

Lessons Learned to Help Improve Your University's Emergency Management Plan

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Pre-Virginia Tech Experiences

1977–1997 U. S. Navy Civil Engineer Corps

Disaster Resistance Training (DRT)

June 15, 1991 – Eruption of Mt. Pinatubo



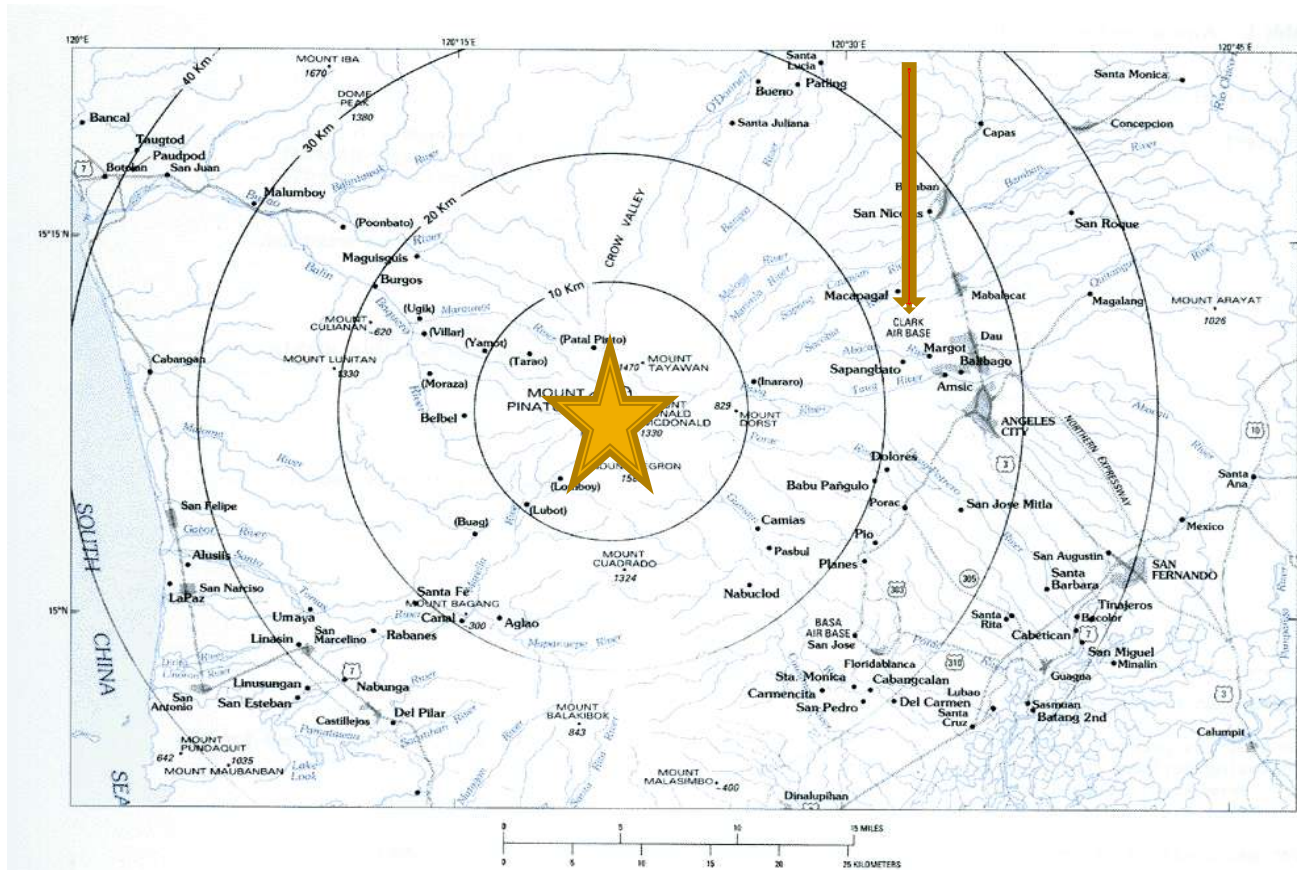
Mount Pinatubo Before the Major Eruption



