

Multiagency Coordination and Risk Communication

***Current Research and Training Projects at
Arizona State University***

by

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***NIEHS Local, State and Federal Partnership for Chemical Preparedness and Response
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Multiagency Coordination

- Increasingly complex risks are faced by the public and private sectors today in regard to emergency preparedness, mitigation, response and recovery
- No one organization can handle every contingency
- Enhanced multiagency cooperation and coordination is needed

Multiagency Coordination: ASU, State of Arizona, FEMA, Etc.

- Arizona State Alternate Emergency Operations Center (ASEOC) Emergency Management and Communications Simulations and Exercises
- Office of Environmental Technology
- ASU/FEMA Campus Public Emergency Communications: Research and Training

Fully Equipped EOC for Classroom/Multiagency Use



Multiagency Exercises at ASEOC



State Agencies



AZ Rapid Response Team, 91st CST, Etc.

Local Agencies



Potential to Integrate EOC functions and management in tactical, on-scene scenarios.



Emergency Management Simulation Training

- An actual, functional EOC facility
- Maximum realism: for example, actual phone numbers are used during the exercise and routed to a “Simcell” control center for action
- Training and simulation capabilities are flexible and scalable meaning that the didactic portion is adapted in complexity to the needs of the individual audience

Navajo Nation Emergency Management Director, Jimson Joe



International Agency Coordination



Office of Environmental Technology



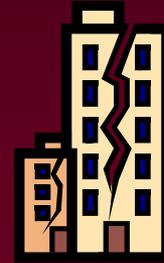
Campus Public Emergency Communications



- Cooperative agreement project
- Arizona State University and FEMA
- Training and Exercise Integration (TEI) Secretariat
 - TEI was formerly the office of Grants and Training
 - TEI is part of FEMA
 - FEMA is part of the U.S. Department of Homeland Security
- \$1.4 million

Potential Threats at College and University Campuses

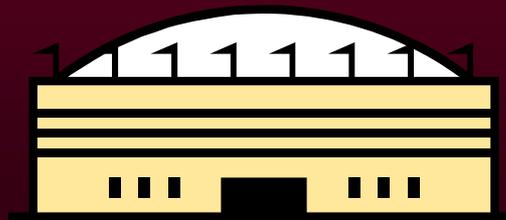
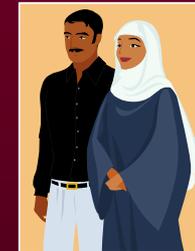
- Violence
- Natural disasters
- Technological disasters, e.g., in labs
- Terrorism



DANGER!

Potential Vulnerabilities at Campuses

- Students
- Staff
- Faculty
- Administration
- Visitors
- Differently abled
- Large-event venues



Emergency Communications on Campus Is a Key Factor

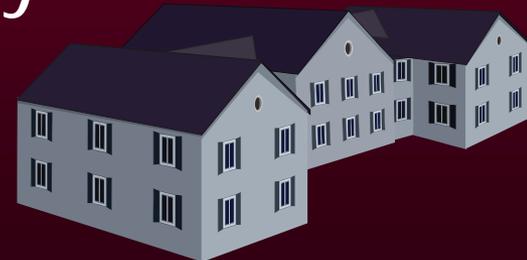
- “Communications before, during and after disaster strikes dictate the success of prevention and relief efforts.”
- “The fact is, without communications, you don't have an organisation, you have a disorganisation.”

Project Objectives



First main objective:

Discover what types of emergency communications systems and practices work best at our nation's 3,700 college and university campuses



Finding Out What Works Best

- Review literature
- Talk with campus administrators, communicators, emergency managers, and first responders by telephone
- Communicate with them via email
- Perform interviews
- Conduct surveys

Project Purposes (cont'd)

Second main objective:

Provide *online training* accessible anytime, anywhere to those responsible for campus safety and wellbeing



