PROMISING PRACTICES: A CASE STUDY ON PUBLIC HEALTH EMERGENCY PREPAREDNESS AT A UNIVERSITY

by

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A Dissertation
Submitted in Partial Fulfillment of the Requirements for the Doctor of Philosophy Degree in Education

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PREFACE

Today I was meeting with the chair of the graduate program, I had questions I knew that could not be answered by a brochure or website. I knew the meeting would not provide me with immediate answers, and that in eight short weeks my previous life would be a distant memory. I was nervous as I climbed the stairs to the third floor in Pulliam Hall, holding my son's hand. What was I doing here? What appealed to me? What drew me to pick this school, Southern Illinois University? I wanted out, out of the fire service, off the ambulance, no more death, calls in the middle of the night, missed holiday celebrations, or uniforms. I was ready to walk away from everything that had been my life for twenty years. A fresh start, that is what I needed and what I wanted.

In the summer of 1989 I began working in a local nursing home to earn money to attend college. I only applied for the job because my best friend was applying and we wanted to work together. I then began taking classes at the community college to pursue my dream of becoming a nurse. My first exposure to life and death situations came in that nursing home.

In the summer of 1990 I took my first emergency medical technician (EMT) class. At the time I took classes in the mornings, and worked at the nursing home in the evenings. I remember my first ambulance ride along internship; it was in a large metropolitan area in west central Missouri. I was anxious, excited, and scared all at the same time. I did not quite know what to expect for the next 12 hours. I completed two 12-hour shifts on the ambulance during that summer and also four 12 hours shifts in the emergency department. Although my ambulance time was busy with critical medical calls, my time in the
emergency department was filled with patients. Their chief complaints varied from sore throats to cardiac arrests. There was a hodgepodge of medical ailments and trauma.

Soon after completing the state’s skills test and written exam I received my EMT license and left for college to pursue my nursing degree. I moved three hours from home and saw that life was not always easy. My parents told me this, but I had no idea what they really meant. I had a huge clash of personalities with the head of the nursing program. She informed me that I would never be a nurse. I was crushed. When the office door shut behind me I looked up to survey my surroundings. I spotted the office for the Department of Agriculture and it looked good enough for me. After all, my mom only told me I had to graduate from college with a degree; she never specified what that degree had to be in.

The next few years were a blur. I officially changed my major from nursing to agricultural science and transferred to a bigger university at the end of my junior year. That summer I filled in at the nursing home and began to make plans for after graduation, which include graduate school. In the fall of 1995, I began my senior year of college. The atmosphere was much different than I had encountered the previous two years and I found myself skipping classes more and more. What I had calculated to be a good move academically turned out to be the opposite. I was invited to sit out a semester to get my life together.

While I was figuring out my next steps, I got married and began working in a nursing home again. I had the opportunity to attend a local community college and take prerequisite classes for their nursing program. The following spring I was accepted into their two-year associate degree program only to receive a letter from the college two weeks later that the college was bankrupt and would not be holding classes after the
current semester ended. I scrambled to locate another nursing program still accepting applications. Before the end of the spring semester I began classes for a Practical Nursing certificate, which I earned in 1996.

I worked as a Licensed Practical Nurse (LPN) for two years at a small hospital but I became restless. I wanted a bigger challenge. I knew I did not want to spend the next thirty plus years working as a floor nurse. I needed more.

After moving to a small rural community south of Kansas City, Missouri I had the opportunity to volunteer at the fire department. I had once trained to be an emergency medical technician (EMT), but had let my license expire. The captain at the fire department asked if I would be interested in volunteering on the ambulance. That meant getting my EMT license back.

Soon after I was taking classes in the evening, doing an internship, and taking both the practical and written test to be an EMT. It did not take much and I was hooked.

When classes were over I passed my state exams and received my new EMT license in the mail. The instructor approached me and asked if I would be interested in attending the paramedic class. I was working part-time as a nurse at the hospital and wanted something that would provide more of a challenge. I accepted a seat in the class.

That year that followed was filled with many personal and professional turning points. I soon found myself a divorced, single, working mom. I began working at a hospital closer to home that had its own ambulance service. The ambulance crew worked in the emergency room when they were not responding to calls. This mix of working environments seemed ideal for someone who had prior hospital work experience, and I soon knew I would fill one of the open positions.
My parents called it stubbornness and being hardheaded, I call it determination and perseverance. The road to becoming a paramedic was not an easy one. Being a female in a male-dominated field made the road to full-time employment as a paramedic taxing. At the end of my shifts I often collapsed, exhausted. My work schedule consisted of 12 hours on shift followed by 12 hours on-call in two or three day stretches. I loved my new position and at the same time hated being away from my family for 48-72 hours at a time. I also worked night shift, which made having a ‘normal’ life difficult.

Those first few months were beyond challenging as I adjusted to my new career choice. It felt like my supervisors and the public scrutinized my every move. Gaining the respect and admiration of the public was critical for me. EMS played a huge role in the community, and we were on display wherever we went. It did not matter if we were responding to a call or on stand-by at a sporting event, rodeo, or community fair.

I have always been one to stand out in a crowd and being in EMS provided me an opportunity push the envelope and think outside the box. In EMS you must be able to think on your feet and make split-second decisions that could mean the difference between life and death. Each shift, each call, and each new patient presented its own unique challenge. No two events ever presented the same and knowing the basic protocols was important when treating a patient. I was always told the ‘real learning does not happen in the classroom, it happens when you get into the field’. I found that to be very true.

After ten years I returned to school to complete my undergraduate degree. In 2004 I finally received the degree my mom had so badly wanted for her children. I worked full-time and my schedule consisted of 24-hours on duty and 48-hours off. Juggling home, work, and school was challenging but also very rewarding. It was not long before I felt something
pulling me to return to school. In February 2006 I began an accelerated masters program. During the time I completed both degrees I was also responsible for covering my shift so I could travel the 174 miles round trip to attend classes.

My career has taken many twists and turns over the last 25 years, with each experience adding on the previous ones and leading me toward a PhD. A short four months prior to making the decision to pursue a terminal degree I vowed to never go back to school again. The old saying “never say never” did not cross my mind.

On May 4, 2007 as I sat next to a man who I truly looked up to I asked him the question, “tell me what I can do with a PhD?” He turned to me and smiled as he began to share his journey achieving a doctoral degree. Over the next few weeks I looked at different universities and the degree they offered. I did not fully understand the journey I was about to embark on. I had felt something was pulling me and telling me there was more in the world for me to do and that I had completed my mission where I was. I was not a good student in high school or in college the first time around but returning to school, as an adult was different I was focused, determined, and dedicated.

Arriving at Southern Illinois University provided me an opportunity to leave my prior life behind and enter into the ‘real world’. Having spent the last twenty years working a variety of hours, weekends, and holidays I saw this as an opportunity to spread my wings and see how the other half lived. Children begin to express their independence around age of two by choosing their clothes, and I was ready dress myself again after years of a strict uniform.

I felt like a fish out of water among my peers. They all had a teaching background and I referred to my background as being a practitioner, or someone with hands-on
experience. I had taught first aid, cardio-pulmonary resuscitation (CPR), EMT, and a variety of education classes for the public while working as a nurse, paramedic, and fire fighter. Teaching was not out of my repertoire of skills, but now it was different. It was too late to turn back and only a small part of me wanted to.

The harder I tried to distance myself from my history in EMS and fire service the more I was pulled back in. I have stayed involved with my past by helping with mock disaster drills for a professor, attending continuing education workshops, and became a member of the Illinois Medical Emergency Response Team (IMERT).

It did not take long to realize that you can take girl away from the emergency, but you can never take the adrenal rush and feeling of excitement while helping someone out of the girl. The life I had walked away from kept calling me back, but not in the same way. This call was intriguing and exciting in a new and different way. A melding of my life in a new light the kind of light that does not flash red and blue.

On my first visit to SIU I met a clinical professor who taught first aid, advanced first aid, and environmental health. While I never took any of her classes, a valuable relationship was formed that has provided me with direction. I have grown to treasure the mentoring she has provided by reigniting my passion, fanning the flame, reining me in, and pushing me forward.

The first opportunity I had to assist with a mock disaster was in December 2008. My son portrayed a gunshot victim and I was the hysterical mother. I had encountered my fair share of hysterical family members and felt I could do this role justice. After the Special Weapons and Tactics Team (SWAT) had entered the cabin and secured the scene, first
responder students were allowed to come in and triage the victim actors. Members of the SWAT team approached me after the scenario and commented on how realistic I appeared.

In addition to my experience in fire service, EMS, and nursing I have had numerous close friends in law enforcement. This includes my husband who works as a Special Agent with the Illinois State Police. He has been a police officer for about 18 years. Being married to a police officer provides a different view of the world. Police, fire, and EMS have very similar cultures; they themselves are a tight-knit family, a brotherhood. The exact culture is difficult to describe to someone who is unfamiliar with it, and the entertainment industry does a poor job of capturing the reality of these professions.

The onslaught of television shows such as Hawaii Five-O, Emergency, Rescue 911, ER, CSI (Crime Scene Investigations), and NCIS (Naval Criminal Investigation Service) has provided the public a heroic and flawed view of real life emergencies. The police, fire, and EMS responders often see humanity at their worst or in the worst of circumstances. Mutual respect and camaraderie among the departments provides support and a safeguard for each other’s sanity. It was reassuring to know the people I worked with were watching and protecting my back. I had the privilege to work with a group of police, fire, and EMS who shared a mutual respect for each other, who were willing to lay down their life to protect each other.

While working fire and EMS positions I had the opportunity to work in two different counties in Missouri. Although the counties were adjacent to each other, the difference in working environments was strikingly apparent. In one county the police, fire, and EMS had a mutual respect for each other and were always willing offer assistance. This willingness made it a fun, enjoyable working atmosphere when out on a call. The other county was
filled with animosity that was so evident it made working stressful situations more challenging.

A diverse background in long-term care, medical-surgical nursing, emergency department care, pre-hospital, and fire service experiences has allowed me to view situations from a variety of angles. Having a spouse with law enforcement training (patrol functions, academy/field training, drugs, homicides, bank robberies, sexual assaults, and financial crimes, etc.) broadens the lens in which you view life. I have responded to many different emergencies. Each one is different, but all responses start with the same approach. Is the scene safe? Do I have my personal protective equipment? What equipment or additional resources will I need? Similarly, each patient assessment always starts at the head; is the airway open, are they breathing, and is there a pulse? Following an algorithm allowed me to be successful regardless the situation into which I was called.

My relationship with a mentoring professor eventually allowed me to be involved and witness a tabletop exercise. It was a university disaster drill in December 2010. The following year I was asked to assist with the moulage of patients for a community wide full-scale disaster drill. It was through this relationship I became involved with the campus all-hazards preparedness program. I began to see beyond the immediate situation. I believed I could meld my years of practical experience in nursing, emergency medical services, and fire service with my education and degrees in Management and Human Relations, Organizational Administration and Leadership, Nursing and now Health Education into something more.
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CHAPTER 1

“It is not a matter of whether a disaster or emergency scenario will confront an organization, but when” (Cavanaugh, 2006, p.3).

INTRODUCTION

The incidence and enormity of disasters in the last thirty years has been on the rise and is anticipated to increase in the future (Guha-Sapir, Vos, Below, & Ponserre, 2011). The last decade was arguably the most turbulent in history, when it comes to a range of natural disasters, and it is regrettable that it takes a disaster to cause change and provide direction for organizations, business, and governments (Holdeman, 2010). There have been numerous events called the “storm of the century” during the past decade that left death and devastation in their wake. Between 2000-2009 the average number of reported disasters numbered 387 annually (Guha-Sapir, et. al, 2011). From 2000-2008, earthquakes caused the most fatalities worldwide with an average of 50,184 individuals per year (Provost, 2011). Flooding on average touches 99 million people a year globally (Provost, 2011). In 2010, 385 natural disasters killed more than 297,000 people worldwide, affected 217 million others and caused economic devastation of over $123 billion. In that year, the major disasters included the January 12th earthquake in Haiti killing 222, 570 individuals; and extreme temperatures, floods, and wildfires that caused 55, 800 deaths in Russia, making 2010 the deadliest year worldwide in the past two decades (Guha-Sapir, et. al, 2011).

The related terms of emergency preparedness, disaster preparedness and emergency management are not clearly differentiated. According to the Business Dictionary (2010), management is defined as “organization and coordination of the activities of an
enterprise in accordance with certain policies and in achievement of defined objectives." Emergency management is a fusion of information, expertise, and capabilities to supervise a multifaceted response efficiently within and between organizations at a local, regional, and national level (Kapur & Smith, 2011). Emergency preparedness is the “state of readiness” to take action during a disaster, crisis, or other type of emergency situation (Haddow, et. al, 2011, p. 380). "Ultimately the purpose of disaster management is to ensure the safety and well-being of the public"; which is achieved through planning and preparedness (Norris, et. al, 2008, p. 128).

The definition of “who” is involved with emergency management or emergency preparedness varies significantly depending on the source of information. Drabek implies there is “no single answer” and that the parameters vary depending on the task or responsibility (Drabek, 1987). Emergency management and response personnel include “federal, state, regional, and local governments; non-governmental organizations (NGOs); private sector organizations; critical infrastructure owners and operators; and all other organizations and individuals who assume an emergency management role” (Haddow, et. al, 2011, p. 378). Typically, “First Responders” fire, police, and emergency medical personnel (Haddow, et. al, 2011); however, during a disaster the usual first responders that provide fire, police, and medical services will be unable to respond to everyone who needs their services (CERT, n.d.). The true first responders during a disaster will be the people who live in the affected area.

The traditional approach toward the emergency management system is intended to be a comprehensive four-step process that includes: preparedness, response, recovery, and mitigation (Schwab, Eschelbach, & Brower, 2007). Preparedness and planning are crucial to
surviving a disaster (IEMA, 2011). The National Incident Management System (NIMS) defines preparedness as “a continuous cycle of planning, organizing, training, equipping, exercising, evaluating, and taking corrective action” in an attempt to ensure efficient harmonization throughout incident response (FEMA, 2004). Response to a disaster includes the coordination of activities intended to provide immediate assistance for disaster victims, to save lives, protect property, and meet essential human needs (National Governors' Association, 1978; Haddow, et. al, 2011). Recovery begins in the hours after the impact of the disaster and may continue for months, and depending on the gravity of the event could last years (Haddow, et. al, 2011). Recovery activities include repair of infrastructure, damaged buildings, and essential facilities (such as hospitals, public works, and roads) (Landesman, 2005). Mitigation of a disaster is the process of taking steps to prevent or reduce the damaging effects from a disaster (Kapucu, 2008; Cottrell, Girvan, & McKenzie, 2009). Mitigation activities may be completed during the preparedness or as part of long-term recovery.

President Jimmy Carter issued an executive order in 1979 to establish the Federal Emergency Management Agency (FEMA) as the lead disaster agency in the United States (Drabek, 1990). During the early 1980s, there was a federal push to bring together medical and emergency management communities to establish national response standards (Landesman, 2007). According to Landesman, “early efforts...were limited to pre-hospital emergency medical services, without the participation or inclusion of hospitals or public health in the process” (2007, p. S6). Following the events of the September 11, 2001 terrorist attacks, FEMA along with 22 other federal agencies, programs, and offices formed
the Department of Homeland Security (DHS) to advance national security towards an "all-
hazards" approach (FEMA, 2010a).

The all-hazards approach to emergency management and emergency preparedness
"takes advantage of the common capabilities necessary to treat any type of disaster or
emergency" (Haddow & Bullock, 2005, p. 11). Haddow and Bullock further state to forsake
the all-hazards approach would be duplicating the "mistake" the emergency management
community made in the 1980s (2005, p. 11). During the 1980s, the era of the cold war,
FEMA's concentration of financial and human resources were concentrated on getting
ready for the next nuclear war. FEMA funding was received by states and localities
following the government's lead.

Local and state capacitates for Hurricanes Hugo, Iniki, and Andrew in the late 1980s
and early 1990s, were rapidly overwhelmed, and federal response was tardy and
unsystematic (Haddow & Bullock, 2005). In response to Hurricane Katrina in 2005, the
most devastating natural disaster in U. S. history, FEMA was reorganized to supply
significant new power to resolve obvious disparities, which became apparent during the
Katrina response. The National Preparedness Goal, released in September 2011, describes
preparedness as being "prepared for all types of disasters and emergencies" (FEMA, 2012).

Police, fire and emergency medical services (EMS) have been responding to
emergencies together for many years; however, with the surge of large-scale public health
incidents there has been an increased awareness of the importance bringing public health
more formally into disaster preparedness planning (Landesman, 2007; Kapur & Smith,
2011). Recent terrorist events and natural disasters emphasize a need to change the way
public health and other emergency responders view and react during times of crisis. What
is needed is a team approach that includes public health, health care and other response personnel (Lyznicki, 2007). Rather, public health does not need to “reinvent the wheel” through a new preparedness model. Public health should be considered and utilized as another spoke in the existing wheel; not a spare tire kept in the garage waiting until there is a flat or an emergency (Subbarao, et al., 2008). Public health should be a fundamental part of the disaster program.

The area of public health emergency preparedness is an emerging field that lacks significant research in the areas of training, communication, preparedness and response, emergency operations, evaluation, recovery and mitigation (Abramason, Morse, Garrett, & Redlener, 2007; Altevogt, Pope, Hill, & Shine, 2008; Nelson, Lurie, Wasserman, & Zakowski, 2007; Yeager, Menachemi, McCormick, & Ginter, 2010). Furthermore, the emergency preparedness literature fails to mention the benefits of a relationship with public health. Instead, the study of emergency preparedness and public health emergency preparedness (PHEP) are contained in separate research and literature silos, and experts observe that they would greatly benefit from a melding of the professions (Yeager, et. al, 2010; James, Subbaroa, & Laniet, 2008; Landesman, 2007). And although PHEP has matured extensively over the past decade and established collaborations between academia and practitioners in public health, there remains a need for integration, evaluation, and expansion of the PHEP literature (Yeager, et. al, 2010).

The destruction witnessed in the weeks, months and years following Hurricane Katrina magnifies the importance of public health and emergency management to form a partnership. “Many of the consequences of the devastation wrought by Hurricane Katrina...fell to public health” such as: failed sewage pumps, putrid food stockpiles, the
need for mass vaccinations, mortuary services, and primary medical care for special needs populations, including durable medical equipment for chronically ill persons (Abramason, Morse, Garrett, & Redlener, 2007, p. 61). The Katrina experience highlighted that it is crucial for disaster plans to identify and address objectives to specifically encompass response and recovery activities; such as mobilization of resources that will protect public health and safety (Lyznicki, 2007).

A challenging area not often thought of is colleges and universities, who pose special concerns in the area of emergency preparedness and management. They generally cover considerable geographic areas, and resemble a community within a community including medical/health centers, laboratories, sports complexes, residential centers, power generating stations, and businesses. The population on campus fluctuates from day to day, semester to semester, and year to year. There is activity on campus virtually around the clock. Even when classes are not in session, there are residential facilities that many out-of-state, international, and married students call home. All of these factors influence how a university prepares for, responds to, and recovers from a campus disaster (U.S. Department of Education, 2010).

A gap exists in the literature for universities to better prepare them for a significant natural disaster to develop and strengthen university response (Human, Palit, & Simpson, 2006). Colleges and universities do not fall under the Disaster Mitigation Act of 2000 (DMA 2000), which requires state and local governments to complete a Hazard Mitigation Plan (Disaster Mitigation Act of 2000, 2000). To fill this gap FEMA developed Building a Disaster-Resistant University to provide colleges and universities planning guidance and encourage them to take a serious approach to disaster mitigation, and establishing a plan to decrease

Illinois became the first state in the nation to enact a law requiring the development of all-hazard emergency preparedness plans for colleges and universities with the inclusion of violence. The Campus Security Enhancement Act of 2008 calls for all colleges and universities to develop and exercise an all-hazards emergency response plan annually, which includes the inter-disciplinary and multi-jurisdictional campus violence prevention plan (Higher Education (110ILCS 12/) Campus Security Enhancement Act of 2008, 2009; Illinois Board of Higher Education, 2012).

Universities can provide critical human capital for emergency preparedness and mitigation, because they typically include experts in subjects crucially important in preventing or managing emergencies. The university is also in a position to assist its neighborhoods, cities and regions in numerous ways. These include using campus facilities as disaster-recovery centers, and providing locations for federal, state, and local agencies to meet and discuss how to handle emergencies. The student center, cafeterias, and residence halls may serve as mass feeding areas and housing for victims. Other uses for the campus during an emergency are using campus meeting rooms, recreational facilities, information-technology networks, radio and television facilities, and food-service operations (MacDowell, 2005). The university is an excellent, often untapped, resource that can be invaluable during a disaster.

**PURPOSE OF THE STUDY**

The purpose of this study was to describe a particular Illinois university's emergency management plan and its execution in response to a specific natural disaster
(e.g. May 8, 2009 Derecho). The study identifies strengths and weaknesses of the university's management of the emergency. It also describes the role of other key players in emergency preparedness before, during, and after the disaster. This study describes changes identified by emergency management personnel subsequent to the plan, and what changes were completed, including rationale.

THE CASE

In the spring of 2009, southern Illinois was devastated by a weather event labeled by the National Weather Service as a “Super Derecho”. It produced sustained winds of 68 mph and gusts up to 106 mph, causing widespread and prolonged power outages, extensive damage, injuries and one fatality (National Weather Service, 2010; Johns, Evans, & Corfidi, 2011). The Super Derecho typified the U.S. Climate Change Science program prediction that extreme weather such as heat waves, heavy downpours, and super-powered hurricanes would become increasingly common in the future (as cited in Carlson, 2008).

In addition to the Super Derecho, Southern Illinois has experienced, or has the potential to be affected by, a variety of disasters, including: severe storms, tornadoes, floods, severe winter storms, drought, extreme heat, and it is at increased risk for earthquakes resulting from the New Madrid Seismic Zone and the Wabash Valley Seismic Zone (Illinois Emergency Management Agency, 2010a). Many of these events have the potential to produce devastating results in terms of the loss of lives, property and services.

RESEARCH QUESTIONS

The research questions for this study were:
1. In advance of a natural disaster how did the university’s responders’ utilize the disaster cycle (e.g. preparedness, response, recovery, and mitigation) to prepare for an emergency?

*Rationale:* There are critical and distinct differences between emergency preparedness planning and emergency time crisis management of a disaster and both were explored through this study (Quarantelli, 1997). "All disasters get managed one way or another, even if everything done is ‘wrong’" (Quarantelli, 1997, p. 40). Literature consistently describes preparedness, response, recovery, and mitigation as an evolving process or cycle. The fundamental piece of preparedness, response, recovery, and mitigation is the “plan” and being able to execute the “plan” smoothly during a crisis. As a paramedic, I was taught very early to treat each emergency call as if it were life or death regardless of the nature of the illness or injury. This allowed me to establish a routine so that I was prepared for the worst possible scenario: “prepare for the worst and hope for the best”.

2. How did the May 8, 2009 windstorm influence the university’s view of emergency preparedness and what were the strengths and weaknesses of their response?

*Rationale:* Experiences gained by the university provide insight for others to enhance the preparedness efforts to face an emergency or disaster (Filmore, et. al, 2011). Each exercise, drill, and disaster provides an opportunity to learn and adjust methods of reaction and response.

3. What role did the student health services play in emergency preparedness at the university?
Rationale: The role of the student health center at the university should be similar to the public health department's role for the community; currently, the literature does not address "what" or "how" the student health center should be involved in emergency preparedness on campus. The student health services should contribute to emergency planning by developing procedures to: ascertain if ample supplies and equipment to triage during an emergency are available, mobilize personnel, create mutual aid agreements with local public health agencies, have a system for disease surveillance and tracking in place, and collaborate with local and state public health colleagues (FEMA, 2003; U.S. Department of Education, 2010).

4. How did local public health officials participate in the preparedness, response, recovery, and mitigation at the university?

Rationale: Local public health professionals "must take responsibility for community health in both disaster preparedness and response" (Landesman, 2005, p. 33). The public health community does play an essential function in identifying, responding to, containing, and recovering from emergencies (Katz, 2013). Collaboration with both on-campus and off-campus resources is essential because during an emergency help will be needed, and having an established working relationship prior to an incident facilitates the mutual aid response.

5. What challenges remain when preparing for future disasters?

Rationale: Many challenges likely remain and finding ways to address obstacles and barriers to university preparedness is paramount for the safety of the students, faculty and staff (Filmore, et. al, 2011). The cost of mitigation projects often prohibits implementation of major remodeling projects. For example in 2008, the
Illinois Campus Security Task Force made recommendations that $25 million be appropriated for a state-funded campus security grant to make improvements to campus security throughout the state; the Campus Security Enhancement Grant Program remains undeveloped four years later and universities are unaware if they will qualify for grant money or how they may utilize the funds (Blagojevich, 2008; Versaci, 2012).

**SIGNIFICANCE OF THE STUDY**

The study of disasters has risen significantly and disaster research literature is spread throughout an assortment of fields, disciplines, and journals, thus making it challenging to synthesize public health emergency preparedness (PHEP) literature (Abramson, et. al, 2007). Experiences gained and promising practices from current and past response to a disaster emergency is hindered by the lack of information sharing among disciplines (James, Subbarao & Lanier, 2008). Yeager, Menachemi, McCormick, and Ginter (2010) completed a quantitative analysis specifically of PHEP literature from 2000-2008 and found a relatively scarce amount of research related to the response, recovery, and in particular the mitigation phase. Research related to natural disaster emergency operations is nonexistent in public health emergency preparedness journals, according to Yeager, et. al’s article (2010). Only one study considers at university officials’ experiences and perceptions of response and management of a natural disaster (Filmore, et. al., 2011). “...Insights for practitioners also must be produced as we join other disciplines in accelerating the professionalization of emergency management. In this way we fulfill the real promise of disaster research—to prevent or ameliorate human suffering” (Drabek, 2002, p. 153).
A recent study identifies the preparedness phase as the most studied phase of the disaster cycle in PHEP literature and cites the paucity of studying the disaster cycle in the context of an actual disaster (Yeager, et. al, 2010). The results of this study will provide insight into the reaction of a university during the deployment of the emergency response plan and how it responded to the needs of the surrounding communities. On a practical level, it will benefit university administrators, emergency first responders, the university community, and the university health professionals seeking ways to increase the level of preparedness.

Public health agencies find themselves at a crossroads; they are becoming the critical link in the chain and are ideally positioned to produce studies that can shed light on incorporating best-practices in the ever growing field of emergency preparedness and PHEP (Scutchfield, et. al, 2009). The vision for Health People 2020 is “a society in which all people live long, healthy lives” (HP 2020, 2012). One of Health People 2020’s national objectives is to provide benchmarks to: “encourage collaborations across communities and sectors, empower individuals toward making informed health decisions, and measure the impact of prevention activities” (HP 2020, 2012). One topic identified is “preparedness”, which follows the overarching goals of the National Health Security Strategy (NHSS) to “build community resilience and to strengthen and sustain health and emergency response” (HP2020, 2012).

In particular, a significant emerging role for the public health educator is to be prepared to promote health and protect individuals from a variety of threats, from bioterrorism to emerging infectious diseases (Brill & Forys, 2007). Public health educators
can play critical roles when planning for and responding to emergency events (Reynolds, 2007).

