria & Wildfires in CA. \$63M.
- 2018, 2019, ????

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Group exercise:  
what are we preparing for?



Campuses must prepare for All- hazard Incident Management. What are examples for each category:

1. Natural
2. Malicious
3. Non-Malicious

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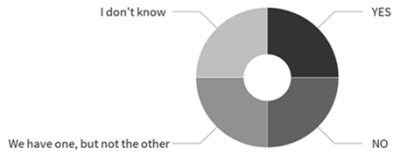
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**My campus has a current Emergency Operations Plan (EOP) AND a Continuity of Operations Plan (COOP)**

☐ YES **A**
☐ NO **B**
☐ We have one, but not the other **C**
☐ I don't know **D**



Start the presentation to see live content. Still no live content? install the app or get help at [Polltv.com/app](https://polltv.com/app)

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**My campus conduct one or more annual table top exercise(s) (TTX)**

Yes

No

I don't know



Start the presentation to see live content. Still no live content? install the app or get help at [Polltv.com/app](https://polltv.com/app)

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# I have completed FEMA's ICS 100, 200, 700 and 800 courses

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Exercise

## TTX: Event Scenario (1)

John Doe Event Center seats 12,000 and expected to be filled to capacity with 3,000 graduates, 500 faculty, and 7,000 visitors. The three (3) hour graduation event is scheduled for 1pm – 4pm in June: 95 degrees, sunny and slightly muggy.

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# Conduct a campus wide Risk/Vulnerability Assessment



- ***Importance and Urgency of Emergency Preparation is directly related to the probability and severity of impact.***
  - Probability– The likelihood an event will occur.
  - Severity – The enormity of the impact/the potential to shut down your core function.
  - Risk & Vulnerability answers how probable the event is likely to occur and how severe the impact might be.

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# What is your assessment?

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**Exercise**

## TTX: Event Scenario(2)

John Doe Event Center seats 12,000 and expected to be filled to capacity with 3,000 graduates, 500 faculty, and 7,000 visitors. The three (3) hour graduation event is scheduled for 1pm – 4pm in June: 95 degrees, sunny and slightly muggy. The commencement speaker is \_\_\_\_\_.

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### Event Planning

- Phase 1: Known in advance
- Phase 2: Event objectives
- Phase 3: Event Planning
- Phase 4: Disseminate the Plan
- Phase 5: Execute/Evaluate/Revise

### Emergency Preparedness

- Phase 1: Hypothetical Incident
- Phase 2: Incident objectives
- Phase 3: Incident Planning
- Phase 4: Disseminate/discuss the Plan
- Phase 5: Debrief / Hot wash

Source: FEMA IAP Guide

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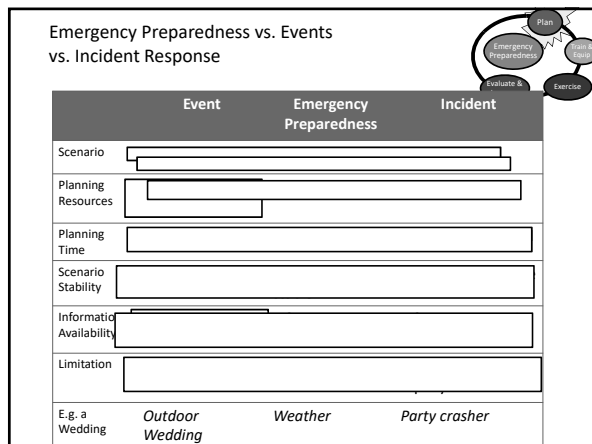
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What to do in the Planning Phase (1)

1. Identify responsible department/personnel
  - ✓ Policy Group (Executive Policy Group)
  - ✓ Operation Group (Emergency Operations Group)
  - ✓ IMT / ERT (incident management/emergency Response)
2. Train responsible staff
3. Conduct Vulnerability/Risk Assessment\*
4. Coordinate plans with first responders
  - ✓ Internal stakeholders
  - ✓ External stakeholders

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What to do in the Planning Phase (2)