Eruption Cloud Shortly Before the Major Eruption



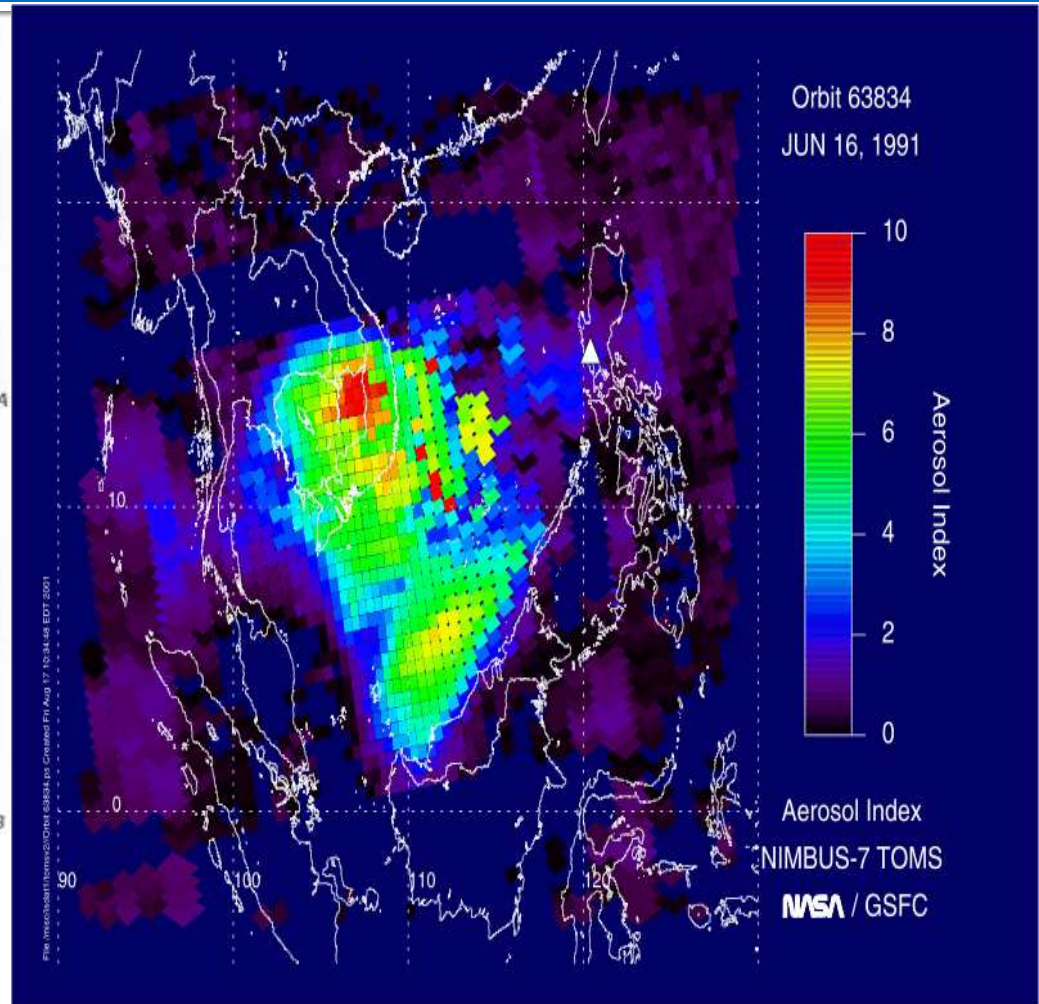
Mount Pinatubo Evacuation Zones



June 15, 1991
Eruption Plume Hours After the
Climatic Eruption



Before and After the Eruption: A River Valley Filled with Pyroclastic Flow



Lesson Learned No. 1

Murphy's Law is Alive and Well

- **Always Plan for the Worst Case Scenario**
- **Must Consider All Scenarios / Threats**
- **Even Low Probability Events Deserve Equal Attention in the Planning Process**





**VIRGINIA TECH MAIN CAMPUS, BLACKSBURG, VA
2007**

- **26,370 Students (9,000 in dorms)**
- **7,133 University Staff**
- **1,000 Visitors, Contractors, and Transient Workers**
- **153 Major Buildings 2,600 Acres**

Virginia Tech 2007 – Setting & Security

- Dorms – card readers 10:00 pm – 10:00 am
- Exterior door hardware not lockable remotely
- Some buildings have F.A. panels with loudspeaker systems that can be accessible at panel only and not from a central location
- VTPD strength was 35 officers – 14 on a typical morning – 9 in office, 5 on patrol
- VT was in the process of upgrading its campus mass communications system



Lesson Learned No. 2

Don't Ever Think...