**RESEARCH DESIGN**

This study used a qualitative case study design. The case study research design has been chosen to allow the researcher to explore the complexity of multi-tiered response and coordination of agencies that do not typically work together. A case study can provide the opportunity for the reader to learn explicitly from the researcher’s narrative account (Stake, 2005). A case study is an in-depth study of a bounded system through description and analysis. The unit of study is the case that is intrinsically bounded around a process, issue or problem (Creswell, 2007; Merriam, 2009). Creswell describes the qualitative case study research as “a qualitative approach in which the investigator explores a bounded system (a case)… over time, through detailed, in-depth data collection involving multiple sources of information (e.g., observation, interviews, audiovisual material, and documents and reports), and reports a case description and case-based themes” (Creswell, 2007, p. 73).

In-depth semi-structured interviews were completed with members of the Campus All-Hazards Response and Recovery Team present in the Campus Emergency Operations Command Center during the recovery from the windstorm, the “Super Derecho.” Interviews were approximately 60 minutes, audio-recorded, and transcribed verbatim. During the interviews, I made written notes of participants’ ideas and observed behaviors. These notes were used to supplement the transcribed interviews. I recorded thoughts and feelings of the interviews in a reflexive journal. For this study, data sources included documents from the May 8, 2009 windstorm, the Campus All-Hazard Emergency Response
and Violence Prevention Plan, verbatim transcripts, newspaper articles, and the reflective journal.

ASSUMPTIONS

Assumptions related to this study were:

1. Interview participants will be honest and accurate to the best of their knowledge and memory of the event.

2. Individuals will speak freely about the response and management of the emergency preparedness plan.

DELIMITATIONS

Delimitations are restrictions purposefully set by the researcher (Neutens & Rubinson, 2010). The following were delimitations of the study:

1. Interviews will be limited to those who participated in the administration of the Emergency Operations Plan (EOP) during the disaster response.

2. Interviews will occur with the All-Hazards Response and Recovery Team and not individuals simply carrying out directives from the Team.

3. The study will only cover the May 8, 2009 Super Derecho in Southern Illinois.

LIMITATIONS

Limitations are the dynamics outside of the control of the researcher in the context of the study (Neutens & Rubinson, 2010). Factors in this study beyond my control include the following:

1. While every attempt will be made to contact members of the All-Hazards Response Team from the May 8, 2009 storm, some may no longer be at the university or may no longer be available.
2. Participants’ responses may reflect personal bias and opinion, and are limited by memory.

3. Participants may guard their answers due to sensitive or bureaucratic issues.

4. I have existing relationships with some of the members of the All-Hazards Response Team that have the potential to bias the interview.

**DEFINITION OF TERMS**

**Case Study:** A case study “involves the study of an issue explored through one or more cases within a bounded system (i.e., a setting, a context)” (Creswell, 2007, p. 73).

**Crisis:** “A disruption in the normal activities... an abnormal event or series of disruptive events that threaten the total operation of an organization or threaten the functioning of a community” (Rowitz, 2006, p. 77).

**Disaster:** A disaster is a “singular event that results in wide-spread losses to people, infrastructure, or the environment” (Cutter, 2001, p. 3).

**Emergency:** Any event that “requires an immediate response that may be due to epidemics, technological catastrophes, strife, or to natural or man-made cause” (Landesman, 2005, p. 283).

**Emergency Manager:** An emergency manager is an individual “who possesses the knowledge, skills, and abilities to effectively manage a comprehensive emergency management program” (Ditch, 2003, p. 12).

**Emergency Management:** “the coordination and integration of all activities necessary to build, sustain, and improve the capability to prepare for, protect against, respond to, recover from, or mitigate against threatened or actual disasters” (NIMS, 2008, p. 5).
Emergency Preparedness: The “pre-impact actions that provide the human material 
resources needed to support active responses at the time of hazard impact” (Lindell, Prater, 

Emergency Support Functions (ESF): An operative area of “response activity established to 
coordinate the delivery of federal assistance during the response phase of an emergency” 
(Landesman, 2005, p. 284).

Emergency Operations Center (EOC): An emergency operations center (EOC) is located in a 
safe zone and provides technical assistance, directs resources to emergency responders 
and distributes information and resources to various organizations and governments 
involved in the response (Perry & Lindell, 2007).

Agency (FEMA) is part of the Department of Homeland Security whose mission is to 
“reduce the loss of life and property and protect communities nationwide from all hazards, 
including natural disasters, acts of terrorism, and other man-made disasters” (Federal 

First Responder: Those responders who arrive first on scene of an incident (police, fire, 
emergency medical personnel) and “take action to save lives, protect property, and meet 
basic human needs” (Landesman, 2005, p.285).

Hazard: A hazard is the chance a disaster will take place. Hazards may be caused by “a 
natural phenomenon (eg, earthquake, tropical cyclone), by failure of manmade energy 
sources (eg, nuclear reactor, industrial explosion), or by an uncontrolled human activity 
(eg, conflict, overgrazing)” (Landesman, 2001, p. 176).
Higher Education Institutions: 12 public universities; 48 community colleges; 94 independent not-for-profit institutions; Total=183 (ICSTF).

Incident Command System (ICS): The Incident Command System (ICS) is the “model for the command, control, and coordination of a response to an emergency and provides the means to coordinate the efforts of individual agencies” (Landesman, 2001, p. 177).

Mitigation: Mitigation is “any sustained action to reduce or eliminate long-term risk to people and property from hazards and their effects” (Schwab, Eschelbach, & Brower, 2007, p. 543).

Natural Disasters: A natural disaster is a “natural phenomena with acute onset and profound effects (eg, earthquakes, floods, cyclones, tornadoes)” (Landesman, 2001, p. 182).

Preparedness: “All measures and policies taken before an event occurs that allow for prevention, mitigation, and readiness” (Landesman, 2005, p. 294).

Public Health Emergency Preparedness (PHEP): “The capability of the public health and health-care systems, communities, and individuals to prevent, protect against, quickly respond to, and recover from health emergencies, particularly those whose scale, timing, or unpredictability threatens to overwhelm routine capabilities” (Nelson et al., 2007, p. S9).

Recovery: The recovery after a disaster consists of the “actions of responders, government, and the victims that help return an affected community to normal by stimulating community cohesiveness and government involvement. One type of recovery involves repairing infrastructure, damaged buildings, and critical facilities. The recovery period falls between the onset of emergency and the reconstruction period” (Landesman, 2001, p. 185).
Response: The "actions taken a short period prior to, during and after disaster impact to reduce casualties, damage and disruption and to respond to the immediate needs of disaster needs" is termed emergency response (Tierney, Lindell, & Perry, 2001, p. 5).

Risk Assessment: "A systematic process that determines the likelihood of adverse health effects in a population following exposure to a specified hazard" (Landesman, 2005, p. 299).

Vulnerability: "The susceptibility of the population to a specific type of event; the degree of possible/potential loss to a given element at risk resulting from a given hazard at a given intensity" (Landesman, 2005, p. 303).

ACRONYMS

ASPR Assistant Secretary for Preparedness and Response
BERT Building Emergency Response Team
CAHERVPP Campus All-Hazards Emergency Response & Violence Prevention Plan
CDC Centers for Disease Control and Prevention
CEOC Campus Emergency Operations Center
CERT Community Emergency Response Team
CPG Comprehensive Preparedness Guide
CPSJ Center for Public Safety and Justice
DHS Department of Homeland Security
DMA Disaster Mitigation Act
DOD Department of Defense
DOE Department of Education
DOT Department of Transportation
DPS     Department of Public Safety
DRU     Disaster Resistant University
EF      Enhanced Fujita (Tornado Scale)
EMAP    Emergency Management Accreditation Program
EMI     Emergency Management Institute
EMS     Emergency Medical Services
ESF     Emergency Support Functions
EOC     Emergency Operations Center
EOP     Emergency Operations Plan
EPA     Environmental Protection Agency
ESDA    Emergency Services and Disaster Agencies
FEMA    Federal Emergency Management Agency
HEW     Department of Health, Education, and Welfare
HHS     Health and Human Services
ICC     Illinois Commerce Commission
ICDA    Illinois Civil Defense Act
ICS     Incident Command System
IDPH    Illinois Department of Public Health
IEMA    Illinois Emergency Management Agency
ILEAS   Illinois Law Enforcement Alarm System
IMERT   Illinois Medical Emergency Response Team
IPHMAS  Illinois Public Health Mutual Aid System
ISP     Illinois State Police
SUMMARY

A fresh face on the emergency preparedness horizon, public health, needs to present itself in a collaborative effort to look out for the community’s health every day, and more so during the disruption of normal daily activities that occur during a disaster. Universities provide a milieu that changes from hour to hour and day to day. In this ever-changing
environment many situations have an opportunity to present in which the university must be prepared to respond to keep students, faculty, and staff safe. State law in Illinois requires colleges and universities to have an All-Hazards Preparedness Plan, and to exercise that plan annually. The application of the Plan in an emergency provides an opportunity for the university to assess the effectiveness of their planning, response, recovery, and mitigation efforts.
CHAPTER II

REVIEW OF LITERATURE

The purpose of this study was to describe a university’s emergency management plan as it relates to preparedness, response, recovery and mitigation to a natural disaster. The study identifies strengths and weaknesses of the university’s management of the emergency. It also describes the student health center’s and public health’s role before, during, and after the disaster.

Disasters

In the Handbook of Disaster Research (2007) Ronald Perry devotes an entire chapter to attempt a “concise” definition of a disaster. Blanchard (2007) has compiled a list that “is not a comprehensive, definitive, exhaustive or official treatment of ‘emergency management’ and related terms, definitions, acronyms, program, or legislation” (p. 1), which nevertheless contains over 80 descriptions of a disaster.

Noji’s viewpoint of defining a disaster is from “the basis of its consequences on health and health services,” and from the public health point of view that disasters are defined by “what they do to people” (Noji, 1997, p. 7). For the purpose of this study, a disaster is defined as events that create more loss than a community is able to handle (Lindell, et. al, 2007). It was further limited to natural disasters that require an emergency response such as: earthquake, floods, tornadoes and other severe weather events (Lindell, et. al, 2007; McGregor, 2007).

There are words, such as hazard, emergency, and disaster, which are similar, but should not be used interchangeably when discussing a disaster (Lindell, et. al, 2007). A hazard is a source of danger or an extreme event that has the potential to affect people, property and
the natural environment at a given location (Drabek, 2004; Lindell, et. al, 2007). A disaster creates a consequence in which the community suffers such severe losses to persons and/or property that the means existing within the community are severely strained (Drabek, 2004; Lindell, et. al, 2007). A disaster refers to the specific event (tornado, flooding, earthquake). A hazard is the threat of an event that reflects the risk, vulnerability, or exposure confronting families, communities, or societies if the event comes to pass (Drabek, 2007).

Each day more individuals and communities are being affected by natural disasters and the devastation faced appears to be progressively worsening (Lindell, et. al, 2007). The top 10 weather headlines in 2009 for the region around southern Illinois and western Kentucky included: 1) January 26-28 ice storm, 2) May 8 windstorm, 3) February 11 high winds, 4) March 28 EF-3 Tornado, 5) April 10 EF-3 Tornado, 6) August 4 severe storms, 7) March 8 tornadoes, 8) June 8 severe storms, 9) April 9-10 bow echo (or comma, which produces intense thunderstorms), and May 8 Ripley County macroburst (NOAA, 2009). Of these 10 events, six of them impacted southern Illinois with the May 8 severe windstorm being the “most unforgettable event of 2009” (NOAA, 2009).

Illinois lies on the eastern border of the traditional Plains stretch recognized as Tornado Alley and is ranked fourth in the nation for tornado frequency (Kellogg, 2012). The Illinois State Climatologist Office in Urbana-Champaign reports 2,244 tornadoes occurred from 1950 to 2010 in Illinois (as cited in Fitzgerald, 2012). Illinois is one of three states affected by the Tri-State Tornado on March 18, 1925, which was the deadliest tornado in U.S. history (National Weather Service Weather Forecast Office, 2010).
Public Health

The World Health Organization defines public health as “an organized effort by society, primarily through its public institutions, to improve, promote, protect and restore the health of the population through collective action” (World Health Organization, n.d.). The mission of public health is “fulfilling society’s interest in assuring conditions in which people can be healthy” (Institute of Medicine, 1998, p. 7). In 1998, the Institute of Medicine charged governmental public health agencies with the distinctive purpose of ensuring the critical components of public health service are in place. The essential services of public health include: health situation analysis, health surveillance, health promotion, prevention, infectious disease control, environmental protection and sanitation, disaster and health emergency preparedness and response, and occupational health, among others (Landesman, 2005; Kapur & Smith, 2011; Katz, 2013).

Prior to the twentieth century, recognized prerequisites for public health were scant (Scutchfield & Keck, 1997). The leading health risks were infectious disease caused by poor hygiene and poor sanitation (McKenzie, Pinger & Kotecki, 2008). The prominence of epidemics in 19th century Europe prompted the United States to take early steps in the interest of community health (Rosen, 1958). To do so, governmental authorities sought advice from the medical community, which advised the government to deal with the unsanitary conditions; however successful execution was not feasible due to the lack of permanent health organizations in municipal government (Rosen, 1958).

The necessity for efficient public health administration came about during the early 1850s; one of the most significant recommendations from the Shattuck Report was the need to establish state boards of health (Rosen, 1958). Lemuel Shattuck produced a

"Catastrophe often precedes and brings into sharp focus the need for social change" (Rosen, 1958, p. 239). While Rosen was referring to 19th century America, the implication of this statement can be seen in the aftermath of September 11, 2001, post-Hurricane Katrina, and violence witnessed on the campuses of Virginia Tech and Northern Illinois University.

At the beginning of the twenty-first century more changes lay ahead for public health; According to Lurie, Wasserman, and Nelson public health emergency preparedness was "pushed" to the top of the U.S. national agenda (2006, p. 935). So often in health services, the focus is on the production and consumption of medical care, while virtually ignoring another critical component—the public health services (Scutchfield, Mays, & Lurie, 2009). One area identified by the Institute of Medicine is the preparation for emergencies and disasters (Institute of Medicine, 2003).

In the past decade the nation has also faced domestic and international crises such as: SARS, the H1N1 pandemic, the Haitian earthquake, and the ongoing radiation emergency in Fukushima, Japan; however the event that has left devastating memories and smoldering ashes is September 11, 2001 (Subbarao, Dobalian, James, 2011). Hurricanes Katrina, Rita, and Wilma struck Florida and the Gulf Coast during the last days of August 2005; which forever changed the face of disasters by disrupting families, altering and ending lives, and forcing the United States to rethink vulnerability and risk assumptions (Bea, et al., 2006).
The charge of the U.S. public health system is to advance physical and mental health and prevent disease, injury and disability (HHS, 1999). The system encompasses an extensive range of governmental and nongovernmental units (Lister, 2005). The events of September 11, 2001, have forever changed the United States and placed increased awareness on public health and its infrastructure (Lister, 2005; McHugh, Staiti, & Felland, 2004; Nelson, Willis, Chan, Shelton, & Parker, 2010; Watkins, et. al, 2011). This breach of security of the U.S., along with various other threats from bioterrorism, natural disasters and disease epidemics placed emphasis on strengthening the public health infrastructure (Baker & Koplan, 2002; Beitsch, Brooks, Menachemi, Libbey, 2006; Katz, Staiti, & McKenzie, 2006). At one time public health focused solely on preventing disease and promoting health; with the turn of another century public health has placed a spotlight on protecting health (Katz, 2013).

Public Health Emergency Preparedness

Public health emergencies, including infectious disease outbreaks, acts of terrorism and natural disasters create concern for all communities (CDC, 2006).

Public health emergency preparedness (PHEP) is the capability of the public health and health-care systems, communities, and individuals to prevent, protect against, quickly respond to, and recover from health emergencies, particularly those whose scale, timing, or unpredictability threatens to overwhelm routine capabilities. Preparedness involves a coordinated and continuous process of planning and implementation that relies on measuring performance and taking corrective action (Nelson et al., 2007, p. 59).
The worst time to establish response actions to an emergency situation is during the emergency (Centers for Disease Control and Prevention, 2001). Preparedness is a progression, not a conclusion (Public Health Preparedness, 2006). Preparedness is referred to as a state of readiness, actions taken, a dynamic process, consisting of plans, procedures, and resources (Centers for Disease Control and Prevention, 2001; Lindell, Prater, & Perry, 2007; Kapur & Smith, 2011; Perry & Lindell, 2007; Schwab, Eschelbach, & Brower, 2007).

Public health professionals bring unique assets to community disaster preparedness, emergency management, and response. “Public health professionals must take responsibility for community health in both disaster preparedness and response” (Young-Landesman, 2001, p. 21). These assets represent an expansion of their typical activities such as: provide disaster education ahead of and following an event, assume responsibility for the health of the community, identify at-risk groups, ensure health services continue after impact, cooperate and collaborate with a diverse array of community agencies, and collaborate with other health and human service professionals to rigorously evaluate intervention outcomes (Landesman, 2005; Young-Landesman, 2001). The scope of emergency public health deals with not only the events that cause emergencies, but also includes multi-agency response, applying public health tools during emergencies, evaluation of community resilience, and coordination of efforts (Kapur & Smith, 2011).

Public health preparedness, as a sub-discipline of public health, which addresses two essential components of a government’s duty to its residents, which are “provide for the common defense” and “promote the general welfare” (Katz, 2013, p. 3). Public health
preparedness as a field is in its infancy and wrestling to define itself and create professional core competencies for the field (Katz, 2013).

**Emergency Preparedness**

The fundamental principle of disaster preparedness is to ensure the protection and well being of the public (Norris, Stevens, Pfefferbaum, Wyche, & Pfefferbaum, 2008). Disaster or emergency management is a field that is ever evolving and is challenging to define its boundaries (Waugh, 2000). Bruce Marshall (Drabek, 1987) identifies emergency management as a calculated rather than a tactical matter. Emergency management is viewed as:

...the process by which the uncertainties that exist in potentially hazardous situations can be minimized and public safety maximized. The goal is to limit the costs of emergencies or disasters through the implementation of a series of strategies and tactics reflecting the full life cycle of disaster, i.e., preparedness, response, recovery, and mitigation (Drabek, 2004, Student Handout 1-3, p. 1).

Emergency management during the Cold War era focused on the possibility for nuclear war and nuclear fallout (Haddow, Bullock, & Coppola, 2011). Nearly every community had a civil defense director and the majority of states also had a civil defense representative in their state government (Haddow, et. al, 2011). Generally these representatives were retired military personnel who received little support, politically or financially, from state or local government and often their responsibilities were in addition to other duties (Haddow, et. al, 2011).

During the 1970s emergency management functions and responsibilities were spread over five federal departments and agencies (Haddow, et. al, 2011). Due to the wide

President Carter appointed John Macy, then head of the Office of Personnel Management (OPM), director of FEMA (Haddow, et al, 2011). Director Macy was challenged with blending an organization that was physically dispersed (the agency was located in five different buildings around Washington) and philosophically independent (Haddow, et al, 2011). Macy's hard work focused on the parallels of disaster preparedness and civil defense and created what is now referred to as an all-hazards approach (Haddow, et al, 2011).

During the 1980s there was a lack of major natural disasters. When FEMA Director General Julius Becton ranked by level of importance the more than 20 major programs in FEMA programs, for natural disasters ranked close to the bottom (Haddow, et al, 2011). This ranking "continued the pattern of isolating resources for national security priorities without recognizing the potential of a major natural disaster" (Haddow, et al, 2011, p. 9). Nevertheless, the next decade witnessed a succession of natural disasters such as: nine states being declared major disasters from the Midwest floods in 1993; the January 17, 1994 Northridge, California earthquake; the Midwest floods in the spring of 1994; and a
series of killer tornadoes, ice storms, hurricanes, floods, wildfires, and drought (Haddow, et. al, 2011; USGS, n.d.).


DISASTER CYCLE

Table 2.1. Disaster Phases and Illustrative Activities

<table>
<thead>
<tr>
<th>Disaster Phase</th>
<th>Illustrative Activities</th>
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| Mitigation     | • Hazard-vulnerability analysis  
|                 | • Land-use planning  
|                 | • Insurance  
|                 | • Building codes  
|                 | • Structural mitigations  
|                 | • Public education (prevention and adoption of mitigative adjustments)  
|                 | • Regulation of hazardous substances (transportation, storage, and disposal)  
| Preparedness    | • Disaster planning  
|                 | • Warning systems  
|                 | • Stockpiling food and medical supplies  
|                 | • Training  
|                 | • Public education (self-help)  
| Response        | • Evacuation  
|                 | • Protective actions  
|                 | • Mobilization of emergency personnel and resources  
|                 | • Search and rescue |
Recovery

- Emergency shelter
- Mass feeding
- Medical care
- Security within impact area
- Damage assessment and control
- Temporary housing
- Clean-up, repair and reconstruction
- Redevelopment loans
- Legal assistance and liability assessment
- Victim counseling
- Community planning


Mitigation

"Effective mitigation efforts can break the cycle of disaster damage, reconstruction, and repeated damage" (FEMA, 2011, para. 2). According to Ollie Davidson "solid case studies and documented results are needed to convince management that mitigation measures will save money and lives" (Davidson, 2002, p. 382). Hazard mitigation is any continued action to diminish or remove long-term risk to life and property from a hazard event. These include coordinating resources, evaluating risks, establishing a mitigation plan, executing the plan and monitoring the progress (IEMA, 2011).

Mitigation begins by completing a risk assessment, which includes: identifying threats, disseminating warnings, evacuating vulnerable populations, search and rescue of trapped disaster victims, providing emergency medical care, addressing ongoing threats, and offering emergency provisions and refuge (FEMA, 2011; Tierney, et. al, 2001). The results provide the basis for mitigation measures to reduce risk, and flood insurance that protects assets (FEMA, 2011). FEMA's Multi-Hazard Mitigation Planning Guidance provides authorized direction for state and local governments to meet the conditions of the
Mitigation Planning regulations under the Stafford Act, which provided funds for mitigation planning (FEMA, 2011).

Risk reduction lessens the risk to life and property, consisting of current buildings and future construction, in the pre and post-disaster situation (FEMA, 2011). Risk reduction is accomplished via regulations such as local ordinances, land use, and building practices. Risk reduction also includes mitigation projects that reduce or remove long-term risk from hazards and their consequences (FEMA, 2011).

The Disaster Mitigation Act (DMA) of 2000 (Public Law 106-390) provides the legal basis for state and local government mitigation planning requirements, which are a condition for FEMA’s mitigation grant assistance (FEMA, 2011). These grants provide aid for mitigation projects for communities that have a FEMA-approved mitigation plan in place (IEMA, 2011).

**Preparedness**

"At the forefront of the public's attention is preparedness; it is one of the most recent tasks assigned to public health agencies (Seid, et. al, 2007). The preparedness phase of the disaster cycle is related to planning (Yeager, et. al, 2010). Planning and preparedness measures are a continual process, not goals to be completed and put away (Dynes, Quarantelli, & Kreps, 1972). The Emergency Operations Plan should always be viewed as a work in progress and never as a completed document (Sharkey, 2004). The planning piece allows for the management of the entire life cycle of a future crisis (FEMA, 2010c).

It is impossible to plan and account for each and every event could happen. Emergencies can fluctuate extensively in their impact and consequence; however, there are generic functions that must be carried out regardless of the situation (Perry, 1991;
Quarantelli, 1997). Some of the generic functions include: plans for warnings, evacuations, sheltering, damage assessments, emergency medical care, mobilization of emergency personnel and resources, and restoring public services (Perry, 1991).

The Department of Homeland Security (DHS) released the first National Incident Management System (NIMS) on March 1, 2004. It was intended to provide a consistent approach nationwide for federal, state, and local governments to work in unison to prepare for, prevent, respond to, and recover from domestic incidents, regardless of source, magnitude, or difficulty (Federal Emergency Management Agency, 2004). In 2008, NIMS was updated to include nongovernmental organizations (NGOs) (independent citizen organizations) and the private sector working with the governments (FEMA, 2008). NIMS, updated in 2011, to be more than a planning guide it enhances preparedness concepts, which include communications and resource management, as well as the Incident Command System (ICS) to facilitate efficient management (FEMA, 2011).

NIMS defines preparedness as “a continuous cycle of planning, organizing, training, equipping, exercising, evaluating, and taking corrective action in an effort to ensure effective coordination during incident response” (FEMA, 2010c, para. 1). These five elements form the ‘preparedness cycle’ and constitute one facet of an extensive National Preparedness System to prevent, respond to, recover from, and mitigate against natural disasters (FEMA, 2010c). The Department of Homeland Security (DHS) and Federal Emergency Management Agency (FEMA) champion preparedness by cultivating policies, making certain ample plans are in place and are valid, outlining essential resources needed to deal with threats, making available resources and technical support to jurisdictions, and assimilating and orchestrating preparedness endeavors all over the Nation (FEMA, 2010c).
Applying NIMS to emergency management and response allows for all organizations and personnel to be on the same page when preparing for or responding to an emergency (FEMA, n.d.b). The emphasis of NIMS is that all incidents start locally and provides the structure to boost the collaboration of responders (FEMA, n.d.b). Therefore, local public health departments are encouraged to develop relationships with regional, state, and federal response colleagues who are adapt with response to disasters and emergencies (Watkins, et. al, 2011).

**Illinois Emergency Management Agency**

The Illinois Emergency Management Agency (IEMA), created in 1951 by the General Assembly, was originally named Illinois Civil Defense Agency (ICDA) (IEMA, 2006). In 1975 [House Bill 1109], ICDA was replaced by the Illinois Emergency Services and Disaster Agency (ESDA) and included increased responsibilities encompassing fires, floods, earthquakes, and other natural or manmade disasters (IEMA, 2006). The final name change for IEMA became effective in 1992 (IEMA, 2006).

The mission of the Illinois Emergency Management Agency (IEMA) is to safeguard the State of Illinois “through integrated approaches to Emergency Management and Homeland Security. To prepare for, respond to, mitigate against, and recover emergencies and disasters” (IEMA, 2012). The mission of IEMA is achieved through the department’s vision, “a better prepared state” (IEMA, 2012).

The state enabling authority for Illinois Emergency Management Agency (IEMA) is the Illinois Emergency Management Agency Act (IEMA Act) [20 ILCS 3305/1], which gives IEMA authority to exercise, administer and enforce it rights, powers, duties, and responsibilities (IEMA, 2012b). Other regulations pertaining to IEMA include Title 29:
Emergency Services, Disasters, and Civil Defense Chapter 1: Emergency Management 

Agency: Subchapters A, C, D, and G (IEMA, 2012b). These subchapters establish policy for training, education programs, administration, and organization within the emergency services and disaster agencies (ESDA) including IEMA (IEMA, 2012b).