- ✓ Emergency Operations Plan (EOP) (FEMA Template)
- ✓ Continuity of Operations Plan (COOP) (FM)
- ✓ Emergency Operations Center (EOC)
- ✓ Incident Action Plan (IAP)
- ✓ Discussion based training: Seminars/workshops, TTX, Operations based training: Games, Drills/Functional & Full scale
- ✓ Crisis Communication Plan
- ✓ Mass communication system (ENP)

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## Emergency Operations Center, EOC



- EOC is not same as Incident Command POST
- EOC requires activation per EOP
- Consider partnering with the city or nearby campus
- If you choose to establish an EOC,
  - Assign an EOC manager
  - Have a back up location
  - Assign roles & assignment & practice it
- EOC requires deactivation

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## Crisis Communications Plan



- Crisis Communications Plan
  - Outlines the process for assessing, drafting and disseminating the official University response.
  - Key administrators are identified

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## Resources



- Department Homeland Security
- FEMA
- State Emergency Management Agency, EMA
- City/County EOC
- CDC <http://www.cdc.gov>
- Peer Institutions
- Insurance Underwriters
- Consultants

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Activity #3: Pitfalls of Disaster Planning



1. Failure to start & persevere.
2. Assume staff availability.
3. Assume technology availability.
4. Assume resource availability (w/ & w/o MOUs, MOAs).
5. Assume how other departments function

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Activity #3: Pitfalls of Disaster Planning



6. Overly complicate the process (do too much, too fast)
7. Fail to establish key internal relationship/partnership before the incident.
8. Fail to resolve policy issues before the incident
9. Fail to establish key internal relationship/partnership before the incident.
10. Overlook broader impact of an incident to neighboring community.

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Planning Principles that Work



1. Relationships work better than policy or force.
2. Simplify, Simplify, Simplify.
3. Identify and regularly update an executive sponsor.
4. Identify and resource the right champion.
5. Involve stakeholders from across the campus to develop & prioritize a list of potential scenarios.

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### Planning Principles that Work



6. Use DATA, quality experience, and financial models to promote Emergency Preparedness
7. Be prepared to promote Emergency Preparedness when the timing is right.
8. Identify the roadblocks and be solution oriented.
9. Be visible (campus events, fliers, promotional, create events).
10. Be innovative (911-cellular app, give a ways)

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### Develop the Plan: EOP/EMP/EAP/ERP

<http://www.fema.gov/national-preparedness>



- E.O.P. (use FEMA template)
- Annexes
  - COOP
  - Emergency Notification System
  - Communication Plan
  - Incident specific IAP
  - EOC handbook
  - ESF 1- 14

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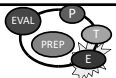
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Exercise

### Event Scenario(3)



Open carry “educational walk” is scheduled to take place from noon – 4:00PM.

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## Train and equip the Campus



### Required/Recommended Training

- ✓ Foundations: ICS 100,200,700,800
- ✓ Intermediate: ICS 300,400
- ✓ Advanced: Specialty, Command/General staff

### Training Resources

- ✓ FMEA / EMI
- ✓ State EMA
- ✓ County EMA
- ✓ TEEX @ Texas A&M
- ✓ Seminars/consultants

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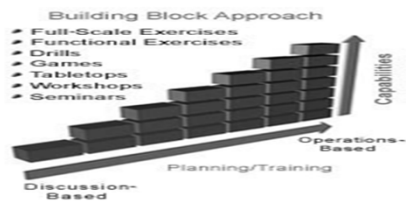
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## Building Response Capabilities Through Training



<http://emilms.fema.gov/IS120A/module1.htm>

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## Activity #4: Why conduct training Exercises



Exercises are time consuming, expensive, and nobody wants to do it. Why bother?

- Clarify roles and responsibilities.
- Improve interagency coordination.
- Find resource gaps.
- Develop individual performance.
- Identify opportunities for improvement.
- Creating buy-in to minimize micro-managing.



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# Table top Exercises (TTX)



What do you test?