"It Can't Happen Here!"



April 16, 2007

- 4/16/07 has become the 9/11 of Colleges and Universities in the United States
- Many lessons have been learned from this tragic incident
- Virginia Governor's Review Panel (8/07)
- IACLEA Special Review Task Force (4/08)
- NACUBO National Campus Safety and Security (NCSS) Project (6/10)





Norris Hall



Ambler Johnston Hall



all





Norris Hall

Ambler Johnston Hall

all



Norris Hall



Ambler Johnston Hall



all



Communication – A Common Theme

Virginia Tech Lessons Learned?

- II-6: Campus emergency communications systems must have multiple means of communication.**
- II-7: In an emergency, immediate messages must be sent to the campus community that provide clear information on the nature of the emergency and actions to be taken.**
- II-8: Campus police as well as administration officers should have the authority and capability to send an emergency message.**
- VI-6: Universities and Colleges should make clear in literature what their policy is regarding weapons.**



Communication – A Common Theme

Virginia Tech Lessons Learned?

- VII-2: All key facts should be included in an alerting message, and it should be disseminated as quickly as possible, with explicit information.
- VII-3: Recipients of an emergency messages should be urged to inform others.
- VII-4: Universities should have multiple communications systems, including some not dependent on high technology.
- IX-2: A unified command post should be established and operated based upon the NIMS and ICS model.



Communication – A Common Theme

Virginia Tech Lessons Learned?

- IX-3: Emergency personnel should use the NIMS procedures for nomenclature, resource typing and utilization, *communications*, interoperability, and unified command.

- XI-2: Universities and Colleges should ensure that they have adequate plans to stand up a joint information center with a public information officer and adequate staff during major incidents on campus.



IACLEA'S Key Recommendations Concerning Emergency Planning Communications (4/08)

Institutions should use an “array” of means and methods:

- Multi-point communication (hi and low-technology);
- Communication system should have sufficient capacity;
- System should be secure and have redundancy;
- 24/7 communications system client care;
- Vendor should have experience; and,
- System should have reporting capability.



IACLEA'S Key Recommendations Concerning Emergency Planning Communications (4/08) *cont.*

Public safety officials and appropriate administrators should have the authority and capability to send emergency messages from anywhere.

The following criteria must be considered before sending emergency messages:

- **Timely;**
- **Accurate; and,**
- **Useful and recipients should be encouraged to inform others.**

Interoperable communications is an absolute for effective critical incident response.



National Campus Safety & Security Project

Communication – A Common Theme

NCSS Project – Nine Higher Education Associations:

- NACUBO (Project Sponsor)
- APPA
- URMIA (University Risk Management and Insurance Association)
- ACPA (American College Personnel Association)
- IACALEA (International Association of College Law Enforcement Administrators)
- AGB (Association of Governing Boards of Universities and Colleges)
- EDUCAUSE
- CSHEMA (Campus Safety Health and Environmental Management Association)
- NACUA (National Association of College and University Attorneys)

Project initiated in February 2008 and just concluded June 2010 with the publication of a book of case studies in campus safety & security.



NACUBO Sponsored National Campus Safety & Security Project

Site Visits

- Purdue University
- Tulsa Community College
- Cornell University
- Arizona State University
- University of Maryland at College Park
- Rollins College

Survey of NACUBO members

- August 2008
- Sent to 2,203 Colleges and Universities
- 342 responses
- 16 Percent Return Rate