Prior to the events of September 11, 2001, Illinois had the foresight to establish the Illinois Terrorism Task Force (ITTF) in 1999 (IEMA, 2006). The ITTF serves as advisory board to the Governor and provides statutory recommendations and guidance for homeland security laws, policies, protocol and procedures (ITTF, 2012). The mission of the ITTF is to “implement a comprehensive, coordinated strategy for domestic preparedness in the state of Illinois, bringing together agencies, organizations and associations representing all disciplines in the war against terrorism” (ITTF, 2012). The ITTF assumes an all-hazard attitude towards preparedness and includes representation for over 60 member affiliations, including federal, state, and local entities; private and non-governmental colleagues; hospitals; statewide first responder associations and mutual aid organizations; and every jurisdiction with a population of 100,000 or greater (ITTF, 2012).

Illinois has established the 2010 State of Illinois Natural Hazard Mitigation Plan to guide local governments through the plan development procedure (IEMA, 2011). Fulfillment of the changes set forth in the DMA 2000 requires cooperation and collaboration between state and local governments during their planning processes (IEMA, 2011). Local governments are encouraged to utilize the risk analysis created by the State for each county in Illinois (IEMA, 2011). The risk assessment describes the geographic area and the hazards that affect the location, descriptions of past disasters and potential of future disasters, discussion of low risk hazards, and the information to identify and
prioritize mitigation actions (IEMA, 2011). This will save local government time and money because the work of recognizing hazards has been completed by the state (IEMA, 2011). Similarly, it is necessary for state government to work together with local governments by integrating the local mitigation projects in the state plan as required by FEMA (IEMA, 2011).

FEMA ranks Illinois’ homeland security program in the top four percent of state programs nationwide (IEMA, 2010c). The peer reviewers used by FEMA evaluated the preparedness efforts centering on achievements, strategy, and developed rationale for investment and utilization of funding when building response capacities to tackle threats (IEMA, 2010c).

Executive Order number 17 (2003) established the ITTF as a permanent “advisory body” that reports directly to the Governor and Deputy Chief of Staff for Public Safety (Blagojevich, 2003). The DHS-Office of Inspector General (OIG) released a report in 2008 citing Illinois’ approach to terrorism and preparedness as an example of “best practices” (DHS-OIG, 2008, p. 16). Illinois used a statewide Task Force and mutual aid organizations to plan, execute, and oversee homeland security programs and activities to boost the accomplishments in establishing and achieving goals and objectives for the State Homeland Security Grant Program (DHS-OIG, 2008). The Illinois Terrorism Task Force (ITTF) developed and implemented the state of Illinois’ homeland security strategy (IEMA, 2010c). The ITTF also establishes how the funds should be distributed to augment emergency preparedness and response throughout the state (IEMA, 2010c).
Mutual Aid Response

Illinois has cultivated a robust mutual aid system for fire, law enforcement, emergency management, and public health that assembles personnel and equipment for local, regional, and statewide emergencies (ITTF, 2012). Illinois’ exceptional mutual aid system was apparent throughout the state’s response to Hurricane Katrina, that supplied more than 900 firefighters, 300 law enforcement officers, roughly 20 emergency management professionals, and in excess of 50 medical personnel who were deployed by the state to help the Gulf Coast states (IEEMA, 2006; ILEAS, 2012).

Illinois utilizes two key mutual aid organizations to organize, equip, train, exercise, and oversee special response teams (DHS-OIG, 2008). The two organizations used are the Mutual Aid Box Alarm System (MABUS) and Illinois Law Enforcement Alarm System (ILEAS) (DHS-OIG, 2008). MABUS, in partnership with IEMA, founded a statewide, non-discriminatory mutual aid response system for fire, EMS, and specialized incident operational teams (MABUS, 2009). Office of the State Fire Marshal, Department of Public Health-EMS Division, and Illinois Fire Chiefs Association share the effort to define a resource response plan to any location within the state upon a Declaration of Disaster and orders from the governor (MABAS, 2009).

MABAS and the plan provide a system of “one-stop shopping” for IEMA officials to activate and mobilize local municipal fire, EMS, and special operations assets (MABAS, 2009). Under the direction of the governor, Illinois assets such as State Police, Department of Transportation and numerous other state resources are able to rally; however the state does not own its own fire department, EMS ambulances or specialized operations (MABAS,
2009). MABAS provides significant “system” resources deficient from the state, which allows for the sharing of resources in an emergency (MABAS, 2009).

The second mutual aid organization used is the Illinois Law Enforcement Alarm System (ILEAS); which was created in 2002 in response to the September 11th terrorist attacks as joint venture of the Illinois Association of Chiefs of Police, the Illinois Sheriff’s Association, and the Illinois Emergency Management Agency (ILEAS, 2012). ILEAS runs the largest statewide local law enforcement mutual aid network in the United States, enabling agencies that have been affected by a disaster to utilize the strength of this mutual aid response (ILEAS, 2012). IEMA relies on ILEAS to coordinate large intra- and inter-state mutual aid responses of local law enforcement (ILEAS, 2012). Upon the request of the Governor, ILEAS deployed to Hurricanes Katrina and Rita disasters by contributing 300 local officers for assistance (ILEAS, 2012). ILEAS operates under the motto of “strength through cooperation” “…in matters of mutual aid, emergency response, and combining resources for public safety” (ILEAS, 2012, mission).

Illinois is also one of only eight states to receive full accreditation from the Emergency Management Accreditation Program (EMAP) by meeting 54 national standards (IEMA, 2006). The certification process evaluated the state’s emergency response capacity to standardize personnel, resources, and communications from a range of agencies and disciplines in preparation for and in response to a major disaster (IEMA, 2006). Work on the EMAP started at the end of the 1990s and the value of launching rigorous emergency management standards to be used throughout the nation was yet to be seen (EMAP, n.d.). Some areas of responsibility to be addressed involve areas of public health such as: detection and monitoring; fatality management and mortuary services; human services
(food, water, and commodities allocation); incident and needs assessment; mass care and sheltering; and public health and medical (EMAP, n.d.).

**Illinois Department of Public Health**

The mission of the Illinois Department of Public Health is to “promote the health of people through prevention and control of disease and injury” (IDPH, n.d., mission). IDPH was established in 1877 to standardize medical practitioners and to advance sanitation practices (IDPH, n.d.).

Illinois has been a pioneer in the realm of emergency preparedness, and public health in the state is no exception. The Illinois Public Health Mutual Aid System (IPHMAS), believed to be the first public health mutual aid agreement in the nation, provides resource sharing to areas devastated by a disaster (IDPH, 2004). The motivation behind the IPHMAS was the threat of bioterrorism (IDPH, 2004). The mutual aid agreement, however, is also a valuable tool for response after a natural disaster (IDPH, 2004).

**Colleges and Universities**

Colleges and universities present a unique set of characteristics to address when planning for emergencies. They are much like a community within a community, with separate emergency operation plans (EOP) from the city or county in which they reside. This poses challenges when coordinating emergency response and administration of the EOP during a disaster (U.S. Department of Education, 2010). There are a few planning guides that specifically address colleges and universities such as: *Building a Disaster-Resistant University* published by FEMA, *Action Guide Emergency Management at Higher Education Institutions* and *Practical Information on Crisis Planning: A Guide for Schools and Communities* both published by the U.S. Department of Education (DHS, 2003; U.S.
Department of Education, 2007, 2010). These documents provide valuable information specifically related to emergency preparedness for colleges and universities.

When a university engages in mitigation and planning for a disaster or emergency it should collaborate and form partnerships in the surrounding community with local and state government and businesses in the area (DHS, 2003). Most of the literature related to emergency preparedness and response on a college campus addresses violence in the form of mass shootings or active shooters. Recent mass shootings or natural disasters in the news on a college campus are:

- **August 1992-** The University of Miami (Florida) sustained $17 million in damage from Hurricane Andrew and with no water or electricity the university was forced to close for just short of one month (DHS, 2003).

- **January 17, 1994-** Northridge Earthquake (California) damaged three universities in the Los Angeles area causing an estimated $380 million in damages (DHS, 2003; Risk Management Solutions, 2004).

- **November 12, 2002-** Union University (Tennessee) sustained structural damage from an F1 tornado and 110-mile per hour winds (Horn, 2002; Kraus, 2002).

- **August, 2005-** Hurricane Katrina (Louisiana, Mississippi, Texas) left a wake of devastation and has caused many colleges and universities continued struggles (Mangan, 2010).

- **April 16, 2007-** Virginia Tech experienced the deadliest shooting in U.S. history, with a death toll that reached 33 and 15 others were injured by a single gunman who was a student (Angelo, 2007; Chordas, 2007; Vernon, 2010).
- February 5, 2008- Union University (Tennessee), campus was ravaged by an EF-4 tornado that affected over 1,200 students believed to be in the dormitories, trapping 13 in fallen rubble and sending 51 students to the hospital of whom nine suffering serious injuries (Black, 2008; Dockery, 2008).

- February 8, 2008- Louisiana Technical College, a nursing student shot two women and then herself in a classroom (Vernon, 2010).

- February 14, 2008-Northern Illinois University, a gunman, a former graduate student, killed seven students and wounded 15 others (Powers, 2008).

- August 2011- Hurricane Irene headed toward the east coast, which caused several colleges and university in Massachusetts, New Hampshire, and Vermont to adjust fall move-in days around the height of the storm (CBS Boston, 2011).

"Building a culture of prevention is not easy. While the costs of prevention have to be paid in the present, its benefits lie in a distant future. Moreover, the benefits are not tangible; they are disasters that did not happen" states Koffie Annan, Secretary of the United Nations (as cited in Risk Management Solutions, 2004, p. 11). Threats of terrorism, mass shootings and natural disasters have caused an increasing awareness among universities to take action towards becoming prepared and mitigating potential hazards (DHS, 2003). “It's been said a million times: You don't want to be introducing yourself at the scene of an actual incident” says Steve Morash, of Boston University (as cited in Schachter, 2009, p. 43). Campus Emergency Administrators promote not only relationships, but also collaborating to exercise preparedness and response plans with local responding emergency agencies (Schachter, 2009).
In the wake of the tragic event at Virginia Polytechnic Institute and State University (Virginia Tech), the Illinois Campus Security Task Force was formed and given the task to develop:

- training to assist colleges to prepare for, respond to and recover from emergencies
- grants to improve interoperable communications capabilities on campuses
- inclusion of college officials and campus security representatives to the multi-agency Illinois Terrorism Task Force (Office of the Governor, 2007)

"Campuses used to be open, inviting, and relatively safe places," said University of Kentucky's Lou Drapeau, "but we now live in a dangerous world, and campuses have gotten more dangerous" (as cited by Chordas, 2007, p.32). Ensuring the safety of students, faculty, staff, and visitors within the 'mini-town' setting of a university is of the utmost importance (Chordas, 2007; Office of the Governor, 2007). Melanie Magara, Assistant Vice-President for Public Affairs at Northern Illinois University (NIU), remembers the morning the Twin Towers fell and a comment by the university president, John Peters, who she describes as a "staunch advocate for emergency preparedness" (Auffermann, 2009, p. 12). "This is a huge wake-up call for all institutions—we absolutely have to have our plans in place and have practiced them and be prepared for any kind of emergency" said Peters (as cited in Aufferman, 2009, p. 13).

NIU President Peters observed in the Report of the February 14, 2008 Shootings at Northern Illinois University:

We realize this report brings neither comfort nor closure, but by sharing what we learned while dealing with this tragedy, we add information to the body of research on mass shootings that seem to increasingly plague our society.
While this report reminds us all of our darkest hour, it also demonstrates the power of a community pulling together in a time of tragedy. This collaborative spirit was evident in the swift action taken by the first responders. It was seen through the myriad ways agencies and universities from across the nation came to our aid. And it was most touchingly evident in the strength and courage of our students, families, faculty, staff, alumni, and community share with one another (NIU, 2010).

Beginning January 1, 2009, the Campus Security Enhancement Act created Illinois Senate Bill 2691, mandated the development of a campus violence prevention committee and campus threat assessment team (Office of the Governor, 2008). The Office of the Governor titled their announcement “Groundbreaking new law strengthens emergency response plans at all colleges and universities in Illinois” (Office of the Governor, 2008). Andrew Velasquez, former Director of Illinois Emergency Management Agency said, “our efforts to make Illinois’ higher education campuses more secure have only begun and will become even more aggressive...” (Campus Security Task Force, 2008, p. 2).

SUMMARY

The Institute of Medicine (IOM) identified five specific needs addressed in the CDC’s report Advancing the nation’s health: A guide to public health research needs, 2006-2015. This research will have implications for three of those identified needs: strengthening response systems (developing and evaluating integrated systems of emergency public health services and incident management); improving timely emergency communications (evaluating characteristics of effective risk communication in emergency settings and system enhancements to improve effective information exchange across diverse partners and populations under emergency conditions); and improving information management to
increase use (scenario modeling and forecasting; information and knowledge management tools to improve the availability and usefulness during crisis decision making) (Altevogt, Pope, Hill, & Shine, 2008).

Chapter II began with a description of a disaster from a sociological viewpoint. Most of the disaster and disaster or emergency preparedness is from the field of sociology and focuses on the human response and reaction to a disaster. This leaves a gap in literature on activation and administration of the emergency preparedness plan. One quantitative analysis of public health preparedness literature reported no articles addressing administration of the plan or emergency operations (Yeager, et. al, 2010) further stating, "emergency operations have a high public health relevance and their omission from the literature is an important area for future research (p. 447). There is one qualitative study of a university's response to a natural disaster that conducted interviews with 12 key informants (Fillmore, et. al, 2011). Additional gaps in research literature relate to university disaster preparedness and response plans. The studies that involve university preparedness focus on response to health emergencies and violence.

The majority of the chapter addresses federal, state and local agencies along with the policy, regulations and laws that outline the organizational structure of emergency preparedness and response to a disaster. The review also introduces university emergency preparedness, highlights significant university related events from disasters to violence, and summarizes the enactment of the Campus Safety Enhancement Act of 2008 in Illinois and the impact of disaster preparedness at a university.
CHAPTER III

METHOD

The purpose of this study was to describe a university's emergency management plan and its execution in response to a specific natural disaster. The study identified strengths and weaknesses of the university's response to the emergency. It also describes the student health center's and public health's role before, during, and after the disaster. This study also describes changes needed in the plan (if any), whether they have been completed, and why or why not. This chapter presents a detailed description of the research methodology used for this study. It includes information on the research questions, research design, population, data collection method and procedures, and data analysis techniques of the study.

Research Questions

1. In advance of the natural disaster how did the university's responders utilize the disaster cycle (e.g. preparedness, response, recovery, and mitigation) to prepare for an emergency?

2. How did the May 8, 2009 windstorm influence the university's view of emergency preparedness and what were the strengths and weaknesses of response?

3. What role did the student health services play in emergency preparedness at the university?

4. How did local public health officials participate in the preparedness, response, recovery and mitigation at the university?

5. What challenges remain when preparing for future disasters?
Research Design

Qualitative Research

"Qualitative inquiry is meant, like wine tasting, to demonstrate choices toward developing a more sophisticated palate, or like appetizers, as an opening to the fuller feast yet to come" (Patton, 2002, p. 9). Research is used to create a symbol for knowledge, power, and truth (Denzin & Lincoln, 2000). Qualitative research helps others find meaning of the startling situations that characterize daily life (Denzin & Lincoln, 2005).

Qualitative research is characterized as:

holistic; it looks at the larger picture... and begins with a search for understanding of the whole; looks at relationships within a system or culture; ... focused on understanding a given social setting, not necessarily on making predictions about that setting; requires the researcher to become the research instrument;

incorporates room for description of the role of the researcher as well as description of the researcher's own biases and ideological preference (Janesick, 1994, p.212)

Qualitative methods are used to “understand the ‘structure’ of a system; how interdependent individuals, groups, and institutional components function (or fail to function) together” (Berkwits and Inui, 1998, p. 197). Qualitative research places significance with the nature of reality, the personal connection between the researcher and the topic, and the situational restraints that mold the investigation (Denzin & Lincoln, 1994).

Catastrophe and social change: Based upon a sociological study of the Halifax disaster by Samuel Henry Prince (1920) has been cited as the first disaster research study (Phillips, 2002). In December 1917, the Halifax disaster resulted from a collision of two ammunition
ships that "shook the world" (Prince, 1920, p. 26). Prince utilized qualitative methods to study the event; disaster researchers today continue with the rich qualitative tradition (Phillips, 2002). Qualitative research allows for "...deep contextual foundation, emphasizing the time, place, and circumstances within which a disaster event, response, or process occurs" (Phillips, 2002, p. 199). Creswell (2007) suggests using qualitative research methods when a dilemma or question needs further exploration, the researcher wants to grasp the context of an issue, or because a detailed, multifaceted knowledge of the circumstances is needed.

Most of the disaster research has been completed in the social sciences, looking at the human response to a disaster. The public health emergency preparedness (PHEP) literature has centered on the planning or preparedness phase, while response, recovery, and mitigation have often been overlooked (Yeager, et. al, 2010). By focusing on the May 8, 2009 windstorm, I hoped to learn how the team perceived and reacted to real-time emergency operations and response.

The qualitative researcher collects data in the natural setting. The researcher is the instrument, uses multiple data sources, an inductive approach to data analysis, focuses on participants' meanings, provides a holistic account, interprets what he/she sees, hears, and understands (Yin, 1994; Esterberg, 2002; Maxwell, 2005; Creswell, 2007; Merriam, 2009; Daymon & Holloway, 2011).

In qualitative research the researcher is the instrument of data collection and analysis; therefore reflexivity is regarded as crucial (Merriam, 1998; Stake, 1995). It is thought that during reflection the researcher's beliefs and actions may influence the analysis (Watt, 2007). Journaling provides the means for the researcher to carry on a
conversation with him/herself examine "what they know and how they think they came to know it" (Watt, 2007, p. 84). This process will also allow the researcher to examine biases and beliefs regarding the research (Ulin et al., 2005; Merriam, 2009). Maxwell (2005) and Merriam (2009) argue for this process of "reflexivity" to address threats to validity, "to understand how you are influencing what the informant says, and how this affects the validity of the inferences you can draw from the interview (emphasis on original)" (Maxwell, 2005, p. 109).

Case Study

Case studies for research purposes are conducted in a variety of situations, including organizational studies, disaster research and health sciences (Neutens & Rubinson, 2010; Yin, 1994; McEntire, 2007). Case studies are the favored approach when research questions are "how" or "why" (Yin, 1994). For example, the case explored in this study was a university emergency management plan and how the student health center and public health are involved before, during, and after an emergency or disaster.

A semi-structured interview guide was developed reflecting the four-phase disaster cycle: preparedness, response, recovery, and mitigation (FEMA, 2004; Schwab, et. al, 2007). Neal (1997) reported that the four-phase cycle characterizes the groundwork for disaster-management system in practice and research today. Using open-ended questions, the interview guide walked the participants through their background, years of experience, specialized training, structure of the command center, and involvement with the All-Hazards Emergency Response and Recovery Team, and their activities during the May 8, 2009. Additional open-ended probes were used to gather in-depth information about
experiences, actions, and perceptions regarding the process of emergency management in general and at the university.

**Study Setting**

Southern Illinois is home to many attractions, from the Shawnee National Forest to Southern Illinois University-Carbondale. The Mississippi, Ohio, and Wabash Rivers border it on three sides with numerous other rivers navigating throughout the countryside. Southern Illinois contains an eclectic mix of wooded hills, farms, underground coalmines, strip mines, low marshlands, and sprawling urban areas.

Southern Illinois is home to the Salukis at Southern Illinois University-Carbondale, founded in 1869 as the state's second largest teachers college and has an average enrollment near 22,000 students with 4,600 residing in on-campus housing and over 5,000 faculty and staff members (Southern Illinois University-Carbondale). Situated in the southwest portion of Southern Illinois, SIUC is located within Jackson County. The main campus is positioned within the City of Carbondale, which is approximately 60 miles northwest of Paducah, Kentucky, and around 100 miles southeast of St. Louis, Missouri. The City of Carbondale's population of around 27,000 residents combined with SIUC's numbers, nearly doubles the population when school is in session. The main campus of the University covers approximately 1,113 acres and 6.2 million square feet of building space from 249 academic and residential buildings. The off campus facilities include the University Farm, Touch of Nature, the Carterville Campus, and Southern Illinois Airport that account for an additional 124 buildings and 5,528 acres of land.
My Role as Researcher

There is much to be said for researcher bias, both as a positive and negative for qualitative research. In qualitative research the researcher is the instrument and brings with them a bias when analyzing and reporting the data. My own 20-year career that encompasses experience as a nurse in the hospital and in the emergency department, fire service, EMS, and most recently academia provided me a unique research approach while also shaping how I scrutinized the data gathered. Having been in the Operations sector for years prior to moving to the Planning sector has allowed me to view the issue from the bottom up and the top down.

Anselm Strauss states, “experiential data should not be ignored...rather mine your experience, there is potential gold there!” (1987, p. 11). Complete objectivity is impossible; however being aware of my background and experiences allowed me to develop balance with my past and my current research. I used reflexivity as a reminder to be “attentive to and conscious of the cultural, political, social...ideological” basis of my “perspective and voice as well as the perspective and voices” of those I interviewed (Patton, 2002, p. 65). To capture the true the emic, or “insider’s perspective,” I will use quotations from the interview transcripts, while using a reflexive journal to provide balance between my “outsider’s view,” or emic, and the perspective of the participants.

My interest in emergency preparedness and my background in the fire service and EMS allowed me to assist and witness some disaster drills on campus. When it came time to learn more regarding emergency preparedness on campus I contacted the All-Hazards Resource Officer. We had met before once socially through my husband and the second time during a disaster drill. My husband had been a police officer at SIUC in the late 1990s
and worked with the Resource Officer. When I phoned him to make arrangements to meet I reminded him of our previous introductions. He became the gatekeeper into additional opportunities to participate first hand in all-hazards preparedness on campus.

Data Collection

Prior to data collection an Institutional Review Board (IRB) application was completed and submitted. Data collection for the reviewing of documents and interviews began after IRB approval from the SIUC Human Subjects Committee was granted (Appendix A). Research participants were chosen based upon their involvement with the May 8, 2009 windstorm or “Super Derecho” Campus Emergency Operations Center. These participants included individuals from Center of Environmental Health and Safety, Counseling Center, Department of Public Safety, Student Recreation Center, Student Center, University Housing, University Communications, and University Risk Management; and other individuals identified through the interview process.

Documents

I received electronic copies of documents generated during the response and recovery from the May 8, 2009 windstorm from the current All-Hazards Preparedness Resource Officer. University Risk Management and Department of Public Safety fund the All-Hazards Preparedness Resource Officer. The position was created to be a liaison between federal, state, and local government for the university related to all-hazards emergency preparedness. The electronic documents received included damage assessment and costs, press releases from IEMA, NIMS forms, and situational reports. I received Unit Logs (NIMS-ICS 214 Form), which provide a record of the activities. The situational reports are designed to give objective details of an event. I was also given a copy of the Campus All-
Hazards Emergency Response and Violence Prevention Plan that was in place at the time of the 2009 windstorm.

**Situation Reports.** I received situation reports from the following departments: Center for Environmental Health and Safety, Counseling Center, Department of Public Safety, Information Technology, Purchasing, Student Recreation Center, Student Center, University Housing, University Communications, and University Risk Management. I also received the situation report for the Campus Emergency Operations Center. Departments not having a situation report for the May 8, 2009 storm were Student Health Services and Plant and Service Operations.

**IEMA, FEMA, and NIMS Reports.** Folders labeled IEEMA (Illinois Emergency Management Agency), FEMA (Federal Emergency Management Agency), and NIMS (National Incident Management System) were also included electronically. The IEEMA folder contained press releases from the Illinois Emergency Management Agency for: Public Assistance Program Applicant’s Briefing; Franklin, Jackson, and Williamson Counties Disaster Declaration; and State Emergency Operations Center Activation. The Federal Emergency Management Agency folder contained an additional copy of the IEEMA Press Release regarding the Public Assistance Program Applicant’s Briefing. The NIMS folder contained “ICS Forms” or the Unit Log (NIMS/ICS 214 Form) for dates May 8, 2009 through May 20, 2009. For the forms with dates May 13, 2009 through May 20, 2009, no data was contained on the document. The Unit Log forms dated May 8, 2009 through May 12, 2009, were not completed; minimal data was listed and did not have any names listed under “Personnel Roster.”
The situational reports and other IEMA/FEMA documents enabled me to develop a partial list of individuals involved with the response to the incident. While many responders were identified in the situation reports, not all were included, so it was therefore determined to use an additional snowball technique to capture as many of the participants as possible. A snowball sample includes participants identified by the researcher, and any other persons referred by the interviewees (Cottrell & McKenzie, 2011). The snowball method was also used to identify or refer additional potential participants outside the university the interviewees felt would provide the best account of events from their respective departments (Creswell, 1998; Lincoln & Guba, 1985). Those agreeing to be interviewed were also asked to provide names of additional individuals to interview. I compiled a list of 34 names of individuals present in the Campus Emergency Operations Center during the May 8, 2009 windstorm. I completed 15 interviews with members of the All-Hazard Response and Recovery Team from the May 8, 2009 windstorm and eight interviews with local, regional, or state public health, emergency management, and law enforcement individuals for a total of 23 interviews. Two individuals declined to be interviewed, one person was deceased, and 15 others were unreachable via phone calls or email. Through the snowball process I was given the names from the local Emergency Management Agency, local health department, Illinois Emergency Management Agency, Illinois State Police Officers, and a retired Illinois State Police Officer who works with the Illinois Board of Higher Education and colleges and universities across the national training on school safety.

I began contacting potential participants by phone to begin to establish rapport and arrange an interview at their convenience. The interviews took place between late summer
into early fall. Two participants requested a copy of the interview questions prior to their scheduled interview; questions were sent via email. Sending the interview questions prior to the interview allowed the participants to gather information they felt pertinent to the setting of the study. I scheduled two to three interviews per week and only for one week at a time. This kept rescheduling issues at a minimum. Only one interview requested to be rescheduled and one participant forgot about the interview; however I was able to complete it the same day.

Table 3.1

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<th>Interview Participants</th>
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<td><strong>Cast of Characters</strong></td>
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<td>Illinois Emergency Management Agency</td>
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Interviews took place in locations of convenience of the interview participant generally their office or a conference room near their office. One participant requested to meet at Panera Bread® in Decatur, Illinois near his home. Upon arrival for interviews, I was able to quickly build and establish rapport with the individual and then begin the interview. I had previously met 12 of the 23 interview participants and my husband had worked with four of the 23 interview participants. I began by introducing myself and thanking the participants for sharing their time and thoughts with me.

Prior to beginning each interview, informed consent was discussed and reviewed (see Appendix B). The consent form explained the purpose and voluntary nature of the study. I also discussed the confidentiality and sensitivity related to the research project. The consent form granted permission to audio record the interview discussions. Information regarding who had access to the data and the destruction of the audio recording was also presented. A copy of the consent or assent form was signed by the participant. When the interview was completed I once again thanked the participant for taking time to help me with the study.

Interviews are often used in the case study method to spotlight on a particular individual, circumstance, or organization (Kvale, 2007). I conducted in-depth exploratory interviews looking retrospectively at the All-Hazards Response and Recovery Team's view of preparedness, response, recovery, and mitigation and other individuals identified
through the interview process. Team members include, but are not limited to, individuals from 12 'key' departments or Primary Units, faculty, and key administrators (see Appendix E).