- ✓ Mass Notification System
- ✓ Confirm MOU/MOA
- ✓ Test the EOP/COOP/EOC
- ✓ Test campus stakeholder (EPG, EOG)
- ✓ Test campus first responders
- ✓ Test Interoperability (First Responders, Dispatch, )

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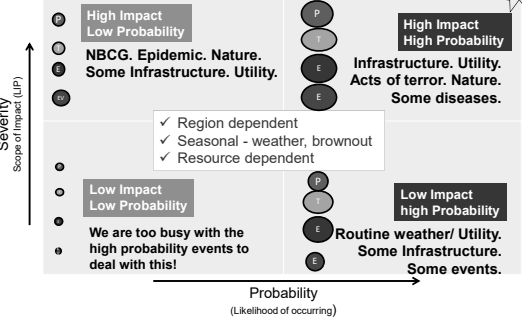
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# EXERCISES: Start with the most probable

**High Impact Low Probability**  
NBCG. Epidemic. Nature. Some Infrastructure. Utility.

**High Impact High Probability**  
Infrastructure. Utility. Acts of terror. Nature. Some diseases.

**Low Impact Low Probability**  
We are too busy with the high probability events to deal with this!

**Low Impact High Probability**  
Routine weather/ Utility. Some Infrastructure. Some events.

✓ Region dependent  
✓ Seasonal - weather, brownout  
✓ Resource dependent

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# Emergency Preparedness - Knowledge Check

- Each table is a team
- *Select a team name.*
- Using your laptop or smart phone, go to *Kahoot.it*
- *Type in the code on the screen*
- *Get ready!*

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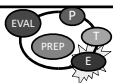
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Exercise

## Incident Scenario



Special guests and demonstrators all have canceled. It's a "normal" graduation day! FBI, the HUB and JIC show now active human caused threats.

Graduation ceremonies began at 1:00PM. Given the hot weather, free water & soda giveaways, people are trickling in since noon to avoid the heat. The event starts without any reported problems.

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Exercise

## Incident Scenario



- At 1:10PM,
- At 1:20PM,

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Exercise

## Incident Scenario



At 1:25 PM,

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Exercise

## Exercise Summary



1. Make a list of incident that you are concerned about.
2. Who are the partners you/your campus must establish immediately?
3. What's a good way to partnership build before an incident important?

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### Emergency Preparedness A POST Knowledge Check

## **FACILITIES**



- Each table is a team
  - *Each player must take at least one round*
  - *One person may not take more that 3 rounds.*
    - *First to raise hand, gets 5 seconds to answer the question. Correct answer = 1point, second to raise hand gets 5 seconds to answer, so on...*
    - Bonus round – chance to double your score.
- *What are you playing for?*
- *ARE YOU ready?*

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## After Action Report (HOT WASH)



- HOT WASH:
  - Damage assessment.
  - Situational Update.
  - What Worked Well?
  - What were some challenges?
  - What can/should be improved?
- Corrective actions listed in the After-Action Report/Improvement Plan (AAR/IP).
- Monitor progress and engage a cycle of continuous improvement.

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## Evaluation – The Homeland Security Exercise and Evaluation Program (HSEEP)



<http://emilms.fema.gov/IS130/CourseSummary.htm>

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## Emergency Preparedness Jeopardy

Emergency Preparedness				
PLAN	TRAIN	EXERCISE	EVALUATE	EMERGENCY MANAGEMENT
\$100	\$100	\$100	\$100	\$100
\$200	\$200	\$200	\$200	\$200
\$300	\$300	\$300	\$300	\$300
\$400	\$400	\$400	\$400	\$400
\$500	\$500	\$500	\$500	\$500

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## Emergency Planning Wrapping UP



- What was the most significant lesson learned?
- How will you apply what you learned to make a positive difference to ensure emergency readiness for your campus?
- Challenge to the facilities professionals.

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**Thanks for participating today!**

**Please complete the course  
survey**

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Joseph Han 216-702-2005  
[joseph@thenunchigroup.com](mailto:joseph@thenunchigroup.com)  
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