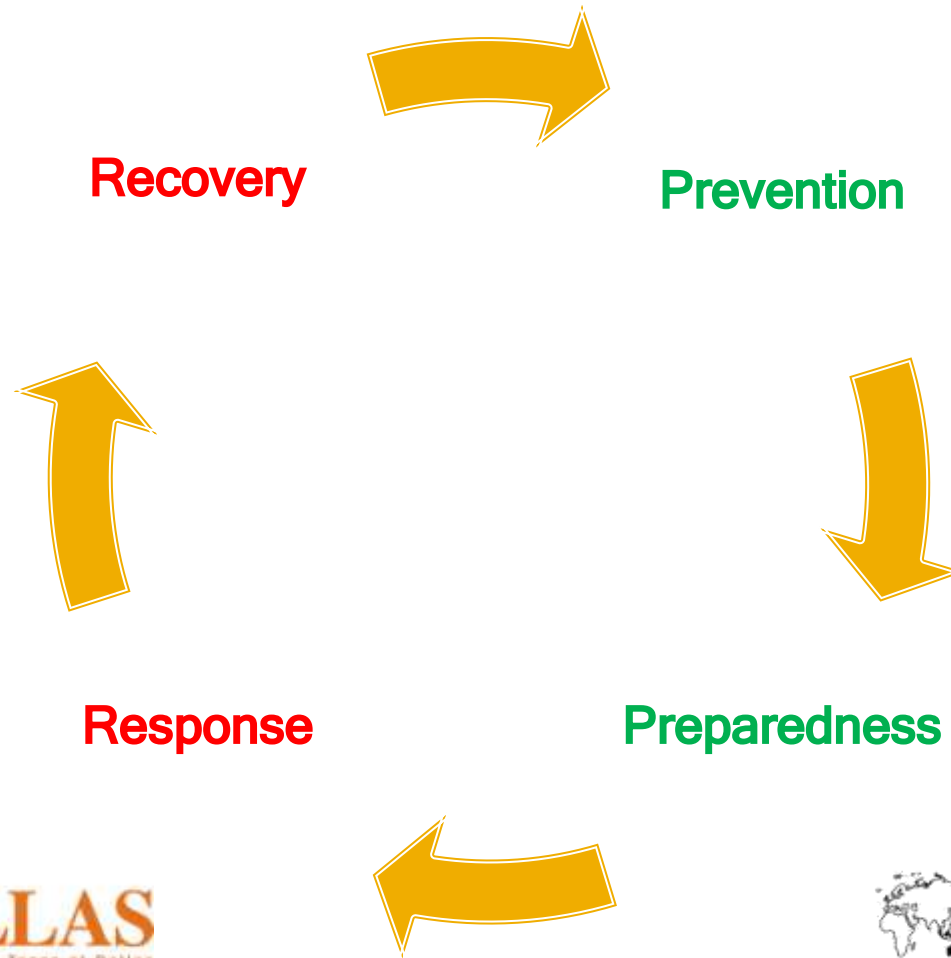
Selected Reference Materials



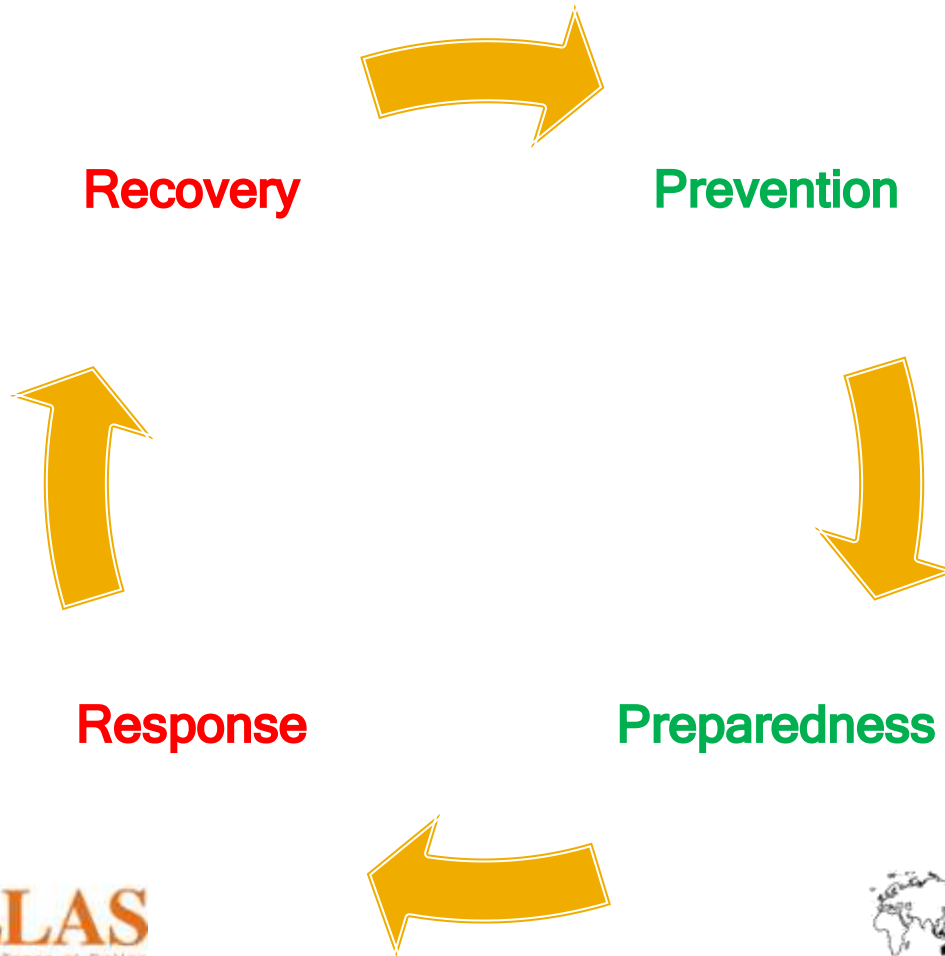
What do these two people have in common?