I began the interviews with the All-Hazards Resource Officer at the time of the May 8, 2009 windstorm. During his interview I asked for names of individuals he remembered being in the CEOC, which I crosschecked those names to the list I had developed. The All-Hazards Resource Officer acts as the liaison between the Illinois Emergency Management Agency and the Federal Emergency Management Agency during a disaster. A list of All-Hazards Response and Recovery Team members was created using Microsoft Excel spreadsheet to include their name, department, phone number, interview date, and additional notes or comments. The original list consisted of 35 names and from that list three people declined to be interviewed, one person was deceased, and 16 were unreachable.

Every attempt was made to contact the individuals who were involved during the execution of the Plan during the disaster. Several individuals who were identified through the situation reports and through interview participants as being present in the CEOC had left the university, retired, or passed away since the event. Those agreeing to participate in an interview were given names of individuals no longer at the university to learn of their role and determine their involvement in the CEOC during the storm. CEOC participants identified in the snowball process did not respond to multiple telephone contacts. Therefore, a revision of the IRB was made to include email solicitation of participants without success (see Appendix C).
One person I did not solicit an interview from was the Director of Public Safety. The Director served as Incident Command during the May 8, 2009 windstorm, but holds a seat on my dissertation committee. The Director of the Department of Public Safety played a central role developing and writing the Campus All-Hazards Emergency Response and Violence Prevention Plan (CAHERVPP). Due to the sensitive nature of the information seeking during the interviews the Director of Public Safety was excluded. The decision to do so was agreed upon by the entire committee. However, information sought could be gathered through other members of the All-Hazards Emergency Response and Recovery Team. The Director was also in my husband’s chain of command during his employment as a police officer at SIUC.

**Data Analysis**

Following each interview I made field notes to be used during data analysis. I transcribed the audio recording of the first interview verbatim. I allowed myself approximately four to six hours to complete the transcription; however the first interview which lasted just over an hour took me over 15 hours to transcribe. This was the first of many underestimations I made during my data analysis and interpretation. After the first interview I solicited a professional transcriptionist to complete the task for me. While waiting to receive interview transcripts I listened to the audio recordings several times each and made written notes of themes that emerged from the data. Once the transcription was returned, I reviewed them for missing information and accuracy.

There is no one-way to analyze qualitative data. Denzin and Lincoln (2005) explain state the interpretive bricoleur produces a bricolage, “a pieced-together set of representations that is fitted to the specifics of a complex situation” (p. 4). The bricoleur’s
methods are evolving, which takes new forms as the bricoleur adds “different tools, methods, and techniques of representation and interpretation to the puzzle” (Denzin & Lincoln, 2005, p. 4). Becker (1992) compares bricolage to the art of quilt making by using “the aesthetic and material tools of his or her craft” (p. 2). Denzin and Lincoln further state the selection of “which interpretive practices to employ are not necessarily made in advance” (p. 4). According to Weinstein and Weinstein the meaning of the bricoleur as someone who “is practical and gets the job done” (p. 161).

As I waited for the transcripts of interviews to be completed and returned to me, I listened to the audio recordings to gain an overall impression. I then made memos to myself regarding interesting passages comparing the overall impression from the interview to experiential data Strauss describes as the researcher’s technical knowledge, research background, and personal experiences (1987). I also considered Drabek’s (2005) article Predicting Disaster Response Effectiveness and Quarantelli’s (1997) article Ten Criteria for Evaluating the Management of Community Disasters while listening to the audio recordings and the transcripts once they were received.

Data findings were presented in chronological order beginning with the events leading up to the Campus Safety Enhancement Act and the Campus All-Hazards Emergency Preparedness and Violence Prevention Plan. Then I transitioned to the May 8, 2009 windstorm, the “Super Derecho” and activation of the Campus Emergency Operations Center during the response and recovery to the windstorm. Lastly, I discuss overarching events and themes that emerged during the analysis and interpretation of the data.
Triangulation

Patton promotes triangulation to add to verification and validation of qualitative analysis:

“(1) checking out the consistency of findings generated by different data collection methods, that is, methods triangulation; (2) examining the consistency of different data sources within the same method, that is, triangulation of sources; (3) using multiple analysts to review findings, that is, analyst triangulation; (4) using multiple perspectives or theories to interpret the data, that is, theory/perspective triangulation” (1999, p. 1193).

The goal of triangulation is to test for consistency, which is done by utilizing multiple theories, methods, and data sources (Denzin, 1978; Patton, 1999; Babbie, 2004). I used data triangulation via interviews of All-Hazards Recovery and Response Team members and community emergency preparedness individuals and document analysis to gain a better understanding of emergency preparedness at the University. A combination of these methods assisted to substantiate emerging findings and add to the validity of the study (Patton, 1999).

Generalizability

Enhancing the generalizability is achieved through thick, rich descriptions of the analysis of a cultural experience from the outlook of someone who is a participant in the studied culture (Maxwell, 2005; Merriam, 2009). A vivid description of the context will allow the reader to interpret parallels and apply potential interdisciplinary knowledge to the subject matter and his/her own situation; which also permits for maximum variation
(Merriam, 2009). Maximum variation allows for intentional relevance of the findings to multidisciplinary topics or concerns (Babbie, 2004; Maxwell, 2005; Merriam, 2009).

I made several attempts to walk away from that former life, walk away from my past, but I have learned those events have shaped who I have become and cannot be ignored. I have found it difficult to compartmentalize each aspect of my personal, professional, and academic career and drawing boundaries and not make assumptions of when I know study participants challenging.

Due to the delicate nature and sensitive subject matter of the inquiry and relationship between the researcher and the interview subject great care has been taken to ensure participants were not identifiable in anyway. Results of the study have been reported in aggregate to maintain confidentiality of the participant’s answers.

**Summary**

The design for this study was qualitative using the case study method. Data was generated from interviews, analysis of documents, archival records, and reflexive journaling. Data analysis using the bricolage approach was used to help answer the research questions.
CHAPTER IV
FINDINGS

"In times of stress we do not rise to the occasion, rather we rise to the level of our preparedness." —Lt. Col. (Ret.) Dave Grossman

The focus of this chapter is the presentation of data from this qualitative case study.

Research Questions

1. In advance of the natural disaster how did the university's responders utilize the disaster cycle (e.g. preparedness, response, recovery, and mitigation) to prepare for an emergency?

2. How did the May 8, 2009 windstorm influence the university's view of emergency preparedness and what were the strengths and weaknesses of response?

3. What role did the student health services play in emergency preparedness at the university?

4. How did local public health officials participate in the preparedness, response, recovery and mitigation at the university?

5. What challenges remain when preparing for future disasters?

THE PLAN

The tragic events at Virginia Tech shootings led then Governor Rod R. Blagojevich and the State of Illinois to establish the State of Illinois Campus Security Task Force. This group included leaders in education, law enforcement, mental health, and public safety. The ICSTF was given the mission of:

developing and implementing comprehensive, coordinated policies and training programs to deter, prevent and significantly enhance response to, and recovery
from, major public safety incidents at all higher education campuses, public and private, in Illinois (ICSTF Report to the Governor).

The multidisciplinary ICSTF represented over 75 organizations from the response, mental health, legal, and higher education communities. The Report was to be used as a tool for campus leaders and their neighboring communities to enhance all aspects of campus security including: prevention, response, recovery, and related legal issues. The ICSTF was further broken down into the Response Committee, Prevention and Mental Health Committee, and Legal Committee; each of these committees presented recommendations for consideration, implementation, and utilizations statewide.

Just shy of the one-year anniversary of the Virginia Tech shooting and two-months after the Northern Illinois University the ICSTF presented their recommendations to Governor Blagojevich the report was presented. Blagojevich said, “while we cannot recover the losses of the past, we do have a responsibility to bring meaning and purpose from these terrible events (ICSTF Report to the Governor).”

The ICSTF put forth an extensive list of findings along with over 25 recommendations to Governor Blagojevich and the State of Illinois. The ICSTF also took decisive actions to boost campus safety around Illinois by conducting a comprehensive survey of mental health services on higher education campuses, provided all-hazard campus safety preparedness, and began providing 303 Starcom21 700/800 Mhz radios and training higher education campuses on their use. According to the Mutual Aid Box Alarm System (MABAS) the intent was to “provide all fire, police, EMS, and Emergency Management agencies with a method of interoperable communication.”
The next steps the ICSTF recommended was fundamental legislation to necessitate emergency planning and violence prevention planning for all Illinois higher education institutions. The 2008 Campus Security Enhancement Act to call for the development, implementation, training, exercise annually: “(1) an all-hazards emergency response plan; and (2) a comprehensive violence prevention plan including development of campus violence prevention committees and threat assessment teams” (Blagojevich, 2008). ICSTF proposed that city and county emergency managers and IEMA regional coordinators collaborate on these plans to help campus public safety agencies take necessary steps to protect lives and property.

For higher education institutions to support these suggestions a recommendation to provide State funding towards enhancement of campus security was presented as the Campus Security Enhancement Grant Program. This Grant Program was intended to:

1. create a full-time campus security coordinator and liaison at the Illinois Board of Higher Education and at the Illinois Community College Board; (2) Support the development and implementation of a three-day campus security training program for campus and surrounding community officials; (3) support the development and implementation of a two or three-day campus violence prevention program to assist campuses with developing violence prevention communities and threat assessment teams; and (4) create a Competitive Grant Program that will provide merit-based funding for the enhancement of campus security to higher education campuses statewide.
The Report also stated it was the consensus of the ICSTF to continue its endeavors in reaching the mission of the Committee. The ICSTF outlined additional steps to promote emergency and security planning and best practice exchange.

On February 15, 2008 and May 13, 2008, future Public Act 095-0881 was introduced during the 95th General Assembly to the Senate and House respectively. This Bill received sponsorship from seven individuals in the Senator and five in the House of Representatives. It took just over six months to traverse through the Rules, Executive, and Higher Education Committees in both the Senate and the House before arriving to be approved by the Governor on August 22, 2008. Public Act 095-0881 would be cited as the Campus Security Enhancement Act of 2008 and take effect on January 1, 2009 (see Appendix G).

On June 5, 2009, the state’s Joint Committee on Administrative Rules (JCAR) completed the campus security-related rules package proposed by IEMA given the title of “All Hazards Campus Emergency Plan and Violence Prevention Plan”. Many provisions proposed as mandatory in the initial version of the rules became advisory actions in the final version of the JCAR Title 29 Illinois Administrative Code Part 305 (see Appendix H).

Partnering together, IEMA and Center for Public Safety and Justice (CPSJ), to advance campus security will provide all colleges and universities technical support in emergency planning. According to the Campus Security Enhancement Act of 2008, every institution of higher education must develop an inter-disciplinary and multijurisdictional all-hazards emergency response plan meeting the requirements of National Incident Management System (NIMS). This Plan must also contain training and exercise components to occur at a minimum annually.
Campus All-Hazards Emergency Response and Violence Prevention Plan

The Campus All-Hazards Emergency Response Team represents a broad cross-section of the campus community, which includes administrative units, academic representatives, service related components, etc. Through day-to-day life on campus Team members have the opportunity to work together, develop rapport, and collaborative relationship.

SIUC's Campus All-Hazards Emergency Response and Violence Prevention Plan (CAHERVPP or the Plan) meets or exceeds the requirements set forth in Title 29 Illinois Administrative Code Part 305. Section 305.40 encourages 'Basic Plan Guidelines' and 'concept of operations' section which means plans are written in generalized terms and able to be adapted depending on the situation or emergency. This structure allows for flexibility of response while making every "attempt to follow the normal existing University operational structure as closely as possible (p. 19)." The CAHEPVPP encompasses the four phases of emergency planning: Prevention/Mitigation, Preparedness, Response, and Recovery. The CAHEPVPP is coordinated with the:

- Jackson County Emergency Management Plan
- City of Carbondale Emergency Management Plan
- Illinois Emergency Management Plan
- National Incident Management System
- Campus Security Enhancement Act of 2008
  - 29 Ill. Adm. Code 35

The goal of Southern Illinois University Carbondale and the All-Hazards Emergency Response and Violence Prevention Plan (CAHERVPP) is to prepare and coordinate
actions to promote continuity of operations and to minimize loss of life and
property damage caused by natural and/or man-made disasters.

The CAHERVPP was developed in accordance with the Campus Security
305. Every higher education institution is required to use the National Incident
Management System to develop an inter-disciplinary and multi-jurisdictional campus all
hazards emergency response plan. The CAHERVPP supplies assistance for SIUC to provide
training and exercises to be carried out in accordance with the Plan.

SIUC’s CAHERVPP was in draft form, however it had been updated to include the
changes set forth by the Campus Security Enhancement Act of 2008 dealt mostly with
addressing the increased violence of college campuses and did not greatly impact the all-
hazards portion of the Plan. The Director of Public Safety was appointed as a member of the
ICSTF and provided guidance to the University and Campus All-Hazards Response and
Recovery Team (the Team) to make appropriate updates and revisions prior to the storm,
activation of this Team, and execution of the Plan during a real-time emergency. After the
Plan received approval and signatures of the 12 Primary Unit Directors the plan received
final approval in May 19, 2010 by the interim chancellor.

**The Weather Emergency**

**Thursday, May 7, 2009 into Friday, May 8, 2009**

During the overnight hours of Thursday, May 7, 2009 into Friday, May 8, 2009
springtime thunderstorms rolled into southern Illinois. These storms had a lot of lift and
energy to "juice it up," producing golf ball sized hail that pelted the region. Many of the
same locations that were affected by the overnight storm would receive the brunt of additional storms throughout the morning and afternoon on Friday.

The local television meteorologists had been watching the forecast charts approximately a week and a half prior to the windstorm on May 8th. Approximately three days prior local meteorologists saw a slight risk for severe weather and shared the predictions with the viewing area. Schedules for the television station were altered in advance to reflect the forecast, staff was encouraged to pack lunches, and prepare for a long day.

When southern Illinois woke up the morning of May 8, 2009 many anticipated a weekend filled with significant events. It was graduation weekend at SIUC and Mother’s Day weekend. The hotels throughout the Carbondale, Murphysboro, and Marion area were booked with family and friends to help with the weekend celebrations planned and area restaurants prepared for the influx and boost in the economy sure to come with the weekend events. Family, friends, and honored guests converged on Carbondale, Illinois to begin the festivities. After the round of thunderstorms went through in the early morning hours, the clouds broke and the area basked in sunshine for several hours during the mid to late morning.

Meanwhile, the atmosphere at the television station was tense as the meteorologists watched the charts, preparing for what was to come. In the Weather Center it was all business, “a roll up your sleeves, sweat on your collar, tie loosened up” type of event. There was an intensity of watching the charts and checking for updates in the Weather Center, while the News Room waited. “In the business breaking news is good news, good news
meaning we would like to cover it.” Soon there would be news to cover and “you could
almost feel the energy... a scared anticipated giddiness pulsing off the News Room.”

In the Weather Center they watched and waited for “go time.” According to one local
meteorologist they knew days in advance of the potential for really bad storms, “we had to
be calm, we were ready and waiting... ready to save lives.” Empty energy drinks litter the
trashcans throughout the station; the meteorologists worked 22 hours straight through the
storms “going on 200% energy the entire time” functioning at peak during the storm.

**Friday morning 10:00 a.m. through 1:00 p.m.**

Gathered in the SIU Arena at 10:00 a.m. were the Master’s degree candidates, their
families, friends, and faculty. An announcement was made prior to the ceremony that the
area was under a severe thunderstorm warning and had the potential to produce
tornadoes. The crowd was informed should there be an immediate threat, the sirens would
sound and instructions would be given. The arena is designated a storm shelter and the
graduation ceremony was held without incident. Around that same time on Friday,
morning buildings around the campus were preparing their staff for an approaching storm
by monitoring the weather online. Over the next three hours numerous storm warnings
would be broadcast over the ENS (emergency notification system) radios. Multiple tornado
and thunderstorm advisories, watches, and warnings for southern Illinois were issued by
the National Weather Service; the City of Carbondale was prepared to activate the audible
warning system if needed; and frequent weather updates were posted to the University’s
Announcement Line according to situation reports.

The City of Carbondale has eight audible sirens throughout the town. The city’s
Emergency Management Services activates the sirens in the event of an emergency,
including those on the SIU campus. There are five of the eight loudspeakers and audible sirens located across campus; only three of the eight sirens located throughout Carbondale are hooked to a battery backup system with the closest being approximately one mile north of campus. According to a Department of Public Safety representative stated, "the sirens on campus were sounding until the power went out."

At 11:30 a.m. the National Weather Service in Paducah, Kentucky reported Thunderstorm Wind Damage near the Union/Pulaski County line [approximately 30 miles southwest of Carbondale] resulting in many trees and power-lines down. Between 11:30 a.m. and 1:20 p.m. numerous reports of hail near two inches in diameter, multiple sightings of tornadoes, flash flooding, visibility reduced to less than one city block, torrential downpours, and significant structural damage in Franklin, Jackson, Perry, Williamson, and Union counties (National Weather Service). By 1:25 p.m. Carbondale became virtually impassable due to the debris as the result of the 70-80 miles per hour winds that whipped through southern Illinois. Widespread structural damage ravaged the area, including a roof collapse on a local school. Multiple injuries were reported, but no life threatening injuries at this time (taken from Situational Report).

Jackson County EMA spent the morning of May 8th on a conference call with the National Weather Service to discuss the potential for significant storms approaching. Trained spotters were notified to be ready and expect 80 plus miles per hour winds. Prior to an expected event, such as the severe weather experienced, the EMA gathers “disaster intelligence” or “pre-disaster intelligence” of what is happening and when it will happen.

A local meteorologist described the approaching storm system as odd:
something that no one had ever seen in lifetimes, a once in a lifetime storm. The National Weather Service handled the situation amazingly by issuing tornado warnings without any tornadic signature. When they look at radar at the Weather Service Office, they are looking for rotation in the clouds, which on radar shows up with green and red moving in different directions (taken from interview).

Due to the oddity of this storm system, seeing 100 mile per hour winds on the radar, but no rotation, a tornado warning confused some people according to a local meteorologist. “There is no easy way to describe a throw echo with a rotating comma head and 90 miles per hour winds wrapping around the outside.” This “comma head” of a bow echo produced what became known as the southern Illinois ‘inland hurricane’ because the storm swirled in a counterclockwise motion, much like a hurricane.

At 11:41 a.m. and 12:37 p.m. the emergency notification system radios were activated with Tornado and Severe Thunderstorm Warning information issued from the National Weather Service. Several other activations occurred during this time and after 1:00 p.m., when the major storm event hit campus (situation report).

**Friday afternoon prior to the storm**

A major storm arrived at 1:00 p.m., which would later be called a “Super Derecho” by the National Weather Service, hits the campus of SIUC, Carbondale, Jackson County, and five other counties along and adjacent to Illinois Route 13 east into and including Saline County. Sustained winds by the National Weather Service were recorded at over 80 miles per hour in Marion and Carbondale and a reading on a private anemometer showed a gust of 106 miles per hour.
Emergency response following an emergency begins locally, meaning in the case of the university, the university itself is the responsibility of the University. In the event an emergency surpasses the capabilities of the University, according to the Campus All-Hazard Emergency Preparedness and Violence Prevention Plan assistance is sought locally from the city, county, neighboring towns, counties, private groups/organizations, and volunteers. The next level of response when local means are exhausted or surpass capabilities is via Illinois Emergency Management Agency (IEMA). Assistance is requested via the State’s EOC that State or Federal assistance is requested. Numerous Mutual Aid Agreements and Memorandum of Understandings (MOU) exist to provide local, regional, and state-to-state assistance prior to requesting federal assistance, which would be sought only when local resources are exhausted.

Storm sirens sounded on campus and faculty, staff, students, and visitors were urged to seek shelter following pre-designated emergency procedures for their building’s plans. Staff was positioned at the exits to assist individuals entering the building seeking shelter and to keep people away from doors. Countless trees fell just preceding and during the storm breaking windows, smashing cars, and damaging rooftops. Residence Life staff initiated emergency protocol for student housing residents, making announcements over the public address (PA) system giving instructions for residents to seek shelter in their bathrooms or the basement. Over at the Student Recreation Center staff directed everyone to the designated shelter, the locker rooms. Although staff were directing everyone to seek shelter immediately, nine participants reported people trying to leave the buildings regardless of the warnings and storm sirens sounding.
The Director of the Student Health Services remembers they were “having clinic” or seeing patients when the storm hit. He recalled that it was the second time that Friday the storm sirens had sounded and he “wasn’t taking it real seriously and I had walked out in the lobby and watched a tree right across the street smash a car.” As the Director of the Student Health Services is sharing his recollections of the events from the day of the storm, he is looking up as if he is picturing the day in his mind.

An Associate Director from the Student Center recalls, “funny how fresh that feels like in my memory.” She shared, “the first storm rolled through a couple of hours before and it was still really dark out.” She remembered having the radar up on the televisions and listening to the radio, “if you watched it you could see it was cyclic, you could see it twisting...I was thinking ’this isn’t over.’”

The Associate Director of the Student Center stated she went floor to floor, office to office sharing, “we aren’t sure what the storm is going to do...we are still under a warning...be prepared to bring everyone to the basement...know who is on your floor.” She remembered talking to her staff about individuals in wheelchairs and being prepared, “we had the sense it could be an ugly storm.” As the last day of finals week, “there weren’t a lot of people around...it was pretty quite...I was eating lunch in the Roman Room when all of sudden the doors blew open then slowly shut.” I could visually see her body tense as she shared her memories of the storm, “that was a serious pressure change or something...I went back downstairs and started watching the radar.” As she looked up and past me she recalled, “I could see it was spinning and it was getting closer...we just everyone prepared.” She and other staff got everyone prepared and gathered the weather radios. As she continued last minute preparation, “it started getting bad then the first warning came so
we did an all-call to get everyone to come to the basement." She recalled, "well we tried to get everyone to the basement...there were people who wanted to watch." Staff at the Student Center were 'manning' certain doors to direct anyone down to the basement, and "then we just kind of watched and waited for it to hit." She stated, "all the clocks stopped at 1:26 for 3 days."

Approximately 1:00 p.m. the university's Department of Public Safety's one telecommunicator was inundated with 911 phone calls, which included fire alarms, reports of a gas leak, injured persons, and property damage. A light duty police officer and a second telecommunicator were assigned to assist with the call volume. Calls were also made to notify authorities of a gas leak at the university's farms, alert the railroad of trees on the railroad tracks (that run parallel to campus), etc. Campus police transported a student to the hospital with a non-life threatening injury and another person was taken by private vehicle. Hundreds of phone calls poured in and were triaged. Officers quickly addressed those calls that reported injuries or safety issues.

Between 1:00 p.m. to midnight, the Southern Illinois University Carbondale-Department of Public Safety telecommunications received over 1,000 911 and seven digit phone calls. Scores of them were 911 "rollover calls" from Carbondale Police Department and Jackson County Sheriff's Office. In the event an emergency call cannot connect to the primary number, the phone system automatically "rolls it over," forwarding it to a special or backup phone number, which is established when the phone system is installed.

Approximately 1:00 p.m. The Storm Hits

The Student Center Associate Director stated, "the sheets of rain were coming down sideways..." She shared remembering a female student and young man coming up to the
front door of the Student Center asking, "can we come to your basement...the roof just blew off our apartment (formerly Campus Habitat) and we didn't know where to go." She stated, "we became a safe place for people...and we kept them here as long as we could once we got cleared." She remembered inviting those who sought refuge in the Student Center basement upstairs and told them, "we aren't sure the what the situation is outside, we knew their was strong winds and heavy rains because we could see it" and gave them the option to leave while telling them "we don't know if this is over."

It was move out day and the storm was bearing down on southern Illinois and the University, people could be seen carrying boxes, crates, and suitcases out of the residence halls despite storm sirens sounding. A Housing Associate Director stated, "we had more parents and families on campus in that [move-out] process and some of the parents were the least well behaved in the storm." She shared, "we were trying to get people into the shelter...except they were still loading their cars and bringing stuff out of the buildings." She quietly giggled and said, "you can see kids with suitcases flying over their heads...still loading cars."

I was shown actual footage of a university surveillance camera from Schneider Hall, "now remember the sirens were sounding until the power went off...so it was 1:22...this was move-out day...now you can see the wind...what I want you to see is how the people are ignoring the sirens," stated a Department of Public Safety officer. As we continued to watch the video footage he stated, "you will see something happen that changes things...this wind came at 100 mph (a tree falls barely missing an individual walking on the sidewalk)...look at this guy take off running." As the video continues he points to the computer screen and says, "did it stop anybody? Watch the wind blow this person, he can't
even walk straight." He further stated, "people were ignoring the warnings, if it weren’t move-out day it would have been devastating here at SIU."

The Director of the Center for Environmental Health and Safety recalled that afternoon, "was really a little scary...the fact that it last so long." He stated, "those flat line winds...it seemed like forever, but I'm guessing eight or ten minutes." The Center for Environment Health and Safety does not have a basement; therefore staff, "got into our safest zone by inside walls." He recalled it "looked like the Wizard of Oz outside...tree limbs were just blowing by...it was like, uh-oh this is not good." The general consensus according to the Center for Environmental Health and Safety Director was "it is not just a bad thunder storm coming through."

Two Associate Directors at the Student Recreation Center recalled the facility being "kind of empty." As they sat and talked prior to the storm's arrival one said, "this looks like a hurricane and we joked." One of the Associate Directors had worked for a university in Florida prior to returning to southern Illinois, recalled being there through four hurricanes in 2004: Charley, Frances, Ivan, and Jeanne. As the storm sirens sounded staff at the Student Recreation Center directed everyone to the locker rooms, which is the designated shelter place.

The Associate Director of Residence Life (Housing) recalls her official start date being May 15, 2009, seven days after the storm hit; however she was sitting in her office when the storms hit. She watched the air handlers "fly off the building," and received reports that "cement pieces of the building were coming off the building at Neely Hall (a residence hall) due the high winds." "We had glass out in all of the buildings at some point...and power out in all of the buildings," she described it as "tremendous."
Another Housing Associate Director recalls receiving a call from a maintenance person informing him the public safety officer assigned to direct traffic had left. Since it was move-out day for the residence halls, an officer is assigned specifically for traffic control to help students and parents “know where to go.” He stated, “I was irked.” He remembered being unaware of the impending storm, approximately 10 minutes after receiving the phone call regarding the officer leaving “it let loose.” The Associate Director watched the storms impact from the lobby of University Housing building D at Washington Square “we didn’t even go into the bathrooms.” He recalled, “I really didn’t know the full effect until afterward when I went to east campus...there were hundreds of broken windows and trees everywhere.” He stated, “we didn’t know how bad...we have radios (picking up his weather radio) but I don’t remember hearing it that day.”

The College of Education and Human Services was preparing for the commencement ceremony to begin at 1:30 p.m. in Shryock Auditorium. As hundreds were gathering inside to support and cheer for the graduates, sirens sounded, the storm advanced on the area, and power was knocked out leaving everyone darkness prior to the graduation ceremony beginning.

The storm knocked out power to large portions of southern Illinois. The local television station’s transmitter went down when the station lost power. The local radio station joined their stations to have each station airing the same updates and information. The local meteorologists turned to social media such as Twitter, Facebook, and Internet streaming. They relied on the local radio stations to broadcast updates until they were able to restore power to their television transmitter. Once the storm system crossed the Wabash
River and moved into central Kentucky and Indiana, it moved from a weather event into recovery, which is a news story event according to a local meteorologist.