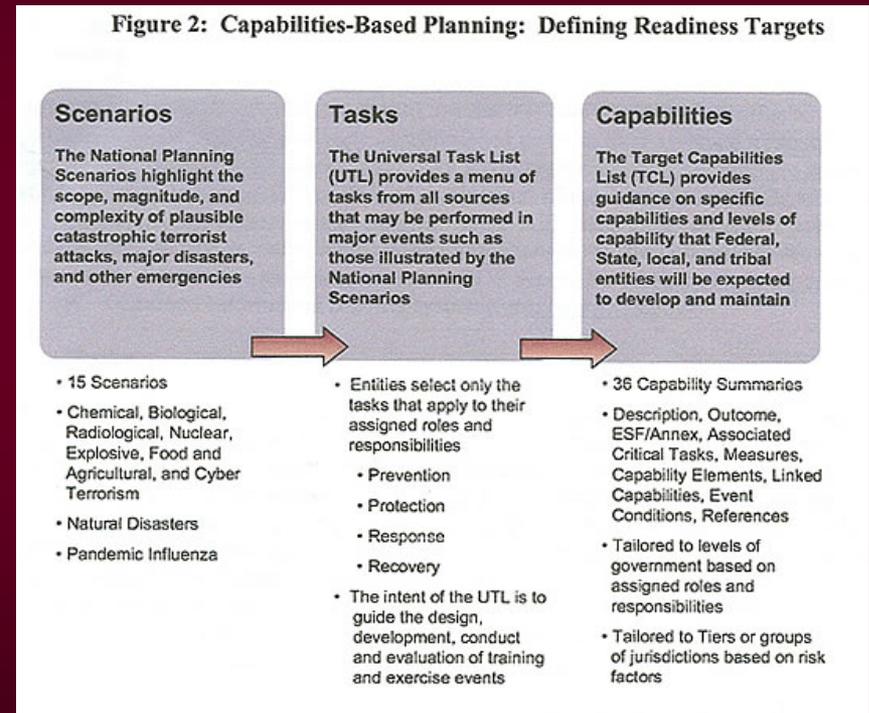
Project Purposes (cont'd)

By so doing, we seek to enhance interoperability, cooperation and coordination between campus leadership, campus staff, and state and local responders



Project Purposes (cont'd)

- Thereby furthering the National Preparedness Goal of improving our preparedness and response capabilities and mitigating threats, vulnerabilities and consequences that may stem from acts of terrorism or natural or technological disaster



Faculty and Staff Involved

- Dr. David Edwards, CHMM
 - Assistant Professor, Environmental Technology Management
 - Information technology in emergency management, crisis communications, citizen preparedness, and community emergency response team organization and function
- Dr. Danny Peterson, CEM
 - Professor of Practice, Environmental Technology Management
 - National Incident Management System, terrorism, weapons of mass destruction, exercises and drills, emergency operations center protocols and management processes
- Mr. Al Brown, MPA
 - Director of Environ. Research Initiatives, and Faculty, ETM
 - Environmental health services, public health, epidemics and pandemics, and the National Incident Management System



Faculty and Staff Involved (cont'd)

- Jeffrey Thomas, Psy.D.
 - Clinical Associate Professor, FSA
 - Fire service management, arson, juvenile fire setting, psychological response to emergencies, paramedic training, and community emergency response team activities
- Dr. Jon Duff
 - Professor, GIT
 - Modeling, animation, illustration, and electronic publishing
- Mr. Hal Berkowitz
 - Director of the Office of Environmental Technology
 - Training in hazmat management, industrial health and safety, risk communications, and legal and regulatory issues pertaining to environmental issues



Faculty and Staff Involved (cont'd)

- Ms. Jayne Abraham
 - Project Coordinator, ASU/FEMA Project
 - Planning, Civil Air Patrol, Community Emergency Response Teams, volunteer law enforcement support, and emergency communications
- Mr. Peter LaFata
 - Graduate Assistant, ASU/FEMA Project
 - Information technology, project management, operations management, and teaching
- Ms. Alice Jung
 - Graduate Assistant, ASU/FEMA Project
 - International communications, Community Emergency Response Teams, and interviewing

Faculty and Staff Involved (cont'd)