Four Phases of Emergency Management



Four Phases of Emergency Management



Lesson Learned No. 3

“An Ounce of Prevention is Worth a Pound of Cure”

---Ben Franklin



Red Flags, Warning Signs, and Indicators

- When a cluster of indicators is present then risk becomes more serious
- A school behavior and threat assessment team upon learning about a list of such warning signs would be in a position to take immediate action including:
 - Talking to the student and developing a treatment plan with conditions for remaining in school
 - Calling the parents or guardians
 - Requesting permission to receive medical or educational records
 - Checking with law enforcement to see if there have been any interactions with police
 - Talking with roommates and faculty
 - Suspending the student until the student has been treated and doctors indicate the student is not a safety risk



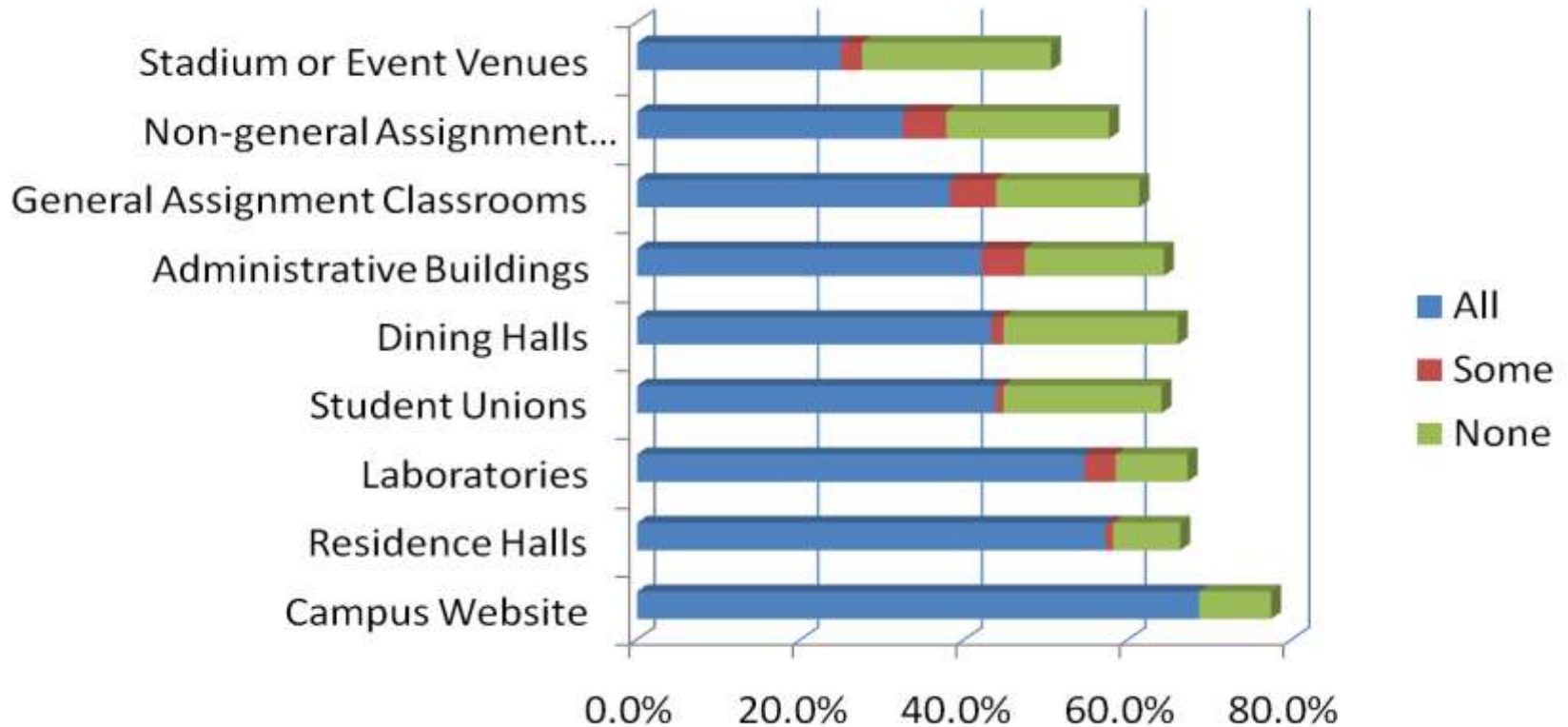
Lesson Learned No. 4

*Follow the “Red Flags”
and be sure to “Connect the Dots”*



Preventive Measures

The Extent to Which Instructions on What to Do in Case of an Emergency Are Posted by Campus Location

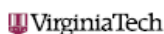


Sample Poster

What to Do “In Case of Emergency”

IN CASE OF

EMERGENCY



REMAIN CALM AND FOLLOW THESE INSTRUCTIONS



FIRE

- * Activate the nearest fire alarm and call 9-1-1 if possible. If there are no fire alarms, knock on doors and yell “fire” as you exit the building.
- * Evacuate the building.
- * Do not use elevators!
- * Close doors as you leave.