An Associate Director with the Student Health Services recalls being in his vehicle heading back towards campus from the east as the sky became dark he stated, “the wind was just tremendous...I started seeing things flying...I ended up finding a place out of the wind.” He recalled, “I parked my big old car beside a vacant building on the east side...I started watching the roofing material...a small snow-cone shack just blew apart.” He shared, “when it blew over I don’t mind telling you I was scared...it was very unsettling because I thought this is a tornado, something’s coming.” After the storm “blew over, I started to see the scope of what just happened and it was incredible,” recalls the Associate Director of the Student Health Services. He stated he had stopped in Carterville, Illinois, which is approximately 11 miles east of Carbondale, Illinois and Southern Illinois University’s main campus. He recalled, “I knew I needed to get back to work because I am part of the disaster response,” since he realized Carbondale had also been impacted by the storm. He stated, “I would need to help deal with whatever...if there were injuries or damage or whatever, that’s just part of my job and really it is right back to our Plan.”

The Student Health Services Associate Director shared, “I started trying to get back to Carbondale on 13 [the highway that runs between Carterville and Carbondale] and there was just no way.” He shared that after several failed attempts he decided to attempt to travel to campus from the south, on a “normal” day the route he took could be made in approximately an hour, however this day it took him twice as long. According to the National Weather Service, the storm path was estimated at 30 to 40 miles in diameter.
Between 1:30 and 2:00 p.m., the Director of Public Safety using landline telephone and cellular phones to notify the Campus All-Hazards Emergency Response activated the Campus Emergency Operations Center (CEOC) and Recovery Team; however the situation report records being unable to reach some Team members. When approaching the response to any disaster and who will be Incident Command responsibility, authority, and expertise should be considered.

The Director of Public Safety became the Incident Commander for SIUC’s response because his department is charged with the life and safety of campus. One interview participant stated, “everyone relies so heavily on him [Department of Public Safety]...it usually end up being the director that steps up because of the ‘role.’” Another stated, “that person that is in command needs to be that ‘everyday face’ people are familiar with.” A third person commented, “that plan [Campus All-Hazards Emergency Preparedness and Violence Prevention Plan] comes out of the Department of Public Safety.”

After the storm had subsided, staff across campus began assessing the damage and providing assistance as needed. Those who sought shelter began to emerge and staff began to shutdown operations across campus. Approximately 2:30 p.m. those members of the All-Hazard Response Team able to respond met at the Student Health Services building, which was designed to help support the Team’s response during an emergency and pre-designated as the primary emergency operations center location in the Campus All-Hazards Emergency Preparedness and Violence Prevention Plan (CAHEPVPP). Student Health Services Associate Director shared, “the Student Health Center was designed with that [being used as the CEOC] in mind...there were certain things we did with the building as part of our justification for getting the building built...was to serve in this capacity.” He
stated, “the old facility [Student Health Center] would never survive any kind of an earthquake...this one was built with seismic code in mind.” “It had spaces and infrastructure in it designed to help support a response team if necessary,” he shared, “but when we gathered...now there was no power, so we had to adjust and we moved into that big atrium space.” The “glass curtain” allowed the light in for the team to “start figuring out what’s the condition of things.”

On person stated, “some people are automatically on the it [the All-Hazards Emergency Response Team] by, you know...the Director of Public Safety or Student Health.” According to the CAHERVPP, the Director or designated replacement from each department or “Primary Unit” serve as the representative in the CEOC. Student Health Services Associate Director stated, “as part of the plan, a number of us in leadership positions were identified as mandated responders.” Members of the All-Hazards Response Team are chosen because of their leadership position in their department and are considered essential personnel based on the resources of their respective areas according to the CAHERVPP. The CAHERVPP lists that 10 departments are listed as a Primary Unit. However, the list contains 11 departments: Center for Environmental Health and Safety, Counseling Center, Department of Public Safety (including All-Hazards Resource Coordinator), Information Technology, University Communications, Plant and Service Operations, Purchasing, Risk Management, Student Health Center, Student Recreation Center, and University Housing. The Director of the Center for Environmental Health and Safety described the team as “a wide cross-section of campus...it get’s input from all sorts of directions of campus...it has worked very well.”
The Director of the Center for Environmental Health and Safety stated, "I can't remember who actually called me...I know I was summoned to the command post." The Associate Director of the Student Center recalls learning of the CEOC meeting during the early evening hours while being on campus filling coolers with ice for herself and her neighbors to pack their food on ice. She was told, "you might want to be there to hear what is going on... because the Student Center did not have any representation." The Student Center was not identified in the plan in place during the storm as a Primary Unit.

The situation report recorded staff from the Student Center, Purchasing, Student Recreation Center, University Housing, University Risk Management, and the Center for Environmental Health and Safety began assessment of the damage and list of the needs for their areas to be able to report when the CEOC met. The situation report from University Housing documented receiving the "all clear" from the weather radio. Residence Life staff made door-to-door checks to provide an accurate count of those students still in each building according to the situation reports. Media Services addressed requests for interviews regarding whether graduation would be held or canceled for the weekend from St. Louis and Chicago area TV and radio stations. Graduation ceremonies for Friday evening were cancelled and further evaluation and discussion regarding Saturday and Sunday's ceremonies was ongoing according to the situation reports.

Due to the devastation in the area and the lack of power, local EMA operated from a Mobile Command Center Trailer and using a portable generator. This trailer contains satellite phones, computers, pertinent files, etc. which allows the EMA to function at a mobile location with ease and all the needed resources.
The local health department Director described public health’s role in emergency preparedness as “our role in every day except it just takes on different ramifications.” She further stated one thing that public health does for emergency preparedness is “communicable disease functions,” such as “surveillance of disease and processes to control disease.” Additional roles include food and water safety, sanitation, and educating the public regarding health related issues. She also shared, “we also would be working with community partners...around health and public health and medical response....working with the partners in the county...to assist in making sure that there was an adequate response as it relates to health and medical issues.”

At a university the Student Health Services should serve as the liaison between the local public health department and the university. The Director of the Student Health Services stated, “public health’s role would be leader in infectious disease.” The Director stated for the storm, “we were in the command post and were a member of the disaster tem and whatever they needed.” He further stated, “with violence, trauma, or shooters I think they [public health] would have a very small role” referring to the storm or other natural disaster.

SIU also has the Center for Environmental Health and Safety that described the Center as “a service unit for the campus...advisors to the campus community for all sorts of environmental health and safety issues.” The Director of the Center for Environmental Health and Safety stated, “our primary function is trying to help...we want to make the campus safe for faculty, staff, and students.”

During the response and initial recovery period, the local public health Director stated her staff provided additional manpower for the county EOC and functioned as the
liaison for public information and fielded phone calls for people with needing resources for functional needs (formally special needs). An additional task local public health officials assumed was in debris management.

The county emergency operations plan contains additional areas that need specific attention. One of these is debris management. While not a responsibility of the local health department everywhere, after the storm, public health was able put to the test their debris management plan written in 2007-2008. The environmental health division of the local public health department had taken a debris management plan from a region of the United States affected by hurricanes and modified that plan for southern Illinois. This is not an uncommon practice in emergency preparedness. Often at trainings and conferences leaders stress not to ‘reinvent the wheel’ that if something is working attendees are encouraged to take advantage of tested plans and modify them to meet their needs.

The debris management annex (or plan) was found to have flaws in it. While it had been used successfully in other hurricane-ravaged regions of the country, the major assumption written into the plan was the anticipation of rapid federal assistance.

Emergency response begins locally, except in extreme cases when widespread devastation is predicted. FEMA will often mobilize prior to the storm and be in a state of readiness staged just outside the storms reach to descend quickly after the storm passes to provide assistance.

The members of the Campus All-Hazards Response and Recovery Team work together on a regular basis and were familiar with each other's strengths and weaknesses, which led to comfort and confidence as group. Structured response is provided through the Plan and NIMS. There was cooperative collaboration as a team to solve problems the storm
had presented and due to the familiarity of each other the CEOC was not “burdened by
egos.”

Communication within the CEOC was easy and everyone felt comfortable sharing his
or her views and ideas. The alliance of the team has been fostered during annual exercises
and allowed the Team to become effective and efficient. A sense of calm enveloped the
room, there was a logical, sensible tactic that needed to happen and the Team met the
challenge head on. Good, proactive planning and preparedness equipped the team
members for the task at hand. “If any there were any silos, on those days the silos come
down quickly,” according an Associate Director from Housing, team members “willingly
threw anything on the table that was needed” during the response.

SIU’s Department of Public Safety held their day shift officers over to assist second
shift officers. They were divided into two teams to begin a thorough assessment searching
for injuries and/or individuals trapped in buildings or vehicles. They also were cognizant of
downed power lines and trees blocking roads. They also responded to two fire alarms one
unfounded and addressed the second alarm quickly with no damage reported.

Friday Evening

At 5:00 p.m. the CEOC reconvened at the Student Health Service for a briefing. Due
to the lack of electricity and generator backup the briefing was held in the atrium area.
Each Primary Unit provided an update from their respective areas regarding issues
mentioned at the previous meeting and a report of new findings or concerns. Needs and
solutions that were discussed during the second CEOC meeting were: food, transportation,
medical care, and graduation.
The Director of the Center of Environmental Health and Safety recalled moving the CEOC “over to the Physical Plant because they had back-up power” as he recalled events of Friday afternoon. He stated, “that Student Health... didn’t have back-up power, which is a long story... but it’s listed in our plan as being the first stop.” He recalled it getting dark and people talking about having to meet elsewhere for the next meeting.

A representative from Jackson County EMA called to request an initial damage assessment from the university, which would be forwarded to the Illinois Emergency Management Agency. A Disaster Declaration had been made for Jackson County along with four other counties. Calls were also received from a representative from IEMA and ITTF offering services, checking on availability to provide shelter to those in need, and regarding graduation ceremonies. No decision regarding weekend graduation ceremonies was made at this meeting.

As the sun began to set, the Academic buildings were closed and locked due to safety concerns with lack of sufficient lighting. According to the situation report housing staff confirmed food shipments from their vendors, since pre-existing orders were in place prior to the storm and also continued their damage assessment. Friday marked move-out day and the Housing staff continued their checkout efforts for residents. Students remaining were moved from University Hall and Triads to Schneider Hall for safety considerations according to a situation report. The east side of campus was without water due to a water main break that occurred during debris cleanup on Friday evening. Housing staff began hourly ‘fire walks’ throughout their residence halls to ensure safety of the building and its occupants. The Associate Director of Residence Life stated, “when we don’t have power our
fire systems don’t work and when our fire systems don’t work we have to walk the buildings every hour to do fire rounds."

The next briefing of the CEOC was moved to the Plant and Service Operations facility. Items for discussion included extending food service times and providing meals for all faculty, staff, students, and students’ parents on campus. Housing reported the back-up generators for the Towers were providing electricity for the residents. The initial count of damaged windows was 90, which was addressed by PSO workers by covering them with plywood. SIU’s Department of Public Safety officers provided additional patrols, including foot patrols for housing. Sustained winds approximately 84 miles per hour for 15 minutes were registered on the anemometer at Plant and Service Operations facility during the storm.

The biggest decision to be made during the response and recovery was regarding graduation. Local EMA and law enforcement were urging individuals not to come into the area, citing safety concerns related to downed trees and electrical lines. Between the 5:00 and the 8:00 p.m. meeting of the CEOC, representatives of the University made their way to the local hotels to inquire if guests were checking out to return home or staying put. It was reported that the majority of the guests were planning on staying. A lengthy discussion took place regarding the remaining commencement ceremonies. According to interviews lack of power, safety and public relations were some of the larger issues debated.

One individual shared, “there were decisions to be made...what are we going to do with commencement?” He stated, “we have all these people here...there’s no power...we had a lengthy debate about that...the merits of having commencement...of not having it, the
whole PR.” Another individual commented, “the longest debate was the whole thing of graduation.” Someone shared,

it was pretty tense. I mean just the normal safety issues and responding to the storm was bad enough but then you have the complication of oh my God if we cancel graduation...I just sat back and listened. If you cancel graduation you have a lot of people really mad. If you have the graduation, you will have a lot of people really mad. So, they were sort of between a rock and a hard place.

Another individual recalls, “I can remember going around the room” he said everyone was asked their view of holding or canceling graduation “and it was probably 90% of the people said you should not have graduation and 10%, if anybody, said you should not and he [the Interim Chancellor] said okay.”Ten members of the All-Hazards Emergency Response Team shared the final decision to hold graduation came from the Interim Chancellor; and they felt he received directives from the Board of Trustees.

Between the 5:00 p. m. and 8:00 p. m. Campus Emergency Operations Center briefing the Student Health Services Associate Director recalls, “I actually got in my car and drove out to the hotels in the area to kind of get an assessment of who was out there...how many were still here.” He shared, “of course most of them [the hotels] were without power, but I talked to the management of those different places to try to get a feel for how, what they thought their guests were going to do.” He recalled learning if the guests were going to stay, “that kind of helped us determine whether or not we should rally...actually hold the commencement or not.” “And so enough people actually stayed...but I’m not sure it was the most responsible decision to do that.”
Center for Environmental Health and Safety Director stated, “safety is first, but as I remember it we still wanted to have some form of normalcy around here.” The President and the Board of Trustees ultimately made the decision to hold the graduation ceremonies on Saturday and Sunday at the football stadium, combining some of the ceremonies. Center for Environmental Health and Safety Director remembers, “there were so many decisions that had to be made and finally the Chancellor said ‘we are doing it’.” Center for Environmental Health and Safety Director recalls, “it was like, ‘we’ll give this a shot and we will see how it goes and you guys tell me [the Interim Chancellor] we can do it safely, we think we have enough people, we will do it’.” Each person interviewed disagreed with the decision to continue with graduation, however once the decision was final everyone set any differences aside and moved forward with preparations.

The Plant Service Operations crew had the most daunting task of making campus not only safe for visitors, but also setting up for the graduation ceremonies. They were tasked with removing debris, setting up generators, lights, chairs, etc. for graduation. A local construction company was contracted to assist the university with storm debris and tree removal. The Physical Plant guys were “searching for equipment...some of which we had and some we didn’t.” Student Health Services Associate Director stated, “fortunately the thing [storm] was such an isolated event resources were available...had it been a larger scale event, it would have been a much different story.” The All-Hazards Response and Recovery Team members stepped up and helped in whatever way they could to assist with ensuring things were in place when it came time for the first ceremony on Saturday. The determination to hold graduation would affect more than just SIU, it also impacted the area
locally. Calls were placed to local EMA and law enforcement to notify them of the decision since their assistance would be needed with traffic and safety.

Student Health Services Associate Director shared, "you know what was really impressive was the demeanor of the people." "The Physical Plant folks and other doing the physical recovery work...they worked their tails off...determined with no end in sight." Everyone from the All-Hazards Emergency Response Team to the workers helping with debris clean-up and set-up for graduation, "they knew we had this event...that it was really important that we have it...they worked all night in preparation."

Department of Public Safety brought officers in early for their shifts and held officers over to assist with safety and security of the campus. The Department of Public Safety also issued alerts regarding graduation ceremonies to be held on May 9th and 10th at the football stadium and posted contact numbers for additional questions. Officers patrolled campus by vehicle and on foot to prevent crimes being committed against persons and burglary/thefts. According to an article in The Southern, the City of Carbondale issued a curfew, which began Friday evening at 9:00 p.m. The City of Carbondale also ordered all bars and package liquor stores to close at 8:30 p.m. both these curfews will extend through 6:00 a.m. on Saturday.

**Saturday, May 9, 2013**

Bright and early on Saturday morning SIU's Risk Management staff began a more thorough assessment and documentation of the damage. Risk Management staff members were assigned a quadrant designated on the campus map and methodically preceded to record and photograph the damage to campus and the buildings. According to the Risk Management representative responsibilities during the response and recovery include
“notifying insurance carriers, documenting damage, and providing updates to the EOC and my supervisor.”

The university’s Public Information Officer was kept busy responding to interview requests from local and regional media outlets both live and over the telephone. The Student Center opened for graduates to pick up caps and gowns and provide faculty/staff a place to prepare for the graduation ceremonies despite being without electricity.

Housing intended to feed the University community on Saturday, but discovered the US Foods refrigerated truck parked on campus failed to maintain the appropriate temperature and the food inside was lost. A new order was compiled to include bottled water, sanitizer wipes and food choices that could be prepared on a charcoal grill and generator-powered smoker. US Foods confirmed the shipment on Saturday morning for this new order.

A representative from a utility requested lodging for tree-trimming workers descending on southern Illinois to assist in restoring power to the area. Shelter would be provided for around 600 workers for approximately two days. University Housing explained the limited accommodations, i.e. no pillows, bedding, etc. however, Housing was able to locate sheets and towels for the workers. An additional lodging request from a tree trimming crew working in the Carterville area was also honored.

Saturday the Director of the SIU Counseling Center contacted the staff to report to Trueblood Hall, a residence hall, during meal times to check on the mental health of students and staff. A schedule was created for Counseling Center staff to be present at each meal served by University Housing at Trueblood Hall. Counselors talked to University students, parents of students, faculty, staff and administrators regarding the effect the
storm had on living conditions and plans for moving out of University Housing. Counselors helped students problem solve and served as liaisons between students and University Residence Life staff to find satisfactory solutions to concerns brought forth by students. Counselors also spoke with those dining to assess how individuals were coping since the storm. According to the situation report these services were provided from 11:00 a.m. until 4:00 p.m.

The local EMA requested assistance from the university for a regional location for debris storage and disposal or burning location for the county. They also asked for a status update on the recovery process and if any additional resources were needed, which as of midday Saturday the university stated they were “ok.” Center for Environmental Health and Safety (CEHS) reviewed potential locations for vegetative storm debris (or trees and tree limbs); due to concerns regarding the quality of the available sites the decision was made to not utilize proposed locations according to situation reports. No additional information was provided what decision was made concerns storm debris disposal locations.

Citing safety concerns, barricades and tape barriers were placed various locations throughout the campus including the Campus Lake walking trail. Numerous leaning and falling trees caused extensive damage. Throughout the day Saturday every effort was being made to restore power and locate generators for University Housing needs and other university department needs.

Due to the volume of calls regarding graduation, intersession (classes held in the four-weeks between the spring semester and summer semester), damage to property along with calls for service an additional telecommunicator was called in to assist in the dispatch
center. University Communications kept the University's home page updated regarding commencement, closure of Thompson Woods and Campus Lake walking paths, cancellation of Mother's Day Brunch at the Student Center, and a boil water order.

The City of Carbondale placed a curfew in effect that requires all persons to be off the streets and in their homes by no later than 8:00 p.m. on Saturday evening. They also extended the suspension of all liquor sales and also serving liquor in restaurants according an article in The Southern. The curfews extend through 8:00 a.m. on Sunday and could be re-issued as needed on a daily basis.

**Sunday, May 10, 2009**

SIU's Department of Public Safety placed a mobile message board on campus notifying the campus community of the boil order issued by Center for Environmental Health and Safety. An SIUC Alert was sent out announcing meals would be available at Trueblood Hall for students, faculty, and staff; counselors would also be available to talk to students, faculty, staff, and administrators. Counselors continued their efforts to help problem solve with students and be a liaison for students and staff. Some students found the storm preventing them from returning home using their preplanned transportation means; counselors were able to offer minor financial assistance for students.

When the CEOC convened for the noon meeting on Sunday there were 200 students left to check out from the over 1,200 student left from the prior day, while over 350 utility workers checked in. Some of the utility workers were discontented with the accommodations, wishing for more 'hotel' like accommodations and some chose to sleep in their trucks. Guidelines were discussed with the utility worker's representative prior to granting permission for housing. The guidelines included no alcoholic beverages and no
smoking in the rooms, which the utility workers were ignoring. Housing had closed seven buildings and made arrangements for contractors to address issues caused by the storms such as roof damage and electrical outages. The Counseling Center staff continued to make themselves available during meal times and reported students and staff in good spirits.

Officers with campus DPS provide ongoing safety patrols on foot and in vehicles while also continuing to complete damage reports. Also shared during this meeting was information received from Carbondale stating there would not be a curfew for Sunday evening. By the authority of Center for Environmental Health and Safety, a SIUC Alert issuing a boil water order for the entire campus until further notice.

Upon arriving at the Student Recreation Center on Sunday, staff was greeted by the smell of fumes and smoke. Two of the Associate Director's of the Student Recreation Center stated, "our generator went out...it exploded and then our building was completely off of the line." They shared someone had to be present 24-hours a day until the Student Recreation Center was able to get new generator. This malfunction proved to be disastrous and exterior door locks failed and would need to be secured by chains.

During the afternoon on Sunday weather predictions included rain and caused graduation to be relocated from the stadium to the Student Center, which was still without power. The Department of Public Safety issued the alert and notification for the change in location. The Student Center had limited staff, however with the help of Plant Service Operations, University Housing, Recreational Sports and Services, Department of Public Safety, the College of Liberal Arts, Shryock, and the athletics staff the ballrooms were transformed to seat over 1200 attendees for the ceremony. The transformation was described as astonishing, miraculous, and unbelievable. Generators were brought in to
power the ballrooms, sound booth, and restroom lights. Every available pair of hands
rallied to perform the ballroom makeover for the graduating students and was met by
appreciative and gracious students and families.

Student Center Associate Director recalls the preparation for the Sunday afternoon,
Around 2:00 p.m. there was another round of storms moving in, and they decided to
bring the 4:00 p.m.-ish ceremony into the Student Center, I got a phone call, 'you
guys ready?' and I said, 'uh, we don't have power.' 'We are bring generators, they are
hooking them to the truck now and we'll be over in five minutes.' We had to 'hot
wire' one of the walls in the ballrooms it was half open, half closed...they ran a
generator cable through the doors of the ballroom through the Corker Lounge to the
panel, they took the panel off and hotwired it from a generator to the panel to open
the door enough so we could place chairs. I called in staff; our sound guy [who lived
about 40 minutes away] came in. An electrician was here so we ran power to certain
places, PSO guys did what they did, we all chipped in, housing brought over lanterns
and threw them in the bathrooms, we didn't have any emergency power in there, we
were on generator power, very limited generator power...it's very limited and keeps
CMS running, telephone service running, part of the Illinois State Police radio
system runs through the Student Center basement, so it's not just things on campus
we have things that are part of the entire southern part of the state in the Student
Center, we have to have generator power. Our primary focus is to make sure those
things are up and running because of the safety they provide. Due to the limited
generator power we had to bring in lanterns...we threw up 1,200 chairs, there were
people standing [for the graduation ceremony] and people were really nice. Our
elevators are on emergency power so we could move people around [in the
elevator] but we had to stand in there with flashlights because at the time it didn’t
have lighting power. We’ve fixed that so now if the power goes out we have lights.
We had grandparents [that used the elevators] and two students in wheelchairs that
were adamant about wheeling across the stage, so we literally picked them up and
put them on the stage [to wheel across]. It was awesome, it was fun...it was COLA’s
[College of Liberal Arts] graduation it’s one of the biggest ones. There were people
shoved in here every which direction. People were really understanding, and the
students were just happy to be graduating...

Intersession classes were due to begin on Monday morning; however, Plant Services
did not anticipate restoration of power in time to continue with the scheduled classes. The
decision for an Administrative Closure for Monday, May 11th did not come until later in the
evening on Sunday and appropriate notifications and announcements were made. In
addition to the closure, the University’s homepage was updated to reflect no Saluki Express
bus service (a mass transit service offered to SIU students, faculty, and staff along with the
Carbondale community), the availability of free meals at Trueblood, and a deadline
extension for spring grades to be submitted by faculty.

Discussion at the evening CEOC meeting revolved the potential to provide the
community shelter should any requests arrive from other agencies. Housing
representatives shared after power is restored they would need 24-hours to clean Allen I,
II, and III to potentially be used as shelter if requested. No request for shelter beyond
housing the utility workers was made. A memorandum of understanding exists between
the University and the American Red Cross to assist in the feeding, sheltering, and welfare
of disaster victims and emergency personnel according to the Red Cross Facilities Use and Sheltering Agreements.

**Monday, May 11, 2009**

Risk Management continued their damage assessments and made copies available for Jackson County EMA. The process to locate a generator for the Student Recreation Center was underway, but shipment had not been confirmed. Classes for approximately 180 students during intersession were on hold until the power had been restored. Faculty members were raising concerns regarding grade submissions due by 3:00 p.m. on Monday with the University under an Administrative Closure. An alert was issued for faculty stating grades would be due the first day the University re-opened.

Monday kept the University’s police officers busy assisting professors inspecting on research that had been placed in jeopardy due to the extended power outage. Most buildings that contain temperature sensitive research projects do not have back-up generators. A number of faculty members were determined to provide any kind of back-up power; even going so far as to drive to neighboring states to secure a generator. This caused significant safety concerns as they tried to run them inside without proper ventilation causing a carbon monoxide issue.

Monday morning began with a continuation of the previous days routines for Housing, Public Safety, and Risk Management. Purchasing began to contact dealers to obtain quotes and availability of generators. Accounts Payable opened to provide payroll checks for student and full-time employees. The Student Center remained closed and only essential personal reported to work. Housing provided meal service for the campus community and City of Carbondale workers.
The CEOC assembled at Trueblood Dining Hall to create objectives for recovery efforts. Housing and Plant Service Operations established bus service to run to Wal-Mart for residents to purchase any items they needed. Housing reported making meals available for the remainder of the week for faculty, staff, students, and city workers. Local schools were also without power and had canceled classes, so Housing arranged activities for the children who lived in Evergreen Terrace (housing for families or graduate students) according to the situation report.

A representative for the utility workers requested additional rooms to house up to 600 workers for approximately three more days. There continued to be issues with alcohol consumption and smoking along with rude and belligerent behavior by the utility workers that were guests on campus. Representatives of the workers were again informed of this behavior and contact them should any further problems arise.

A utility vehicle, along with volunteers arrived on Monday to assist with recovery and cleanup efforts as per the situation report. A discussion in the CEOC yielded the decision to provide alternatives to the location where they were currently camped. During interviews with the participants no one mentioned volunteer showing up to assist with clean up. I specifically asked about volunteers during the event of a disaster such as a tornado or earthquake and no one was able to provide me a clear answer. All those interviewed said they did not recall many volunteers due to the widespread impact of the storm. The situational reports provided the small glimpse that a few volunteers did indeed arrive wishing to assist in any way they could.

Locating generators for departments without one or to replaced failed generators was an ongoing challenge and objective. The prolonged power outage and lack of reliable
backup power sources caused critical issues with securing buildings. Extra foot patrols were initiated by the staff in the respective departments in addition to beefing up patrols by DPS. The utility companies reported power might not be completely restored to portions of campus until the end of the week, while some portions of campus power restoration was imminent.

Once electricity was restored food storage areas would need to be inspected by the local health department to insure proper disposal of spoiled food. There would be no food services in the Student Center for 48 to 72 once the power was re-established. Student Center Associate Director stated, “most of the freezers and coolers held their temps, so we didn’t lose a lot of food.” Meals continued to be provided for the campus community at Trueblood Hall by the Housing Dining Hall staff. The local public health department utilized mutual aide from neighboring counties to assist with the volume of food safety and restaurant inspections to ensure food safety for the community.