- Other faculty and staff outside of Technology Management include
 - *Dr. Steve Corman* and other faculty in the Consortium for Strategic Communication in the Hugh Downs School of Human Communication
 - *Allen Markus*, M.D., M.S., MBA, F.A.C.P., Director of ASU's Campus Health Service, chair of the ASU Pandemic Flu Committee, and clinical professor at the University of Arizona
 - *James Gibbs*, University Fire Marshal, ASU Environmental Health and Safety
 - *Assistant Chief Jay Spradling*, Assistant Chief of Police at ASU, and member of the State of Arizona's and Arizona Central Region's Citizen's Corps Councils
 - *Joel Hutchison*, Ph.D., Director of Student Counseling Services at the ASU Polytechnic campus
 - *Julie Newburg*, media relations officer for ASU

Outside Subject Matter Experts

- Experts who will be cooperating with us on preparation of training materials
- 5 courses, each with about ten modules
- Thus about 50 topics
- Their knowledge integrated into training materials
- Training materials developed by team based on FEMA CORE/ADDIE approach to instruction

Project Deliverables

- Five (5) training courses on Campus Public Emergency Communications
- Flexible, NIMS-compliant, secure, online multimedia training modules, each 20-50 minutes long
- Executive summary course versions, 2-3 hours long
- Participants will be people responsible for campus safety, e.g.,
 - Administrators
 - Campus emergency communicators
 - Campus emergency managers / risk managers
 - Campus public relations
 - On- and off-campus fire, police and EMS
 - Facility managers
 - CERT teams

First Two Courses

- Principles of effective campus public emergency communications
- Campus Emergency Communications: Individual and Organizational Perspectives

Decision Making Challenges

- Often, the challenges in emergency communication arise not from technology but from decision making
- What are the decision-making protocols that colleges and universities use?



Third and Fourth Courses

- Emergency communications systems
- Strengths and weaknesses of each major emergency communication system and associated protocol
- Example: text-messaging alert system
 - Allows dissemination of info to many people rapidly
 - Uses very little bandwidth
 - Not subject to overload nearly as much as is voice-messaging
 - Many college and university campuses are now incorporating it
 - ASU recently inaugurated their text-messaging alert system
 - Voluntary, so there's no unwanted intrusion of privacy
 - On the other hand . . .
 - Not everyone has a cell phone, or has one turned on
 - Not everyone does text messaging
 - This approach doesn't work well if the cell towers are down or if the cell phone system is overloaded, or if jammers are being used

Examples of Emergency Communication Systems

- Cell-phone text-messaging
- Cell-phone voice-messaging
- Email
- Landline phones
- Satellite phones
- VOIP phones
- Pagers
- Web sites
- Intercoms and PA systems
- Alarms/sirens
- Bullhorns
- FRS/GMRS
- Amateur Radio
- LCD displays
- Runners
- Flyers/papers



Fifth Course

- Redundancy or backup
- Needed in event of equipment or system failure
- Examples: cell towers and landline systems can go down or get overloaded, as can the Internet
- Electricity may not be available
- A good campus public emergency communications program plans and prepares for such contingencies

Multimedia

- Narrated PowerPoints, and/or
- Streaming video, and/or
- Podcasts with printed graphics
- Sounds / music / comedy / storytelling / cartoons / videos / drama / theater / simulation / puppetry / art / photos / interviews / debates / forums / panels / modeling / demos / papers / forms / maps / games / self-quizzes

Game Simulations from Sandia



Receiving Training

- Who learns? People with a legitimate need to know about campus public emergency communications
- Where? Folks will be able to take our training courses essentially anytime, anywhere. Course materials will be viewable in the office, at home, in the field, or on the road at the end of the day.
- How? All that will be required to access a course will be a broadband Internet connection and some form of graphics/audio capability.
 - e.g., PC or laptop
 - DVD player
 - Printed slide show graphics and podcast audio

Project Beneficiaries

- Members of the campus public
 - Faculty
 - Staff
 - Students
 - Visitors
- Campus officials primarily responsible for safety
 - Administrators
 - Emergency managers / risk managers
 - Media relations staff
 - Residential life managers
 - First responders and EHS staff
- Off-campus first responders and government officials having jurisdictional responsibilities over a campus

Campus Public Emergency Communications

- 1. Learn what works*
- 2. Share it with others*
- 3. Keep it interesting*
- 4. Help make our nation's campuses safer*

Success Through Partnership



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