- * Feel closed doors with the back of your hand. Do not open if doors are hot.
- * Move well away from the building when evacuating.



SUSPICIOUS PERSON/OBJECT

- | | |
|--|-----------------------------------|
| SUSPICIOUS PERSON | SUSPICIOUS PACKAGE |
| * Do not physically confront the person. | * Do not touch or disturb object. |
| * Do not let anyone into a locked building/office. | * Call 9-1-1. |
| * Do not block the person's access to an exit. | * Notify your supervisor. |
| * Call 9-1-1. Provide as much information as possible about the person and his or her direction of travel. | * Be prepared to evacuate. |



BOMB THREAT/ EXPLOSION

- * Notify Virginia Tech Police Department at 9-1-1.
- * As you evacuate, look around for anything suspicious.



HAZARDOUS MATERIALS

- * If an emergency develops or if anyone is in danger, call 9-1-1.
- * Move away from the site of the hazard to a safe location.
- * Follow the instructions of emergency personnel.
- * Alert others to stay clear of the area.
- * Notify emergency personnel if you have been exposed to the hazard or have information about the release.



POWER FAILURE

- * Remain calm; provide assistance to others if necessary.
- * Move cautiously to a lighted area. Exits may be indicated by lighted signs if the emergency power is operating.
- * Turn off and unplug computers and other voltage-sensitive equipment.
- * For localized outages, contact Facilities at 231-4300.
- * For information about a prolonged outage, check www.vt.edu or call 231-6668.