By late afternoon of the third full day, which was Monday, since the storm impacted the region power began to be restored to portions of campus. As equipment and buildings were brought back on-line, the situation report identifies staff for the Student Recreation Center, Plant and Service Operations, Student Center, and Purchasing began thorough checks of all mechanical rooms and other necessary equipment and systems to ensure they were all working properly and not in need of repair.

The Counseling Center continued to be available for students, faculty and staff. Counselors spoke with residents and families of the University's family housing complex assessing psychological coping and identifying unmet needs. Concerns listed in the situation report that were voiced by the residents included: finding showers for children,
many families relied on food stamps for monthly food supply and due to the power outage having to discard food without a way to replace it, entertaining children while coping with own distress, etc. The counselors also served as a resource for accurate information for recovery efforts and events unfolding as stated in the situation report.

During the mid-day CEOC meeting on Monday, the Interim Chancellor received a phone call from Carbondale’s mayor sharing that the electrical utility company thought to have power restored to campus Monday afternoon and according to the situation report power was restored around 2:30 p.m. However, only 15 of 37 stoplights had been repaired and driving through town still required extreme caution and alertness. All recreational parks in the city remained closed until cleanup can begin at those locations. The City of Carbondale provided the University with an approved vendor list for repairs or work exceeding the workload of the University.

Tuesday, May 12, 2009

Slowly services began to be restored to the city and the University inhabitants. The main campus, the airport, and Washington Square had power restored. Beginning the following morning (Tuesday) full bus service would be available and the Student Center and Student Recreation Center would open for limited services and hours. Since power was restored Chartwells (food service provider for campus) would not provide food and meal services in the Student Center until the end of the week pending inspection by the health department.

University Communications kept the University’s homepage updated reflecting the restoration of power along with campus being open the first time since the storm on Tuesday, May 12th. Multiple interviews were completed with local radio and TV reporters,
and the Associated Press announcing the reopening of campus. The campus was also still under a boil water order. Along with the Student Center and the Student Recreation Center opening, the Student Health Center would be open to see patients.

Intersession classes began on Tuesday. Risk Management continued assessments and documentation of storm damage. According to the situation report University Risk Management requested forensic accounting assistance due to the overwhelming amount of documentation. According to the situation report staff from Risk Management established temporary offices at the Student Health Center on Tuesday and continued with documentation and assessments of the damage.

The final meeting of the CEOC was Tuesday afternoon. From Friday, May 8, 2009 approximately 1:00 p.m. through Tuesday, May 12, 2009 over 4,200 calls to the campus emergency information line were reported and in excess of 165,000 text messages were sent according to a situational summary sheet from the CEOC. Trueblood Dining Hall served more than 8,300 meals to the students, families, faculty, and staff of the campus community along with workers from the City of Carbondale over a five-day period. The Department of Public Safety officer's have had fewer calls for service and continue to provide additional safety patrols across campus. Housing accommodations was provided for approximately 600 utility workers throughout the storm recovery.

The boil water order for the city had been lifted, however the campus boil order remained in effect. The confusion was clarified by CEHS; the boil order would be lifted once the results from water samples submitted for analysis were received. Building Emergency Response Team (BERT) members were notified and will check signage for drinking
fountains and bottled water was available for the residents of campus. The boil order was 

lifed on Thursday, according to the situation report.

Shower facilities were made available through the Student Recreation Center for 

SIUC staff and some residents of university housing still affected by the power outage. Bus 

transportation operated as scheduled. Arrangements for temporary housing were made 

available for residents because some locations may not have power restored for an 

additional week.

The Campus Emergency Operation Center was deactivated at the conclusion of the 

All-Hazards Response and Recovery Team meeting at 2:00 p.m. on Tuesday, May 12, 2009. 

Deactivation of the CEOC did not mean that response and recovery efforts were completed. 

The recovery process continues for weeks, months, and even years after a storm. Damage 

to the University totaled in excess of $7 million dollars from cleanup, repairs, and 

replacement to trees, roofs, windows, etc.

More than 2,000 utility workers from, linemen to trimmers, labored to restore 

power knocked out from the storm. Workers replaced nearly 2,500 poles, over 750 

transformers and thousands of feet of conductor plus additional materials for a cost in 

excess of $35 million.

Cleanup of the university grounds was a three-phase process. The initial focus was 

ensuring safety on campus and mitigating any vulnerabilities or emergencies. The next 

phase involved cleanup of the central core of campus and ongoing debris removal. The 

third phase entailed cleaning up and clearing out around Campus Lake, Thompson Woods, 

and the outlying sections of the campus. An estimated 1,000 trees from the Campus Lake
and Thompson Woods areas alone were destroyed, along with hundreds more across the rest of campus.

A Housing Associate Director stated, “it [move-out day] did help with the timing of that regard,” furthering saying, “we were blessed...very fortunate that people were in the process of leaving campus.”

**Experiences Gained**

**Student Health Services**

As a whole the Student Health Services did not play a significant role during storm response or recovery during the May 8, 2009 windstorm later named the “Super Derecho.” The Director of the Student Health Services role for Campus All-Hazards Emergency Preparedness on campus becomes the Chief Public Health Officer in liaison with the local health department. Campuses should be expected to “take care of their own.” Natural disasters have the potential to produce infectious diseases with prolonged power outages or contaminated water supplies. The Director recalls sitting down at one of the graduation ceremonies at the football stadium when an announcement was made regarding a boil water order issued by the Mayor of Carbondale as he spied a large cooler of water placed for the attendees. “I was really concerned, I went running to find out if they had just opened a tap on that,” stated the Director of Student Health Services. Unsafe water “makes you susceptible to any of the gastrointestinal infections,” however, he learned that bottled water had been poured into the larger coolers.

A Housing Associate Director stated the Student Health Services “need to be educators in the process of what ‘we’ need to look for...how we monitor health,” from physical well-being to mental well-being. She wants to be able to share with her staff “what
do we need to look for in our students, in our families that are visiting...that could be of concern.” She mentioned wanting to know, “are there health issues...are there hazardous conditions that could cause ‘whatever’...we need to be aware...to be able to share with our staff to educate them.”

An additional issue “that was kind of an eye opener” to the Student Health Services Director was “all of our staff left.” He recalls, “I was standing here...they [the staff] were just all panicked and had to get home and see that their kids and spouses and pets were safe.” He stated, “I think I could have gotten some of them to come back...but there wasn’t any question in anyone’s mind that they were going home first.” He further stated, “they were out the door just like everyone else.” However, representatives from Plant and Service Operations, Student Center, Student Recreation Center, Center for Environmental Health and Safety, University Housing, and the Department of Public Safety all shared their staff willingly stayed to assess the damage, check for injured people around campus, and to assist with clean-up. In relation to the storm, “the Student Health Center...we weren’t tested, my staff went home and that was it,” said the Student Health Services Director.

Student Health Services Director shared a story from the May 2011 community functional drill involving the hospital and his staff. He stated,

I had to get my nurses registered to be volunteers weeks in advance [of the disaster drill], and when I took a group of nurses over during the exercise it took a long time on the day with the computer and the rest of my medical staff said ‘it’s not worth it’...they make it really, really, really, hard to volunteer. As a result they are not going to get the group they need. I remember complaining about that and said ‘do you know how hard you made it for these people I’ve got credentialed...I’ve done all the
background checks, everything over here [for the Student Health Center]. Do you know how hard you’ve made it for them to come over here and help?” I don’t think in a true, true emergency they aren’t going to accept somebody that opens up their wallet and shows a picture ID and a license...I bet you they are going to take them.

When I asked the Student Health Center Associate Director how someone who has a current nursing license or paramedic license could get engaged to help he replied, “we’ve actually addressed some of that in our planning exercises. We’ve had a pretty collaborative and cooperative relationship with the hospital.” Student Health Services Associate Director stated, “in our [the Student Health Center] plan...if the Health Center was not able to function, our staff were directed to report to the hospital emergency department and their staff determines the best place to use them.”

Communication

“Communications seems to be an ongoing issue...it is well documented from 9-11 to Hurricane Katrina and other incidents in between,” recalls a Department of Public Safety representative. “The problem we run into is that everyone is on a different frequency...I’m talking radio communications between agencies,” during an emergency when multiple agencies respond “there is interoperability of radios and these (points to multiple radios in the corner) Starcom radios will help with that.”

A Housing Associate Director stated, “I don’t know when, but PSO [Plant and Service Operations] put in a repeater and an antenna of the roofs of our high rises...it has a generator so that when we lose power the radios will still work.” He recalls, “I think they did that after the storm.” He further stated, “you know it’s unfortunate most of these things are usually learned after something bad happens.”
Student Health Services Associate Director recalled, “communications weren’t too reliable early on.” He stated, “it was pretty impressive that early on that [Friday] afternoon you could get a cell phone through.” A Housing Associate Director recalls, “we were lucky that the cell towers still worked for most of us.” She stated, “we stayed connected by text messages, they seemed to work...sometimes phone calls didn’t.” She laughed as she shared, “we learned really quick who was efficient in the area of text messages.” Student Center Associate Director recalled, “we were communicating [between the Campus All-Hazards Emergency Response Team members] by text message.” “We were charging cell phones in outlets or plugging them into each others car,” she stated.

A second Housing Associate Director recalls, “I had just gotten a cell phone (his first) the week earlier...someone had to show me how to use my phone and put people’s numbers in there for me.” He further shared, “and I had no idea how to do that text messaging they were all doing.” He says he received a “crash course” on his cell phone and text messaging at the evening CEOC meeting and someone programmed the Campus All-Hazards Emergency Response Team members’ phone numbers into his new phone.

**All-Hazards Emergency Preparedness**

**Preparedness.** A Housing Associate Director stated all-hazards emergency preparedness and safety, “as become part of our everyday life.” She shared, “my job is about safety now for sure...we regularly meet with them [staff] to review all of our emergency procedures.” She mentioned after approximately a month she “intentionally meets” with her staff “touching base” about “how has this been going? What procedures or policies do you not understand or aren’t clear? What are you having questions about, etc?” she shared she meets with staff multiple times a semester to keep them informed.
A second Housing Associate Director stated his responsibility is "for the safety and security of the students so, obviously that includes preparing for a disaster." Student Health Services Director stated his staff "takes it [drills or exercises] pretty seriously here because of our accreditation."

Student Health Services Director stated, "something I have brought up over the years is...drilling multiple buildings at once...I don't think we have the traffic patterns to evacuate a large part of campus rapidly." He shared an incident from his time at Ohio State University, "I actually got to take part in a real shooter...it was in a residence hall...he didn't kill anyone but we had him isolated in that residence hall for a long time." He stated, "we had to do segmental drills to get people out of that building and then we did segmental drills to get people out of near buildings." He encouraged me to attend a drill at an academic building stating, "many of our buildings are multi-use so that one department will take part seriously and another part won't." Again he stated, "I have always felt like we need to do a drill on multiple buildings at once...we've never drilled that. I think everyone would come out and get in their car and not be able to move." Shaking his head back and forth he stated, "we do one building at a time...even two buildings makes the problem twice as difficult."

**Generators.**

*Student Health Services.* Student Health Services Director stated, "I'd like to say this [the Student Health Center] turned out to be a great CECO, but it was horrible without power." He further shared,
I made a decision to look towards the future, my staff still isn't happy with me paying as much money as it cost to buy a generator ... we were either going to be part of the problem or help with the problem.

His vision for community and campus collaboration in the event of a devastating disaster affecting the local hospital included being able to provide a “fully powered medical facility where people could come in and be treated.”

Another way the Student Health Services Director envisioned the Student Health Services could be used during a disaster was based off an example from California after an earthquake. He shared an example in which a university set-up a “mobile pharmacy” he stated it was really big because everyone had lost their medications... all their medications and that was one of the most important things we were able to do out on the lawn in the dark after the event... they didn’t have a generator either... now with a generator [in the Student Health Center], 10 seconds we’re up and operating after the power goes out. And we would be able to do that in the convenience of an actual pharmacy.

The Student Health Services Director stated of his building and staff, “I don’t have any doubt in my mind that we’ve been ahead of the curve on all the drills. We drill tornadoes, fires, hostile individuals in the building.” Additionally he shared, “I think we’ve drilled the only active shooter and we are getting ready to do it again in the next couple weeks.” The Student Health Center Director stated, “the first one we did a shelter in place... this one we are going to have an active shooter in the pharmacy... tell them where it is... and see how they avoid going to that area and getting out of the building.”
Emergency exercises or drills are an integral part of the Student Health Center. The Director stated, "we've always been an active part of the disaster drills that they [the campus] do...and we have our own disaster committee [Building Emergency Response Team or BERT] within the Health Center." He stated, "some of our drills are occupational, like needle sticks...or biohazards...we have six drills, I think, we carry out on a regular basis."

Student Health Services Director shared one drill they [Student Health Services] participated in with the campus; the scenario was a leaking rail-tanker car with a gas cloud. He stated, "my entire staff was involved, we had students exposed to a 'gas'...we learned that we don't want a bunch of people with poison traipsing through the Student Health Center." He shared, "to decontaminate them, we found a way to open up a side door and bring them through the showers in our pool area." He stated, "if we hadn't of drilled it we wouldn't have known that that's the way to do it."

**Housing.** Housing Associate Director shared approximately 15 years ago Housing and Plant and Service Operations split the cost of a generator. He further shared, it is kept on a trailer and, "if we need it, we would have it." He recalled, "the Rec Center [Student Recreation Center] generator blew out six months before the storm, so they decided to hook our temporary generator up over there." He stated, "now when we needed a generator to help feed the students it wasn’t on hand." Housing Associate Director remembered Plant and Service Operations Associate Director was able to locate a generator, "I remember I was very impressed that it arrived as quick as it was, I don't remember how quick exactly, but we hooked it up at Trueblood Hall [Residence Hall]."
Housing Associate Director shared, "we have generators in our three high rises [Residence Halls]," which allowed for utility workers to be housed during storm clean up. He stated, "we can run the high rises without power to the community because they have generators in them," however he shared they do not provide full power, "they light up the hallways and the do enough that even the elevator could be run."

*Academic Buildings. Center for Environmental Health and Safety Director* stated, "the single issue which has not been addressed for our campus is back-up power for research facilities." He shared,

certain types of research, you have to have freezers or refrigerators, whether it is to keep you biological materials alive or some places use chemicals that are heat sensitive...and most buildings that need them have not had back-up generators added. That is a matter of cost...sort of the elephant in the room because it is a lot of money. It [the storm] really affected people's research. It affected their pocketbooks and created a lot of safety issues. Because we had some faculty members that were...bent to be sure that they had some kind of back-up power. They knew their building didn't so they drove over to Missouri, picked up a back-up generator, brought it back, and basically tried to run them in the buildings. Then you are going to kill people with carbon monoxide. We worked with the research office and did a survey of campus trying to identify where the needs are, how much power that would be and then the physical plant gave sort of a reasonable ballpark estimate of how much it was going to cost and they are still sitting out there. I think the Administration knows that, but I think that's a very big priority. When we were
doing the surveys I was being asked ‘you have the money for this?’ I told them ‘no, I am just trying to get our arms around what are the issues.’

He continued by saying, “this building [Center for Environmental Health and Safety] does not have a back-up generator, but it is on the original drawings to have a back-up generator.” He shared if Jackson County Health Department or the state “had a mass casualty event we [Center for Environmental Health and Safety] are one of the emergency morgues. So we are in theory a back-up morgue because we have a cooler in the back.” The Director reiterated, “so even our building needs it [back-up generator].”

Training. Everyone interviewed discussed attending trainings on the National Incident Management System (NIMS) sharing trainings were not mandatory, but they each felt it would be beneficial with their involvement on the Campus All-Hazards Emergency Response Team. Some discussed attending classroom (in-person) NIMS training and also online NIMS training. The online NIMS trainings are available at http://www.fema.gov/national-incident-management-system for team members and are encouraged to take the courses. Some NIMS courses are available online while others are only offered in the classroom, in-person setting and may last three to five days. Each person interviewed stated they were interested in attending additional trainings to assist with their response to an emergency on campus.

Student Health Services Associate Director shared how Southern Illinois is a part of the surrounding community in terms of emergency preparedness. He stated, “we are the number one employer in southern Illinois, so our impact on the region is huge.” He went on to state,
the number of people the university brings to the community is huge, so all of our exercises we have a campus exercise but then we would also do a joint exercise. We would have the police department, the fire department, Jackson County Emergency Management, sometimes the state folks [IEMA, Illinois State Police] would come to observe or participate...those relationships between those organizations are always important...and pretty healthy. We also have our colleagues at other institutions, other universities that we talk to, but I think we [Southern Illinois University] are ahead of a lot of them.

**Response.** Housing Associate Director stated, “there is no doubt in my mind if we hadn’t been meeting [for drills] all those years and worked out our all-hazards plan that it wouldn’t have gone as well as it did. He recalled, “the biggest part of the plan is just to know you have a group working on operations, which is the immediate...then a group working on the planning side.” He stated, “there was a lot more than just the storm that was thrown on us...look at the graduation, throw in housing utility workers, and then feeding the entire community.” “We did [refer to the plan] who to talk to...and what kind of supplies do other people have,” recalled Housing Associate Director.

**Campus Emergency Operations Center.** Student Health Services Associate Director stated, “we benefited a lot because that group [All-Hazards Emergency Response Team] had worked together in exercises.” He further shared, “we were familiar with each other...we worked together on a regular basis, so there is a lot of comfort and confidence in the group.” He stated the “exercises [or drills]” provide a “no pressure” environment, but through them “you become familiar with each other...they knew where the strengths,
resources, and the weaknesses..." He shared the Interim Chancellor was present at the first few meetings and "recognized he wasn't the expert but what he did was offered support."

A Housing Associate Director stated, "we work collaterally here...you who people are, what they do, what their responses should be...we've become really effective and efficient in what we are doing." She shared, "you do all the right planning, you talk through all the trouble, trouble shooting [during drills]...I think that is what good planning and preparedness does for you." "It has made us really, really good at what we do," she stated.

In the CEOC, "you remain calm and you respond...there is a logical, sensible pattern that needs to happen...you get your wits about ya real quick and figure out what you need to do," commented a Housing Associate Director. Student Health Services Associate Director recalls, "there were people there with clear responsibilities...the Interim Chancellor was there for decision making...the Chief of Police who was charged with the life and safety, the well-being but it wasn't an environment where that was important." He further stated, "we all sat down and we talked about the issues...people felt comfortable giving their ideas and their views." He shared no thought or idea was "dismissed out of hand...each idea that came forth was give thoughtful consideration and discussion."

A Housing Associate Director described the All-Hazards Emergency Response Team as "a real tight nit group." Another Housing Associate Director shared the atmosphere in the CEOC was, "very calm, deliberate" which he attributed to the leadership of the All-Hazards Emergency Response Team. Student Health Services Associate Director stated, "while there was structure to it [the CEOC]...it wasn't burdened by egos and people's need to be seen as in charge...there was a real cooperative, collaborative 'let's solve the problems' team approach."
Everyone discussed and agreed, "physically the command center should have power." The Student Health Center was listed as the primary location for the Campus Emergency Operations Center. The Director of the Student Health Services shared that 2009 was his first year on campus remembered being assured he would "never have to worry about the power going out in this [the Student Health Center] building." He shared the storm was the second time the building had lost power; the first time "someone hit a transformer and the power went out for a day."

Student Health Services Associate Director stated, "the Student Health Center was designed to have a back-up generator...during construction of it, um, I won't give anybody the responsibility for that decision, but a decision was made to cut it." He added, "but if you go there now you will see that they have one." The Campus All-Hazards Emergency Preparedness and Violence Prevention Plan lists multiple locations that may potentially be utilized as the Campus Emergency Operations Center depending on the circumstances of the emergency, location or portion of campus affected, and extent of the damages.

**Unified Command.** In incidents involving multiple jurisdictions or multiagency response establishing a unified command allows agencies or jurisdictions affected to work together without interfering individual agency responsibilities. According to a Department of Public Safety representative, "I think we operated very well without it [unified command] but you could get a better use of resources with it..." He also stated, "Williamson County was a very good example of...a unified command response...they were giving updates...keeping all their units together for the whole county-wide situation." A Department of Public Safety representative remembered that although telephone calls were received from the Illinois Emergency Management Agency, Jackson County
Emergency Management Agency, "homeland security" [Illinois Terrorism Task Force], and Carbondale's Emergency Management Agency agent "we all functioned independently."

An Associate Director from the Student Center stated, "we never did drills with them [the city, Carbondale] before, but now we are doing a lot more with them...we've built off the storm." Another Department of Public Safety Representative stated, "everyone...city, county, SIU...needs a command structure for their area, but overlapping agencies need to come together to form an unified command too." "We've worked on that through a full scale exercise...brought all the agencies in to form a unified command," recalls the second Department of Public Safety representative, "it did take a while for someone to step-up and be commander but all groups worked together." "It wasn't like we hadn't worked with them [city] before, we've always had a mutual-aid agreement...as far as I can remember...it was bringing everyone else in...like EMS, the health department, sheriff's department, the helicopter," these agencies all work together on a daily basis as a team "we need to pull them all together at the same time" stated a Department of Public Safety Officer.

**Faculty.** One area that was missing prior to, during, and has minimal representation since the storm is academia. One individual interviewed stated, "it is always like pulling teeth...it is very difficult to get people from academia there," referring to the Campus All-Hazards Emergency Preparedness Committee meetings. A different participant said, "it's like they don't think they have to participate...since they are tenured it makes them exempt or something." And another remarked, "it's almost like...I'm tenured and I don't have to leave." A third person remarked there was a "select group of people who are well prepared, but the whole is probably not as well prepared as they could be." An additional comment was it was "not from a lack of trying to disseminate the information" and stated, "it is more
from 'their' lack of wanting to be involved...lots of people on campus will like 'if it happens I'm not doing anything' or 'it's not my problem' and felt 'hands-off than be ready to deal with it.'

A fourth person recalled, "we [the All-Hazards Emergency Response Team] are well represented, but I don’t recall a faculty member being part of the discussion." "We have to remember on campus there is on-going research...there is a lot at stake financially if something becomes compromised," the need for faculty representation on a college campus is important. Yet another stated, "the faculty sometimes don't know how to respond, it's not that they don't care...it is not on their radar."

**Recovery.** Three interview participants viewed University Risk Management as "behind the scenes" during the response and recovery. Student Health Services Associate Director stated, "that's probably the most active I have seen them [University Risk Management]." University Risk Management staff were "taking care of the coverage and the reporting requirements...inventorizing the damages, photographs...going out and visiting the different sites." Two people shared University Risk Management "set up camp in the Health Center," their office space was "days away from having power." Student Health Services Associate Director chuckled as he stated, "they got much more active than we were accustomed...it is hard to simulate some of their stuff during an exercise."

Student Health Services Associate Director commented, "I don’t know what we [All-Hazards Emergency Response Team] could have done better. I was impressed with the number of folks that showed up and how quickly it occurred." He stated, "it was a Friday afternoon, the end of the semester...a number of faculty were gone, a number of students were gone, it is incredible that there were no injuries."
Mitigation. A Housing Associate Director stated that as the Facilities Director there were "lots of examples of mitigation in housing." He shared of updating roofing material for certain wind speeds common to the region, roof designs to make locating a leak easier, and other facilities projects. He stated, "I think we have a lot higher standards than a classroom setting...these are their [students] homes."

Student Health Services Associate Director shared when the new Student Health Center was built, "with seismic code in mind." New building construction and renovations around campus are based off building codes applicable for potential natural disasters that could occur in this area.

Summary

During the overnight hours of May 7-8 golf-ball sized hailstones pelted the University and surrounding region causing widespread damage. Additional storms rolled through the area mid-morning on May 8th and again in the early afternoon. The afternoon storm system brought sustained winds up to 80 miles per hour. The University activated their Campus All-Hazards Emergency Response Plan for a real emergency for the first time. The years of annual emergency exercises were put to the test and the emergency operations of the campus were efficiently and effectively coordinated.
CHAPTER V

SUMMARY, CONCLUSIONS, DISCUSSION, IMPLICATIONS, AND RECOMMENDATIONS

"Excellence is the gradual result of always striving to do better." — Pat Riley, American basketball player

In Chapter IV, I described the recent events that impacted the University's Campus All-Hazards Emergency Response and Violence Prevention Plan. I told of the University's activation of their Plan for a natural disaster impacting campus and the surrounding region, along with how the University provided services to the community during the windstorm recovery. Much of the public health literature on emergency preparedness and emergency management mentions a disconnect between emergency preparedness and public health emergency preparedness citing the vast number of disciplines and journals the articles are published (Abramson, et.al, 2007; Landesman, 2007; James, et. al, 2008; Yeager, et. al, 2010). For public health emergency preparedness and emergency management to be successful everyone must be willing to collaborate and compromise for the health and wellness of the communities they serve.

Summary

When I undertook this study I did so with a desire to delve into the complexities surrounding emergency preparedness and management and I chose Southern Illinois University-Carbondale as my setting. The preparation for this study began long before the research design was established. I began my career in emergency response in the late 1990s. When I arrived on scene I frequently found that individuals were not prepared for whatever 'event' summoned me to their location.
It is impossible to be prepared for every emergency or disaster that happens. Disasters are considered "low-probability events" and emergency preparedness vies for attention with the main concerns of everyday life (Kapucu, 2008). A local meteorologist described the May 8, 2009 windstorm as a "once in a lifetime event". Emergency preparedness is more about responding to a disaster instead of reacting to it. Having general guidelines prepared, keeping an open mind, and being flexible are critical during an emergency response.

The purpose of this qualitative research case study was to describe the execution of Southern Illinois University-Carbondale's emergency management plan in response to the May 8, 2009 windstorm "the Super Derecho," or the operational coordination. The case study design allowed me to investigate the intricacy and synchronization of disaster response at the university. Data collection included documents, in-depth interviews, and reflexive journaling.

The experience provided real-life application of things the Campus All-Hazards Emergency Response Team learned during a functional or full-scale exercise and added to the richness of the presentation. The data was collected retrospectively from 15 Team members present in the CEOC during the response and recovery. An additional 8 interviews were completed with local public health officials, emergency management agency employees, and members of the Illinois State Police. Through the analysis of the data I was able to describe the situation, feelings, and obstacles that faced the Team during the response. I was also able to pull out day-to-day activities each department does as part of the university's overall prevention, protection, and mitigation plan. My research identity contained multiple facets that included being an EMS worker, former fire fighter, a nurse,
and researcher all of which influenced my understanding of all-hazards preparedness on campus and added to richness of the analysis.

Conclusions

1. Members of the Campus All-Hazards Emergency Response Team shared a genuine respect for one another, they listened to one another, and worked as partners.

2. Community collaboration is essential for effective response and recovery to a disaster. Partnerships need to be established before an incident occurs to allow time for a working relationship to be established.

3. Each department on campus represents a ‘service’, which comes together to provide a service at the time of the disaster or emergency (one-stop-shopping). There are numerous departments with independent roles and responsibilities that came together to form the response team.

4. The Student Health Services did not play a significant role during the response, however their services during an emergency are critical.

5. The Center for Environmental Health and Safety acted as advisors for a safe campus community for faculty, staff, and students, which included a public health component.

6. Continuing with the commencement ceremonies was pivotal to provide for continuity of operations and to provide some normalcy for students, faculty, and community.

7. All-hazards emergency preparedness is viewed as a part of everyday life.
8. Teamwork and leadership among the responders proved indispensable during the response and recovery. Team members did not always agree on decisions, however once the decision was made everyone rallied together.

9. Familiarity with the group awareness of strengths and weaknesses aided working dynamic of the Team.

10. The preparedness, planning, and training among responders contributed to the good working relationships and trust throughout the response.

11. The storm taxed an aging backup generator system as well as newer generators.

**Study Limitations**

Although there were a number of experiences throughout the storm response and recovery to be gained from this study I would be remiss to not acknowledge the limitations. The first limitation was the availability of data. Interview participants remarked that documentation did not begin immediately. They documented retrospectively, but were unable to give me an exact or approximate time frame after the event began documentation. This accounts for the time discrepancies found on the situation reports. It also made triangulating data difficult causing evidence to be purely antidotal.

Additional data analysis challenges related to the documentation came from the Unit Log reports that were contained in the ‘NIMS’ folder. The Unit Log is an incident command system recording of significant event, attendance, and actions completed; however every Unit Log form was missing important data and some were blank.

The situation reports were not uniform among the responding departments. Missing departmental reports included Student Health Center and Plant and Service Operations. University Communications, Risk Management and Housing identified those present by
name in the situation report. The Center for Environmental Health and Safety used titles to identify responders. And the Department of Public Safety, Information Technology-Operations Group, Information Technology, Student Center, Counseling Center, and Purchasing situation reports did not contain any names of those responding; nor did the Campus Emergency Operations Center. The lack of accurate attendance logs, or role sheets made knowing exactly who was in attendance difficult; therefore not all participants may have been contacted for an interview.

Many individual who were present during the storm in the Campus Emergency Operations Center were no longer working for the university. In fact, less than half of those names gathered were located and agreed to an interview. While the participants in many instances had vivid recollections from the storm on Friday afternoon, as the events of the weekend progressed their memory of specific details became less accurate.

Discussion

During the December 2010 Functional Exercise, I stood at the back of the room designated as the CEOC and watched the flurry of activity and discussion between everyone present. Then I saw someone standup in frustration, slam their hands on the table and demand to know “who’s in charge here?” This was the image I carried with me when I began interviewing participants.

While responding to an emergency I was taught to prepare for and expect the worst while hoping for the best. This manner of thinking encouraged me not to be caught off guard. Former Green Bay Packers coach Vince Lombardi says, “plan your work and work your plan.” The planning process begins with the response in mind. The response to an
emergency needs to be structured, yet flexible and begins long before the event strikes. Preparedness and mitigation facilitate well-organized and successful emergency management and incident response activities. As an EMS responder my job description quite literally involved life or death decisions. My way of thinking and attitude were essential so I could respond with concern not emotion, alertness but not excitement, be quick but not rushed, while always resolute to do what was best for the patient.

My career in EMS began with education, coursework and hands-on practice getting ready for a real patient. Skills/hands-on practice involved working with imaginary patients, manikins, and or actual students in role-play. By using real people who were not sick or injured we began to learn what a non-sick or non-injured person looked and felt like while doing the assessment. I learned that it was critical to be well organized and multitask, as several things are often accomplished at one time. After being in the field for several years the structure I practiced while in school could still be seen in my patient assessments.

The preparedness or planning process at an organization begins with an all hazard analysis, an assessment of vulnerabilities, and an assessment of response capabilities. No one can prevent the unpredictability of a natural disaster, however steps can be taken to lessen the impact of the disaster. Annual exercises or drills allow for cohesiveness of the Team to be established and built upon. The participants spoke of the rapport and respect shared throughout the command center during the storm and credited the bond to working together on a daily basis. Training and exercising are part of the preparedness cycle from NIMS: plan, organize/equip, train, exercise, evaluate/improve (FEMA, 2010c). The more individuals or organizations are exposed to training, exercises, or real emergencies the more prepared they will become (Tierney, et. al, 2001).
NIMS supplies a systematic, proactive method to direct agencies and departments at all levels of government and the private sector to work fluently “to prevent, protect against, respond to, recover from, and mitigate the effects of incidents, regardless of cause, size, location, or complexity,” to decrease the loss of life and property (NIMS, 2008, p.1). The Campus All-Hazards Emergency Response Plan identifies and operates using NIMS as the essential emergency system for the university. The participants of the study all reported completing NIMS courses either online or in a classroom setting and spoke of the benefits the framework provided such as understanding how an ‘incident works and who is in command.’

NIMS blends “best practices” into a comprehensive framework to be used by emergency management/response personnel for an all-hazards approach (NIMS, 2008, p. 3). Police, fire, and EMS use NIMS on a daily basis. Healthcare and PHEP strive to work following evidence-based practice or best practices to operate. The rarity of large-scale public health emergencies makes it challenging to develop performance measures and standards to improve their practices (Nelson, et. al, 2008). The use of NIMS, the emergency operation plan, and functional annexes will provide the standards and measures needed to establish best practices for PHEP.

Drabek (1986; 1987) identified a social reality that the general attitude to emergency preparedness is characterized by public complacency. After the May 22, 2011 EF-5 tornado that cut a swathe through Joplin, Missouri the National Weather Service deployed a team to Joplin to learn if there had been enough warning prior to the storm. Findings showed a desensitization of people to the warnings (WSILT, 2011).
Several participants admitted to being unaware of the potential for storms expected on that Friday afternoon while others shared being avid weather followers. I must admit I did not realize the intensity of the storms I was driving into as I was more focused on being home and spending time with family. I also was unaware of the storms that had impacted Carbondale and the campus the night before the historic windstorm. I lived approximately 50 minutes from campus and only received rain and mild thunderstorms during the overnight hours of Thursday. I also primarily listened to satellite radio, which did not have commercials, weather updates, or storm warnings.

Communication is the area that is continuously mentioned as needing improvements during and after an emergency. Due to the widespread devastation caused by the storm SIUC along with the surrounding communities were without power and the usual lines of communication were compromised. This caused multiple challenges for the response and recovery efforts. The local television station was off line due to transmitter failure and warnings or updates could not be televised. The television station had dabbled in social media outlets such as Facebook and Twitter prior to the storm. Meteorologists were able to utilize social media during and after the storm to facilitate dispersal of information to the public. WSIL television utilized the local Mississippi River Radio network to announce any additional alerts, warnings, or to pass along information updates.

The City of Carbondale has eight audible emergency alert sirens throughout the town and campus. However, only three of the eight have battery backup in the event of a power outage. None of these battery backup sirens are located on campus; the closest is approximately a mile away from the north edge of campus. The audible storm sirens are
activated by the City of Carbondale, however as I mentioned previously, once the university lost power the storm sirens could no longer be utilized as a warning system.

Any communication system should allow for redundancy of alerts and warnings. Southern Illinois University-Carbondale provides multiple layers of communication of warnings and emergency information such as: BERT, email, emergency information line, emergency radio notification network, Internet, public address systems, and WENS. The layering of messages provides multiple ways to disseminate information and allows individuals to take necessary actions.

During the first couple of CEOC meetings fellow Team members were giving lessons on sending text messages. The cellular lines were not always reliable for placing and receiving calls, but the Team was able to utilize text messaging dependably. The first text message on record was sent December 3, 1992, and in 2009 cell phone users older than 24 years old sent an average of 30 texts per day (Pew, 2011; CNN, 2012). During one interview a participant shared with me he had purchased his first cell phone the week prior to the storm and received a “crash course in texting” during the command meeting. Having no inkling how to even save numbers in the phone’s contact list, another team member programmed team members contact information for him. This seems unfathomable given the technology updates over the last five to ten years.

During the extreme, destructive storm that caused extended power outages, it is important to remember that the normal lines of communication might be compromised for hours to days. Advancements to technology occur rapidly and trying to keep up can be challenging.
The 'elephant in the room' for a research institution is the need for back-up power for the research facilities and other essential locations. There are several buildings on campus that do not have a back-up generator, even though the original drawings included one. It was frequently cited that back-up generators were one of the first things to be cut when a building project ran over budget. The elimination of this back-up power source became a missed opportunity to be better prepared for the May 8th storm.

The Student Health Services building was designed to have a back-up generator; unfortunately that critical piece was eliminated during construction. However, the Plan does list alternative locations for the CEOC depending on the 'what' and 'where' of a disaster. So as the sun set for the day the decision was made to relocate the command meetings to the Plant Services building. This location had a large conference room type space that could be utilized for the CEOC, along with having electricity, showers, and other amenities that would prove beneficial.

The normal safety issues that come with the response of a devastating event such as the windstorm can be 'bad enough' but when coupled with the complication of graduation it can add a new level of challenges. Many felt they were between a rock and a hard place regarding the holding of or cancelation of commencement. There was a lengthy debate regarding the merits of having graduation versus the risk of cancelation.

The Chancellor attended the meetings of the CEOC the night of the storm. The discussion regarding graduation was tense, and the Team's recommendation did not match the ultimate decision regarding the go-ahead of the event. Whether it was to portray a normalcy or for public relations, administration made the final determination regarding the commencement ceremony. The next decision would be to find the safest location to
hold the event and the football stadium was identified as the only location to support the occasion due to the power outage.

Hindsight proves to be valuable when assessing judgments. Those interviewed continued to have mixed feelings regarding the decision, which was ultimately out of their control, to hold graduation. Many cited the daunting task of the physical plant workers who were responsible for not only debris cleanup, but also preparation for the ceremony. The Team rallied behind the decision at the time, put aside any difference of opinions, understood the overall objective, and supported the choice whole-heartedly at the time. Despite the situation, "there were things all under control that you cannot control." Once the decision was made everyone jumped in to assist, keeping all eyes on the goal of graduation.

Holding graduation affected more than the university. The City of Carbondale was closed and a curfew had been established for its inhabitants' safety. The city was virtually impassable which made maneuvering throughout town treacherous. Representatives from SIU contacted the city and county command centers to coordinate needs regarding the ceremony, discuss the implications, and establish a plan.

Some of the greatest experiences gained from the event were for the Team to be prepared, to know that the Team is all in this together, knowing how the CEOC works, and knowing who is in command. The Campus All-Hazards Response Team did not display fear while responding to the disaster.

When I consider the bureaucracy and multitude of personalities that is present at any workplace, the camaraderie spoken of by all the study participants was overwhelming. The interview participants provided overwhelming evidence for strong, effective
leadership, which is needed during an emergency situation and also during non-crisis times to provide proactive guidance and direction. Having an environment that encourages a forward-thinking, proactive approach to prevention and protection for the preparedness of the University, as a whole towards potential or perceived threats is critical to not growing stagnant.

The overall impression was that Team members understood their role as a small part of the larger whole of campus. While they all came from the top leadership positions from his or her respective department no one demanded to be heard and any ‘ego’ was left outside of the CEOC, which facilitated solidarity throughout the disaster response.

Implications

During a recent town-hall meeting I attended with numerous emergency managers, law enforcement, and public health officials a discussion can up regarding what changes should be made to emergency preparedness. I commented that more cross-discipline education was needed. My intentions were to educate each profession on the capabilities of the others. When I shared I was from public health education and I felt there was more we [public health] could bring to the table two public health officials from a rural health department stood up and stated, “for the past 10 years the only thing they have told us we are allowed to do is pass out pills during an epidemic.” This statement caught me off guard and sadden me; I felt public health had been placed in a stovepipe and limited their resources. Deepak Chopra says, “instead of thinking outside the box, get rid of the box.” Realizing that everyone involved has a responsibility and working together for the greatest good it is essential collaboration across communities and sectors occur (HP2020, 2012). The Illinois Department of Public Health encourages local health departments to develop
plans for all-hazards emergency preparedness, but I was told the only deliverable when receiving public health emergency preparedness dollars is in bioterrorism (mass pill dispensing and vaccinations). I went online to Illinois Public Health Department’s website to see their page for public health emergency preparedness:

Screenshot from idph.state.il.us/Bioterrorism/default.htm

Screenshot from idph.state.il.us/Bioterrorism/emergency.htm

This portrays a false view of what PHEP should be and local public health may feel limited when trying to stretch outside traditional areas of practice. Some areas of southern Illinois have a strong working relationship with local EMA and other emergency preparedness agencies; this may not be the case across the state or nation. However, with dwindling funds to cities and counties it is more critical now to build a spirit of cooperation
and collaboration (Nelson, et. al, 2008). Successful participation of community partners during pre-disaster preparedness and planning can lead to strengthened relationships and enhance response effectiveness (Kapucu, 2008). Building robust partnerships prior to an emergency is important so communities can pool their resources. It is important to remember that the government is not going to come save you at the federal level if it is a local issue.

Budgetary woes are hitting more than just cities and counties. There are shortfalls and state payments being late to colleges and universities in Illinois as well. According to the President at SIU the university is owed over $148 million from the State of Illinois, which is only 16% of what is owed by the state. This causes the university to make difficult decisions regarding the budget and can make mitigation renovations fall on the list of priorities at the university. Funds were to be made available through the Campus Security Enhancement Act of 2008 towards mitigation of campus security across the state through capitol development, but as of February 2012 the Campus Security Enhancement Grant Program had not been fully developed (Versaci, 2012).

While working in the emergency medical services I was a participant during many thunderstorm warnings, tornado warnings and even a few snowstorms when people could not get to work. The concept of leaving work after the ‘all clear’ was foreign to me. There was no way for me to leave and check on family without facing serious legal repercussions. Leaving would have meant abandoning my position and could mean potentially losing my license, and my way of life. Unless you have worked in this type of environment it does not set with you the same way. Several participants discussed co-workers leaving after the
storm to check on their family and their homes. It struck me as odd and the concept was almost foreign to me since I was never in a position in which that was possible.

So often police, fire, emergency medical services, or the emergency management agency are misunderstood. In each of these professions individuals are used to stepping up and taking charge. Each of these professions has a tight culture that can be very intimidating to 'outsiders' and I have yet to be able to describe the culture to someone that is not familiar with it. Crossing jurisdictional lines can be challenging. It will be difficult to understand how the response pieces fit together without understanding how police, fire, EMS, or EMA work, and they in turn understand how public health works by doing some cross-pollination (MacDowel, 2006; James, et. al, 2008; Kapucu, 2008; Subbarao, et. al, 2008).

Recommendations

All emergency response begins and ends locally and will be enhanced by forming partnerships and strengthening local community relationships. No two disasters are precisely the same. There may be a familiarity to the type such as tornado, flooding, infectious outbreak, or shooting. Each one brings to light new aspects of preparedness and response to be added to the body of knowledge regarding what should be considered, what works, and what may not work (USFA-TR-167, 2008).

Educating the public to emergency response is important. Recently I was discussing my research focus with someone unfamiliar with 'how' emergency response works. I was met with a barrage of negative comments regarding FEMA's response or lack of response to the EF5 Leap Day Tornado in Harrisburg, Illinois. I explained the levels of response to a disaster to a disaster such as the Harrisburg versus a response to a hurricane, and how they
differed. Emergency response to a disaster has multiple levels of response that includes: local response, regional response, state response, mutual aide response, and federal response. The federal government will not come in and take over a local response to an event. They are there to offer assistance based on the resources needed (i.e. food, manpower, shelter, equipment, etc.).

While by no means do I wish to downplay mistakes made by FEMA in the past. I do wish to highlight that the most local of responses begins with individual responsibility. Which means that I must understand that it takes time for a response effort to be initiated and assume personal responsibility to ensure my family and I are adequately prepared. There have been events to significantly tarnish the reputation of FEMA and my research was not intended to redeem them.

As a research institution whose mission “strives to perpetuate high quality... service to its community and region” through public service, civic and social development as demonstrated through a steadfastness to augment the quality of life via problem-solving skills and academic proficiency. The University aspires to improve the safety and welfare of the community and those lives it comes in contact with.

While the academics are trying to come up with a new model or theory for how to best respond, people in the field are applying and testing, during real-life situations, and realize what works and what does not. This is what I refer to as ‘treat the patient not the monitor,’ which is simply that the books may say an event must be handle ‘this way’ but in the field where they are encountering the situation a better way to approach the situation was found. Recognizing the value of hands-on, practical, lived experiences versus solely theory/methods perspective and striving to weave both areas of expertise together for
maximum benefit of communities, which will be the real beneficiaries of these partnerships.

Colleges can provide vital human capital such as faculty and staff members. It is critical not to forget that students can also play a significant role too. Colleges and universities contain subject experts in areas such as engineering, information technology, public health, etc., which are essential for preparing for or managing an emergency (Covich, et. al, 2005). Creating a Campus Medical Reserve Corp would be a good use of the student population who may come to college with valuable skills and talents or allow students to utilize skills learned in the classroom setting such as first aid to engineering skills.

Recommendations for the University

1. Continue discussions for a dedicated command post.

2. The time consuming requirements as the All-Hazards Resource Coordinator are immense. Having a full-time All-Hazards Resource Coordinator whose only responsibilities would revolve around all-hazards and violence prevention on campus.

3. Train new hire Department of Public Safety Officers as EMT/EMS responder since they are first on scene and their emergency medical training can provide additional resources during events.

4. Encourage faculty to incorporate prevention, protection, and preparedness towards all-hazards emergency preparedness and become involved in outreach to communities.

5. Drill involving Administration and Board of Trustees-stress importance of potential events that would make campus off limits
6. Continue to foster strong community partnerships with agencies involved in emergency preparedness and response along with forging new partnerships in areas involved.

7. Develop a Campus Medical Response Corp (MRC) to augment the county's newly formed MRC to take advantage of the human capital available as part of the campus community.

8. Establish an awareness of cross-disciplinary research across campus and promote inter-disciplinary research collaborations.

9. Keep in mind the safety and security of students, faculty and staff when constructing new buildings on campus. Follow building codes based off of potential disaster risks for the area and campus.

10. Students, faculty, and staff should be trained annually about responding to various emergencies and about the notification systems that will be used.

11. Develop plans to account for and utilize volunteers that may arrive to assist with response and recovery efforts during a disaster.

**Recommendations for Public Health Education**

1. Much concentration is placed on bioterrorism for public health; however, history has shown the impact when emergency preparedness has tunnel vision towards a specific hazard. Public health educators must recognize the significant flaw in this type focus and be prepared to embrace new roles for public health emergency preparedness.

2. Local public health leaders have the capability to motivate organizations and potential community partners to collaborate and participate in preparedness
activities. Public health educators should continue to pursue collaborative multi-
disciplinary relationships to advance the community awareness and preparedness.

3. Public health educators should be at the forefront of public health emergency preparedness educating, training, and preparation of the future leaders in the profession.

4. Public health educators are trained based off core competencies: assessing,
planning, implementing, evaluating, communicating, coordinating, and acting as a
resource for the public and the profession. Utilizing these core competencies in the
delivery of public health education for all-hazards preparedness is a parallel to the preparedness cycle of NIMS.

5. Provide experiential learning opportunities to students where they actually have the chance to take part in an all-hazards exercise.

6. Provide education to the public on emergency preparedness, response, recovery, and mitigation. Including information on how to volunteer after a disaster strikes. Volunteers should not just arrive on scene after a disaster; they should always be a part of a requested group.

**Personal Reflections**

My mother always told me to go to college and get a degree, that it was something no one could ever take away from me. When I returned to school in 2003 to complete my bachelor’s degree I never imagined 10 years later I would be completing my PhD. After 10 years and three, almost four, college diplomas I am anxiously excited to see this chapter end and the next one begin.
Never being one to back down from a challenge, I have found the process of furthering my education exhausting, stressful, and exhilarating at the same time. It seems like yesterday that I began the last leg of this journey, thinking I knew what to expect, yet having no clue what I had gotten myself in to. I have spent the last six years trying to blend my past and my present to create my future. I have struggled to try and fit in, yet did not want to lose myself in the process. While being pulled in multiple directions from a variety of professors during my time as a student I learned it is best to be true to myself and follow my passion and the rest will fall into place.
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APPENDICES
SIUC HSC FORM A
REQUEST FOR APPROVAL TO CONDUCT RESEARCH ACTIVITIES INVOLVING HUMAN SUBJECTS

CERTIFICATION STATEMENT

By making this application, I certify that I have read and understand the University's policies and procedures governing research activities involving human subjects. I agree to comply with the letter and spirit of those policies. I acknowledge my obligation to:

1. Accept responsibility for the research described, including work by students under my direction.

2. Obtain written approval from the Human Subjects Committee of any changes from the originally approved protocol before implementing those changes.

3. Retain signed consent forms in a secure location separate from the data for at least three years after the completion of the research.

4. Immediately report any adverse effects of the study on the subjects to the Chairperson of the Human Subjects Committee, SIUC, Carbondale, Illinois - 618-453-4533 and to the Director of the Office of Sponsored Projects Administration, SIUC. Phone 618-453-4531. E-mail: siuhsc@siu.edu

Project Title
Promising practices: A case study of public health emergency preparedness at a university

RESEARCH ADVISOR'S ASSURANCE: My signature on this application certifies that the student is knowledgeable about the regulations and policies governing research with human subjects. I am aware of my obligations stated on Form A and will be available to supervise the research. When on sabbatical leave or vacation, I will arrange for an alternate faculty sponsor to assume responsibility during my absence. I will advise the Human Subjects Committee by letter of such arrangements.

Amy L. Mathes
July 10, 2013

Researcher(s) or Project Director(s)

Kathleen J. Welshimer
June 10, 2012

The request submitted by the above-named researcher(s) was approved by the SIUC Human Subjects Committee.

This approval is valid for one year from the review date. Unless the protocol is approved as Category I (exempt), researchers must request an extension to continue the research after that date. This approval form must be included in all Master's theses/research papers and Doctoral dissertations involving human subjects that are submitted to the Graduate School.

Chairperson, Southern Illinois University Human Subjects Committee
7-23-12
HSC Approval letter (exempt)

To: Amy Mathes

From: Jane L. Swanson, Ph.D.
Chair, Human Subjects Committee

Date: July 23, 2012

Subject: Promising practices: A case study on public health emergency preparedness at a university

Protocol Number: 12319

The revisions to the above referenced study have been approved by the SIUC Human Subjects Committee. The study is determined to be exempt according to 45 CFR 46.101(b)2. This approval does not have an expiration date; however, any future modifications to your protocol must be submitted to the Committee for review and approval prior to their implementation.

Your Form A approval is enclosed.

This institution has an Assurance on file with the USDHHS Office of Human Research Protection. The Assurance number is FWA00005334.

JS:kr

Cc: Kathleen Welshimer
To:          Amy Mathes

From:        Jane L. Swanson, Ph.D.
             Chair, Human Subjects Committee

Date:        September 19, 2012

Subject:     Promising practices: A case study on public health emergency
             preparedness at a university

Protocol Number:  12319

The SIUC Human Subjects Committee has approved the modification to the above
referenced project submitted on 9/19/2012 and you may proceed.

NOTE: Your study is determined to be exempt according to 45 CFR 46.101(b)2. Due to a
recent change in policy your project no longer has an expiration date; however, any
future modifications to your protocol must be submitted to the Committee for review
and approval prior to their implementation.

Thank you for helping us keep your file up-to-date.

JS:kr

Cc:          Kathleen Welshimer
APPENDIX B
CONSENT FOR AUDIO-RECORDING AND PARTICIPATION

This is a study of a university’s emergency management plan and its execution in response to a specific natural disaster (e.g. May 8, 2009 windstorm “Super Derecho”) to seek input from the response team to strengthen emergency preparedness at the university.

This study involves interviews with individuals associated with the All-Hazards Team. Your name was obtained through a document analysis of Situation Reports generated from the Emergency Operations Center. Your phone number was obtained using Southern Illinois University’s People Finder link on the university’s website.

I agree to be in this study. I understand that:

1. My participation:
   a. involves a 60-minute interview;
   b. is voluntary.
2. I may withdraw at anytime without penalty.
3. The interview will be audio-recorded.
4. My responses will be held confidential.
5. I am free to ask any questions, refuse to answer a question, or drop out of the study at any time.
6. I will be identified by a pseudonym.
7. All information will be reported in aggregate. Every effort will be made to ensure I am not identifiable in anyway.

Prior to the study being released for publication I will have the opportunity to review and respond. If I have any questions I can contact Amy Mathes (almathes@siu.edu) or Dr. Kathleen Welshimer (welshime@siu.edu). Only the investigator will have access to individual responses.

“I agree____, I disagree____ that Amy Mathes may quote me anonymously in her dissertation and any publications.”

[Participant signature and date]

This project has been reviewed and approved by the SIUC Human Subjects Committee. Questions concerning your rights as a participant in this research may be addressed to the Committee Chairperson, Office of Sponsored Projects Administration, SIUC, Carbondale, IL 62901-4709. Phone (618) 453-4533. E-mail: siuhsc@siu.edu.

APPENDIX C
EMAIL SOLICITATION REQUEST

From: Amy Mathes

Subject: Research Request

Dear ____________:

I am a doctoral student in the Department of Health Education at Southern Illinois University Carbondale. I would like to request an interview with you.

This study involves interviews with individuals associated with the All-Hazards Team. Your name was obtained through a document analysis of Situation Reports generated from the Emergency Operations Center. Your e-mail address was obtained using Southern Illinois University's People Finder link on the university's website. The interview will be audio-recorded.

Questions about this study can be directed to me or to my supervising professor, Dr. Welshimer (welshime@siu.edu), Department of Health Education, SIUC, Carbondale, IL 62901-4632. Phone (618) 453-2777.

If you would like to have your name removed from any future mailings, please respond with that request. If you do not respond to this email or return the opt-out message, you will be contacted again with this request up to three times in the next three weeks. Thank you for your time and assistance.

Thank you for taking the time to assist me in this research.

Amy L. Mathes
(618) 663-2838
E-mail: almathes@siu.edu

This project has been reviewed and approved by the SIUC Human Subjects Committee. Questions concerning your rights as a participant in this research may be addressed to the Committee Chairperson, Office of Sponsored Projects Administration, SIUC, Carbondale, IL 62901-4709. Phone (618) 453-4533. E-mail: siuhsc@siu.edu
APPENDIX D

SEMI-STRUCTURED INTERVIEW QUESTIONS

1. What is your background?
   a. How long have you been at SIU?

2. Tell me about your experience with All-Hazards Preparedness.

3. Tell me your experience with the All Hazards Preparedness Committee?
   a. How long have you been on the Committee?

4. Tell me how the Committee is organized (structure, responsibilities, etc.).
   a. How are the Committee members' chosen?

5. Tell me about day to day/month to month things you may do to prepare for a larger event.

6. What training do you have or did you receive related to Committee responsibilities?
   a. What additional training you should have or you feel would be beneficial to your involvement on the Committee?

7. How has your involvement in the All-Hazards Committee changed your perceptions of emergency/disaster preparedness?
   a. On Campus?

8. Were you involved in the preparation of the All-Hazards Plan?
   a. Tell me about how you were involved.

9. Where were you when the May 8, 2009 storm hit?

10. What was your assignment during the May 8, 2009 storm?
    a. What other things did you do?

11. Once an emergency is declared, tell me about how individuals are notified.

12. Describe the command center:
    a. What is the atmosphere like?
    b. What characteristics of the Responders do you see?
    c. How is it run?
    d. Who decides how issues will be handled?
    e. Who follows up on items needing addressed?