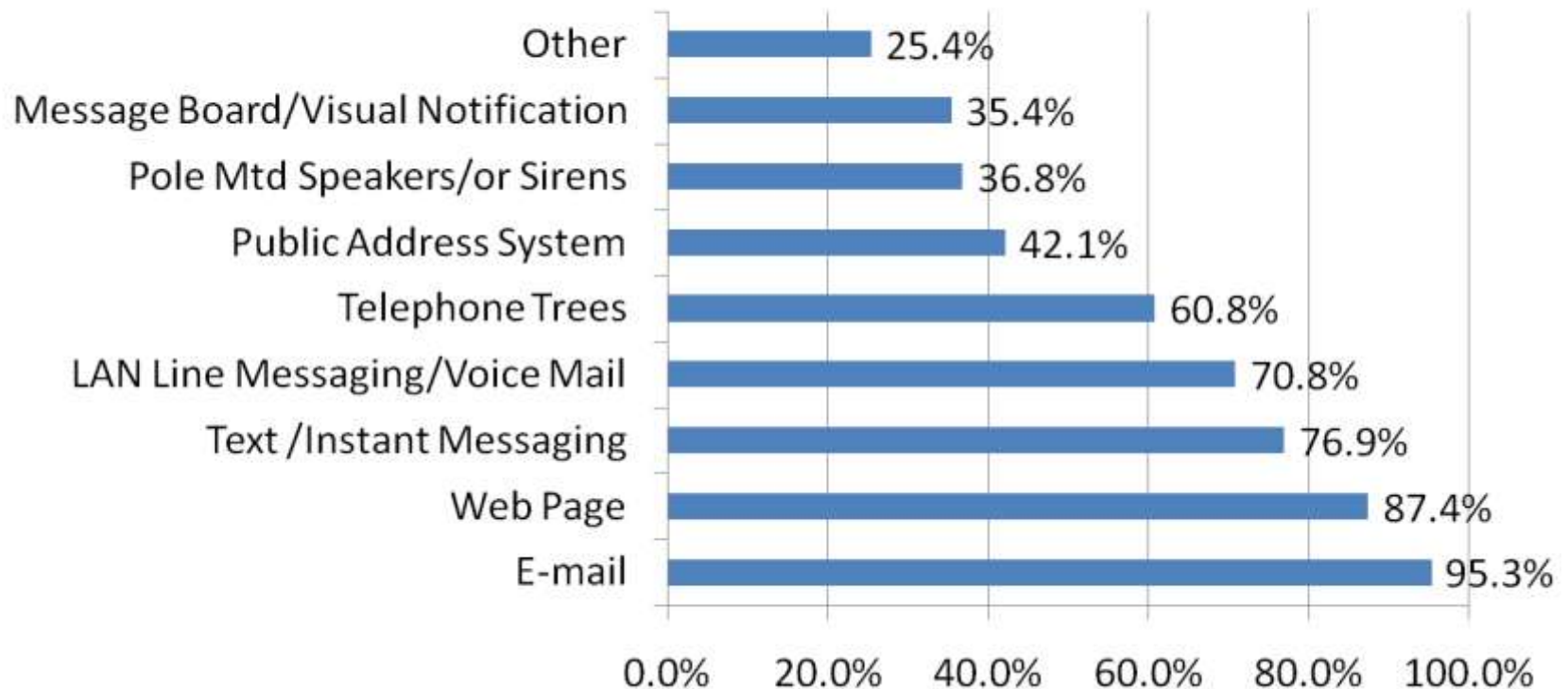
CAMPUS WARNING SIRENS

- * Seek shelter: get inside.
- * Shut all doors and windows.
- * Stay away from exterior windows.
- * Seek information: call 231-6668 or point your Web browser to www.vt.edu.



Communication and Systems Infrastructure

Emergency Notification System Infrastructure



Communications Systems and Infrastructure at Colleges and Universities

Participation Policies for Text/Instant Messaging

Opt-in: Participants must sign up for enrollment in the university's emergency notification system (ENS). When asked about participation policies for text/instant messaging, about 70% of respondents reported that staff, faculty, and students had to "opt-in" for participation; fewer than one-fifth of respondents said that all or most (at least 75%) of the target population for text/instant messaging had signed up for the ENS.

Opt-out: Many experts recommend this approach. Florida State University and Rollins College use this approach when students register for classes.

Mandatory: The University of California, Davis uses this approach.

Campus culture may be a deciding factor as to which approach is adopted.

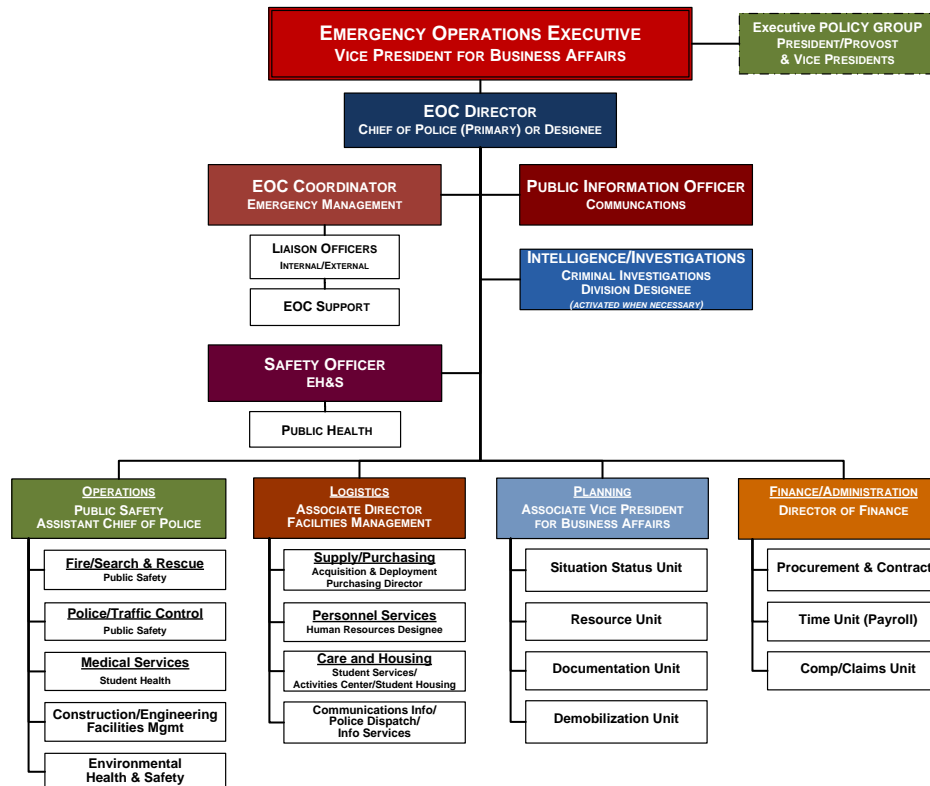


Emergency Management Communications

During and After an Emergency

June 12, 2009

THE UNIVERSITY OF TEXAS AT DALLAS EMERGENCY OPERATIONS CENTER ORGANIZATIONAL CHART



Emergency Management Communications

During and After an Emergency

(Virginia Tech Example)

System	Effect of Incident
University Web Site Access	3,000 percent increase
Police Dispatch Center	450 percent increase
Cellular Capacity & Coverage	Required 3 cell on light trucks (COLT), 2 in-building antennae systems, 200 additional cell phones
Internet Gateway Capacity	300 percent increase
University Switchboard	300 percent increase
Telephone Calls into Local Central Office	Multifold increase
University Telephone System Inbound Calls	300 percent increase
Centralized Computing Systems Data Storage	100 percent increase
Data Preservation (12-week period)	390 percent increase



Communications: A Key to Success!

Use multiple means of communication – before, during, and after an emergency. Redundancy of systems can be vital in disseminating an emergency message. Ensure total campus community coverage.

Include/use high and low-tech means of communication.

Post emergency instructions in ALL campus facilities.

Consider/expand audible communications infrastructure.



Communications: A Key to Success!

Develop templates to facilitate clear and timely emergency messages to the campus community.

Use a text/instant messaging participation policy that works best for your institution.

Base your emergency management and communications plan on NIMS/ICS.

Chief Public Information/Relations official is a key player.

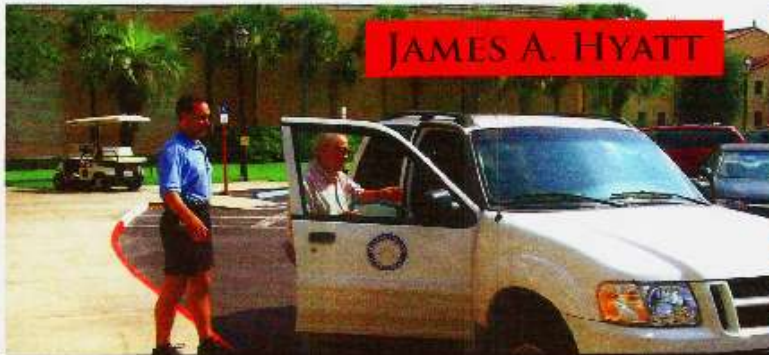


Lesson Learned No. 5

Good Communication is the Key to Successful Emergency Management Planning



JAMES A. HYATT



READY TO RESPOND

CASE STUDIES IN CAMPUS SAFETY AND SECURITY



NATIONAL ASSOCIATION OF COLLEGE AND UNIVERSITY BUSINESS OFFICERS

Post Virginia Tech Incidents

- **September 28, 2010 – The University of Texas at Austin**
 - **Colton Tooley fatally shoots himself after being chased into the University library**



Post Virginia Tech Incidents

- **January 8, 2011 – Tucson, AZ**
 - **Jared Loughner, 6 dead, 12 wounded**
 - **Former Community College Student**



Summary of Lessons Learned to help You Improve Your University's Emergency Plan

- *Murphy's Law is Alive and Well*
- *Don't Ever Think – “It Can't Happen Here!”*
- *“An Ounce of Prevention is Worth a Pound of Cure”*
- *Follow the “Red Flags” and be sure to “Connect the Dots”*
- *Good Communication is the Key to Successful Emergency Management Planning*



Questions?

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