13. If you could change anything related to the May 8, 2009 Command Center, what would it be?
a. What worked well?
b. What changes would you make?

14. How would you describe public health's role in emergency preparedness in general?
a. In emergency preparedness on campus?

15. How does the All-Hazards Preparedness Plan address the health of the students, faculty, and staff (campus community)?

16. Anything else we should talk about to help me understand preparedness and response better on campus?

17. May I come back to you if I have additional questions as this unfolds?

18. Is there anything else you want to know from me?

19. Is there anyone else I should go speak with?
## APPENDIX E

### All-Hazard Preparedness Team

<table>
<thead>
<tr>
<th>Department</th>
<th>Description of Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Public Safety (DPS)</td>
<td>• Develop procedures for reviewing and updating All-Hazards Preparedness Plan</td>
</tr>
<tr>
<td></td>
<td>• Develop procedures for facilities and equipment, including testing systems</td>
</tr>
<tr>
<td></td>
<td>• Developing procedures for mobilizing department of public safety personnel and pre-positioning resources and equipment</td>
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<td></td>
<td>• Develop a process for managing incidents at the field level using the NIMS-ICS</td>
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<td></td>
<td>• Develop a process for communicating with and directing the central dispatch center, including the activation of the Emergency Contact List</td>
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<td></td>
<td>• Develop procedures to warn threatened elements of the population</td>
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<tr>
<td>University Housing</td>
<td>• Develop procedures to coordinate the need for on-campus housing, temporary shelters, and temporary off-campus housing locations</td>
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<tr>
<td></td>
<td>• Develop procedures for identifying resident students in need of emergency evacuation assistance</td>
</tr>
<tr>
<td></td>
<td>• Develop procedures for the evacuation and temporary shelter accommodations for resident students</td>
</tr>
<tr>
<td></td>
<td>• Develop procedures for checking residential facilities and equipment</td>
</tr>
<tr>
<td>Information Technology (IT)</td>
<td>• Data backup and storage to ensure the integrity of the research enterprise and reducing interruptions caused by disaster</td>
</tr>
<tr>
<td></td>
<td>• Assist with cyber terrorism and other threats to the communications network</td>
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<tr>
<td>Center for Environmental Health &amp; Safety (CEHS)</td>
<td>• Provide plans and information regarding the location of hazards on campus</td>
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<tr>
<td></td>
<td>• Responsible for filing reports on campus storage and use of hazardous materials</td>
</tr>
<tr>
<td></td>
<td>• Ensure that hazardous material procedures are consistent with the state and local</td>
</tr>
<tr>
<td>Department</td>
<td>Responsibilities</td>
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<td>----------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------</td>
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</tbody>
</table>
| Environmental Safety, Hazardous Materials Plans | • Responsible for dealing with insurance issues  
• Develop, review, and update state and federal disaster declaration requests |
| Purchasing                       | • Develop procedures for procuring emergency resources for responding to and recovering from emergencies  
• Develop the process for documenting the financial cost of emergency response and recovery operations  
• Develop procedures for tracking employees’ time and issuing paychecks during disaster operations  
• Develop a Business Continuity Plan (BCP) |
| Counseling Center                | • Identify and train appropriate staff to provide developmentally and culturally appropriate mental health services  
• Provide basic training on available resources and common reactions to trauma for all staff  
• Assemble and train crisis recovery teams  
• Identify both internal and external partners and partnership agreements |
| Student Affairs/Student Services | • Develop procedures for checking student affairs facilities and equipment, including those relating to on-campus recreation, student organizations, on-campus employment, community service, and volunteerism  
• Develop procedures for addressing the needs of students living in Greek housing or off-campus facilities  
• Develop procedures for pre-positioning resources to maintain functioning of such campus elements as career services and student government  
• Develop mutual aid agreements and pre-negotiate services for foods and services in the event of an emergency  
• Ensure that all items under the Americans with Disabilities Act are considered throughout the planning and implementation of the emergency |
<table>
<thead>
<tr>
<th>Management Plan</th>
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<tbody>
<tr>
<td>• Ensure that the plan is accessible to students whose primary language is not English</td>
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<tr>
<td>• Develop parent or family notification procedures</td>
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<tr>
<th>Student Health Center (SHC)</th>
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<tr>
<td>• Determine adequate supplies and equipment to triage for an emergency</td>
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<tr>
<td>• Provide for system of disease surveillance and tracking</td>
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<tr>
<td>• Coordinate with local and state health partners</td>
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<th>Student Recreation Center (SRC)</th>
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<tr>
<td>• Space utilization/scheduling</td>
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<tr>
<td>• Volunteers</td>
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<th>Plant &amp; Service Operations (PSO)</th>
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<tr>
<td>• Assist with reducing the effect of natural and man-made disasters</td>
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<tr>
<td>• Help shape the institution’s built environment</td>
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<tr>
<td>• Provide maps and floor plans for all campus properties</td>
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<tr>
<td>• Provide and operate resources and equipment</td>
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<th>University Communications (UC)/Public Information Office (PIO)</th>
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<tr>
<td>• Develop procedures for coordinating with all departments to provide unified and factual messages to students, staff, faculty, families, and the media using multiple forms or methods</td>
</tr>
<tr>
<td>• Develop pre-agreements with the media concerning debriefings and media holding areas during an emergency</td>
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<tr>
<td>• Designate a campus spokesperson</td>
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<tr>
<th>Central Administration (Chancellor’s and President’s Office)</th>
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<tr>
<td>• Provide resources and leadership to drive the initiative</td>
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<tr>
<td>• Develop procedures for declaring an emergency</td>
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<tr>
<td>• Identify alternate administrative facilities</td>
</tr>
<tr>
<td>• Develop and coordinate procedures for recruiting volunteers and additional staff</td>
</tr>
<tr>
<td>• Develop procedures to coordinate and approve volunteers and manage donations during an emergency</td>
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<tr>
<td>• Develop a Continuity of Operations Plan (COOP)</td>
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FOR IMMEDIATE RELEASE:
August 22, 2008

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Governor Blagojevich signs Campus Security Enhancement Act

Groundbreaking new law strengthens emergency response plans at all colleges and universities in Illinois

SPRINGFIELD – Governor Rod. R. Blagojevich today signed the Campus Security Enhancement Act into law, making Illinois the first state to require all colleges and universities to plan for and practice their responses to emergencies of all natures. This law will ensure that response plans are developed in partnership with local emergency response agencies and mental health service providers.

“The tragedies that occurred on the Virginia Tech and Northern Illinois University campuses provided an unfortunate reminder that colleges and universities are not immune to acts of senseless violence,” said Governor Blagojevich. “This new law sets Illinois apart in our efforts to make sure students and faculty members on college campuses are as safe as possible.”

Senate Bill 2691 creates the Campus Security Enhancement Act. Beginning January 1, 2009 all Illinois higher education institutions will be required to develop and exercise an all-hazards emergency response plan and an inter-disciplinary and multi-jurisdictional campus violence prevention plan. State and local emergency management officials will assist with the development of these plans, as well as with training and exercises related to the plans. The Act also requires the development and implementation of a campus violence prevention committee and campus threat assessment team.

“Colleges and universities in Illinois have long recognized the importance of implementing measures to ensure the safety of their students,” said Andrew Velasquez III, Director of the Illinois Emergency Management Agency. “This Act will strengthen those efforts by ensuring consistency in their planning efforts and encouraging coordination with their local emergency response agencies.”
The Campus Security Enhancement Act incorporates several recommendations presented to Governor Blagojevich this spring by the Campus Security Task Force, a multi-disciplinary group created by the Governor in April 2007 following the tragic shootings at Virginia Tech University. The task force included representatives of 75 organizations from the response, mental health, legal, and higher education communities. Members focused on campus safety issues related to response, prevention and mental health, and legal issues.

In addition to the recommendations offered on those issues, the group’s comprehensive 259-page final report also included a section outlining initial lessons learned from the response and recovery to the shootings at the Northern Illinois University campus in DeKalb in February.

"Unfortunately, as we learned all too well on February 14th, it is necessary for our colleges and universities to have emergency operations plans in place, including plans to respond to campus violence," said Northern Illinois University President John Peters. "I commend the Illinois General Assembly and the Governor for recognizing, through the passage of this Act, the importance of adequate campus security procedures and responses to protect our students, faculty and staff."

Governor Blagojevich continues to push for legislative approval of another task force recommendation that would create a $25 million Campus Security Enhancement Grant Program. The program would make available funding for campus security response and violence prevention training programs, projects to enhance emergency communications, and planning and execution of campus-wide training exercises. Funding for this initiative is included in the proposed Illinois Works capital program.

SB 2691, which was sponsored by State Sen. John Sullivan (D-Rushville) and State Rep. Bob Pritchard (R-Sycamore), was unanimously approved by the Illinois House and Senate.

"As a parent of two children in college, I speak for all other parents who want to have the confidence that when they send their children to school, they will be safe," said Sen. Sullivan. "The Campus Security Enhancement Act will make sure our colleges and universities are prepared for a worst-case scenario."

"The recent campus tragedies illustrate the need for well-devised emergency preparation plans on university campuses," said Rep. Pritchard. "Faculty members and students deserve the maximum effort put forth by institutions of higher learning to ensure their safety, and this Act directly addresses that."

-30-
Information maintained by the Legislative Reference Bureau

Updating the database of the Illinois Compiled Statutes (ILCS) is an ongoing process. Recent laws may not yet be included in the ILCS database, but they are found on this site as Public Acts soon after they become law. For information concerning the relationship between statutes and Public Acts, refer to the Guide.

Because the statute database is maintained primarily for legislative drafting purposes, statutory changes are sometimes included in the statute database before they take effect. If the source note at the end of a Section of the statutes includes a Public Act that has not yet taken effect, the version of the law that is currently in effect may have already been removed from the database and you should refer to that Public Act to see the changes made to the current law.

HIGHER EDUCATION

(110 ILCS 12/1)
Sec. 1. Short title. This Act may be cited as the Campus Security Enhancement Act of 2008.
(Source: P.A. 95-881, eff. 1-1-09.)

(110 ILCS 12/5)
Sec. 5. Background investigation. Each public institution of higher education shall, through written policy and procedures, identify security-sensitive positions and make provision for the completion of criminal background investigations prior to employing individuals in those positions.
(Source: P.A. 88-629, eff. 9-9-94.)

(110 ILCS 12/10)
Sec. 10. Community task force. Each public institution of higher education shall establish by December 1, 1996, a community task force for the purpose of coordinating with community leaders and service providers to prevent sexual assaults and to ensure a coordinated response both in terms of law enforcement and victim services.
(Source: P.A. 88-629, eff. 9-9-94.)

(110 ILCS 12/15)
Sec. 15. Arrest reports.
(a) When an individual is arrested, the following information must be made available to the news media for inspection and copying:
   (1) Information that identifies the individual, including the name, age, address, and photograph, when and if available.
   (2) Information detailing any charges relating to the arrest.
   (3) The time and location of the arrest.
   (4) The name of the investigating or arresting law enforcement agency.
   (5) If the individual is incarcerated, the amount of any bail or bond.
   (6) If the individual is incarcerated, the time and date that the individual was received, discharged, or transferred from the arresting agency's custody.
(b) The information required by this Section must be made available to the news media for inspection and copying as soon as practicable, but in no event shall the time period exceed 72
hours from the arrest. The information described in paragraphs (3), (4), (5), and (6) of subsection (a), however, may be
withheld if it is determined that disclosure would:

(1) interfere with pending or actually and reasonably
contemplated law enforcement proceedings conducted by any
law enforcement or correctional agency;

(2) endanger the life or physical safety of law
enforcement or correctional personnel or any other person;
or

(3) compromise the security of any correctional
facility.

(c) For the purposes of this Section the term "news media"
means personnel of a newspaper or other periodical issued at
regular intervals whether in print or electronic format, a news
service whether in print or electronic format, a radio station,
a television station, a television network, a community antenna
television service, or a person or corporation engaged in making
news reels or other motion picture news for public showing.

(d) Each law enforcement or correctional agency may charge
fees for arrest records, but in no instance may the fee exceed
the actual cost of copying and reproduction. The fees may not
include the cost of the labor used to reproduce the arrest
record.

(e) The provisions of this Section do not supersede the
confidentiality provisions for arrest records of the Juvenile

(Source: P.A. 91-309, eff. 7-29-99; 92-16, eff. 6-28-01; 92-335,
eff. 8-10-01.)

(110 ILCS 12/20)
Sec. 20. Campus security enhancement.
(a) In this Section, "higher education institution" means a public university, a
public community college, or an independent, not-for-profit or for-profit higher education
institutions located in this State.
(b) Each higher education institution is required to do the following:
(1) develop a National Incident Management
System-compliant, all-hazards, emergency response plan in
partnership with the institution's county or major
municipal emergency management official, report the plan to
this official, and have training and exercises for the plan
annually at a minimum; and
(2) develop an inter-disciplinary and
multi-jurisdictional campus violence prevention plan,
including coordination of and communication among all
available campus and local mental health and first response
resources as well as communication with governmental
agencies and school districts contiguous to the higher
education institution's boundaries, in partnership with the
institution's county or major municipal emergency
management official, report the plan to this official, and
have training and exercises for the plan annually at a
minimum. The campus violence prevention plan shall include
the development and implementation of a campus violence
prevention committee and campus threat assessment team.
(c) County and major municipal emergency managers and
Illinois Emergency Management Agency regional coordinators shall assist in the planning and training process for the plans specified in subdivisions (1) and (2) of subsection (b) of this Section with all resources available to them.

(d) County and major municipal emergency managers and Illinois Emergency Management Agency regional coordinators shall provide higher education institutions with appropriate standards and guidelines for the plans specified in subdivisions (1) and (2) of subsection (b) of this Section and for the training and exercises for these plans.
(Source: P.A. 95-881, eff. 1-1-09; 96-356, eff. 1-1-10.)

(110 ILCS 12/99)
Sec. 99. Effective date. This Act takes effect upon becoming law.
(Source: P.A. 88-629, eff. 9-9-94.)
TITLE 29: EMERGENCY SERVICES, DISASTERS, AND CIVIL DEFENSE
CHAPTER I: ILLINOIS EMERGENCY MANAGEMENT AGENCY
SUBCHAPTER c: ADMINISTRATION AND ORGANIZATION OF LOCAL POLITICAL
SUBDIVISION EMERGENCY SERVICES AND DISASTER AGENCIES

PART 305
ALL HAZARDS CAMPUS EMERGENCY PLAN
AND VIOLENCE PREVENTION PLAN

SUBPART A: GENERAL

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305.10 Purpose
305.20 Definitions

SUBPART B: GUIDELINES FOR THE CAMPUS EMERGENCY OPERATIONS PLAN

Section
305.30 Initial Analysis and Assessment
305.40 Basic Plan Guidelines
305.50 Campus Functional Annex Guidelines

SUBPART C: GUIDELINES FOR THE CAMPUS VIOLENCE PREVENTION PLAN

Section
305.60 Campus Violence Prevention Plan
305.70 Campus Violence Prevention Committee
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SUBPART D: COORDINATION, SUBMISSION AND REVIEW
GUIDELINES FOR CAMPUS EMERGENCY OPERATIONS
PLAN AND CAMPUS VIOLENCE PREVENTION PLAN

Section
305.90 Coordination, Submission and Review

SUBPART E: TRAINING AND EXERCISE GUIDELINES

Section
305.100 Training
305.110 Exercise Guidelines for the Campus Emergency Operations Plan and Campus Violence Prevention Plan
AUTHORITY: Implementing the Campus Security Enhancement Act of 2008 [110 ILCS 12].


SUBPART A: GENERAL

Section 305.10 Purpose

Pursuant to the Campus Security Enhancement Act of 2008, each higher education institution is required to develop a National Incident Management System-compliant all hazards emergency response plan and an inter-disciplinary and multi-jurisdictional campus violence prevention plan. This Part provides guidelines for the creation, review, training and exercise of each higher education institution's Campus All-Hazards Emergency Response and Violence Prevention Plan.

Section 305.20 Definitions

"Act" means the Campus Security Enhancement Act of 2008 [110 ILCS 12].

"Campus" means any higher education facility that offers post-secondary education, including an annex or satellite campus away from the main campus, that includes, but is not limited to, rented classrooms in a commercial building or at a secondary school.

"Campus Emergency Operations Center" or "CEOC" means a location where policy and strategic management decisions are made during a disaster or disaster exercise.

"Campus Emergency Operations Plan" or "CEOP" means the written plan of a higher education institution describing the organization, mission and functions of the higher education institution and supporting services for responding to and recovering from disasters/emergencies and for violence prevention.

"Campus Incident Command" means a system that combines facilities, equipment, personnel, procedures and communications to operate within a common organizational structure and that designates responsibility for the management of assigned resources to effectively accomplish stated campus goals and objectives.

"Campus Incident Commander" means the individual responsible for the management of all campus incident command operations as provided for by law.

"Campus Incident Command Post" means the location at which the primary command functions for the CEOP are executed.
"Campus Violence Prevention Plan" or "CVPP" means the written plan of a higher education institution describing the creation of multi-disciplinary and multi-jurisdictional violence prevention strategies, including formation of a Campus Violence Prevention Committee and implementation of a Campus Threat Assessment Team to address aberrant, dangerous or threatening behavior on campus.

"Concept of Operations" means the overall approach of the higher education institution to the preparation and management of a disaster/emergency, including response efforts and how the higher education institution will implement the concepts and procedures of an incident command system.

"Disaster" means an occurrence or threat of widespread or severe damage, injury or loss of life or property resulting from any natural or technological cause, including but not limited to fire, flood, earthquake, wind, storm, hazardous materials spill or other water contamination requiring emergency action to avert danger or damage, epidemic, air contamination, blight, extended periods of severe and inclement weather, drought, infestation, critical shortages of essential fuels and energy, explosion, riot, hostile military or paramilitary action, or acts of domestic terrorism. [20 ILCS 3305/4]

"Emergency Management" means the efforts of the higher education institutions to develop, plan, analyze, conduct, provide, implement and maintain programs for disaster/emergency mitigation, preparedness, response and recovery.

"Emergency Services and Disaster Agency" or "ESDA" means the agency by this name, by the name emergency management agency or by any other name that is established by ordinance within a political subdivision to coordinate the emergency management program within that political subdivision and with private organizations, other political subdivisions, the State and federal governments. [20 ILCS 3305/4]

"Exercise" means a planned event realistically simulating a disaster/emergency, conducted for the purpose of evaluating the higher education institution's coordinated emergency management capabilities, including, but not limited to, testing emergency operations plans.

"Full-Scale Exercise" means a time-pressured exercise of a minimum of six functions of the emergency operations plan, involving strategic and tactical decision making, including the direction and control function, activating the emergency operations center and incident command post and deploying responders, equipment and resources to the field.
"Functional Exercise" means a time-pressured exercise of a minimum of four functions of the emergency operations plan, involving strategic and tactical decision making, including the direction and control function, activating the emergency operations center or the incident command post, or both.

"Higher Education Institution" means a public university, a public community college, or an independent, not-for-profit or for-profit higher education institution located in this State. [110 ILCS 12/20(a)]

"IBHE" means the Illinois Board of Higher Education.

"ICCB" means the Illinois Community College Board.

"IEMA" means the Illinois Emergency Management Agency.

"National Incident Management System" or "NIMS" means the comprehensive, national approach to incident management that is applicable at all jurisdictional levels and across functional disciplines. It provides a consistent nationwide template to enable all government, private-sector, and nongovernmental organizations to work together during domestic incidents. (See Homeland Security Presidential Directive-5.)

"Preparedness" means actions taken and programs and systems developed prior to a disaster/emergency to support and enhance response to and recovery from a disaster.

"Recovery" means restoration actions and programs associated with recovering from a disaster/emergency, including, but not limited to, academic recovery, physical/structural recovery, business/fiscal recovery and psychological/emotional recovery for students and campus personnel.

"Response" means the actions taken to address the immediate and short-term effects of a disaster/emergency.

"Table Top Exercise" means a low stress, non-time-pressured, discussion based exercise of a minimum of four functions of the emergency operations plan, including the direction and control function.

"Threat Assessment" means a process of evaluating the actions and conduct of individuals, and the circumstances surrounding those actions and conduct, to uncover any facts or evidence that indicate that violence is likely to be carried out. A threat assessment should occur when a person (or persons) threatens or induces
others to commit a violent act or engages in behavior that appears to threaten "targeted violence".

"Targeted Violence" means an incident of physical violence in which both the perpetrator and targets are identified or identifiable prior to the incident.

SUBPART B: GUIDELINES FOR THE CAMPUS EMERGENCY OPERATIONS PLAN

Section 305.30 Initial Analysis and Assessment

To begin the planning process and in conjunction with the annual review and updates, as provided in Subpart D, the higher education institution should perform all of the following tasks:

a) Conduct an all-hazard analysis for the higher education institution.

1) Identify all hazards, including natural, man-made and technological. The following should be included:

   A) Severe weather
   B) Fire
   C) Bomb threats or the discovery of suspicious items
   D) Structural failure or loss of utility service
   E) Mass casualty event
   F) Release of hazardous materials (indoor/outdoor)
   G) Use of weapons/hostage situations/active shooter
   H) Public health emergency
   I) Earthquakes
   J) Nuclear power plant accidents, where applicable
   K) Cyberthreat;

2) Profile hazards, considering frequency, magnitude, intensity, location, spatial extent, duration, seasonal pattern, speed of onset and availability of warning, using historical data, scientific methods or other sources; and
3) Compare and prioritize risks of the hazards identified.

b) Assess vulnerabilities within the higher education institution.

1) Collect demographic data (such as daily population patterns, traffic patterns, seasonal population changes, special needs populations) to determine potential consequences of identified hazards on people and community functions.

2) Collect structural inventory data (including data on critical facilities, residential, commercial and industrial structures, lifelines, and transportation) to determine potential consequences of identified hazards on community functions, property and sites of potential secondary hazards.

c) Assess response capabilities of the higher education institution, identify shortfalls in response capabilities and develop strategies to alleviate shortfalls, such as memorandums of understanding, mutual aid agreements or Good Samaritan agreements.

d) In analyzing and assessing the CEOP, higher education institutions may include, but not be limited to, the designated campus public safety officer, the campus emergency planning team, the campus emergency management director, local mental health community providers, local first responder agencies and ESDAs, county or major municipal emergency managers, or other persons deemed appropriate.

Section 305.40 Basic Plan Guidelines

a) The CEOP should have a foreword that includes:

1) A document signed and dated by the president or most senior level administrator of the higher education institution approving the plan.

2) A register for recording changes and entering change dates.

3) A distribution list of the plan recipients, indicating whether complete plans or specific portions were distributed. Specifically this item should address the method of providing the CEOP to the campus community.

4) A table of contents listing all Sections of the plan.
b) The CEOP should have a Basic Plan Overview detailing the higher education institution's approach to emergency operations, including:

1) A general purpose statement of the CEOP.

2) A list of assumptions used in developing the plan.

3) A concept of operations Section, including, but not limited to, how the higher education institution will implement the concepts and procedures of a recognized incident command system (e.g., NIMS).

4) Identification of the line of succession, by title and position (with up to two alternates), of who will implement the plan, direct emergency response and recovery, and provide leadership, authority and responsibility.

5) A description of the functions and responsibilities assigned to each organization, including private and volunteer organizations or groups, in support of emergency response and recovery operations in the higher education institution. This information may also be exhibited in a chart or matrix designating who has primary and support responsibilities.

6) Maps, or references to maps pertinent to emergency operations planning for the higher education institution and including, but not limited to, locating fixed hazards.

7) An attachment, if applicable, containing written mutual aid agreements, memorandums of understanding (MOUs), and other written agreements affecting the emergency response and recovery functions of the higher education institution.

8) Procedures detailing how the higher education institution will request outside assistance in a disaster, such as assistance from the ESDA or IEMA, or both.

9) Citations to the legal authorities for emergency operations, including, but not limited to, ordinances.

10) Assignment of responsibility for plan maintenance, review, evaluation and updating.

Section 305.50 Campus Functional Annex Guidelines
a) The CEOE should include an annex addressing how the higher education institution will perform each of the following functions:

1) Direction and Control – What means the higher education institution will use to direct and control activities during and following disaster/emergency situations.

2) Communications – How information will be exchanged among responders, administrative officials, teachers and students and other interested persons during and after a disaster/emergency situation.

3) Warning/Disaster/Emergency Information – How the public and campus community will be warned and instructed regarding actual or threatened hazards through the public media or other means.

4) Public Information – The means, organization and process by which a higher education institution will provide timely, accurate and useful information and instructions to the community throughout a disaster/emergency. It includes information disseminated to the public through the media and other information sources on what is happening, what the response organization is doing, and what the public should do for its safety. The higher education institution should address the circumstances of special needs populations, including limited English proficiency populations.

5) Disaster Intelligence/Damage Assessment/Recovery Planning – The means the higher education institution will use to identify, collect, analyze and disseminate information on the extent and impact of the disaster and those plans for recovery and restoration of operations.

6) Evacuation/Shelter-in-Place/Lockdown – The movement of people to a safe area from an area believed to be at risk, when disaster/emergency situations necessitate that action.

7) Mass Care – Actions taken to ensure appropriate services are provided at a mass care facility, including, but not limited to, providing temporary shelter, food, medical care, clothing and other essential life support needs to people displaced from their homes because of a disaster situation.

8) Health and Medical – The activities associated with providing health and medical services in emergencies and disasters, including emergency medical, hospital, public health, environmental health and mental health services.
9) Mortuary Services – Activities including the collection, identification and care of human remains; determining the cause of death; inventorying and protecting deceased's personal effects; and locating and notifying the next of kin.

10) Resource Management – The process of managing people, equipment, facilities, supplies and other resources to satisfy the needs generated by a disaster. This includes the management of volunteer response teams and spontaneously responding volunteers.

b) Each campus functional annex identified by subsection (a) should individually address:

1) The purpose of the function.

2) A description of situations that trigger implementation of the function.

3) A description of assumptions that apply to the function.

4) The concept of operations for the function.

5) Assignment of responsibility for annex maintenance, review and updating.

c) In addition to subsection (b), the Campus Direction and Control annex should also:

1) Describe the direction and control relationship of tasked organizations, including:

A) The command structure – specifically who will be in charge during disaster/emergency response operations.

B) The authorities of, and limitations on, key response personnel such as the on-scene Campus Incident Commander.

C) How disaster/emergency response organizations will be notified when it is necessary to respond.

D) The means that will be used to obtain, analyze and disseminate information (for decision making, requesting assistance, reporting, etc.).
E) The relationship between the CEOC and the Campus Incident Command Post.

2) List the organizations that are tasked with specific direction and control responsibilities and describe those responsibilities. Include the assignment of responsibility for:

A) Reporting to the CEOC when activated.

B) Coordinating press releases among response organizations.

C) Managing the primary and alternate CEOCs.

D) Maintaining a significant events log.

E) Removing debris.

d) In addition to subsection (b), the Campus Communications annex should also:

1) Describe the total emergency communications system used for communication among all groups and individuals involved in the higher education institution's response to a disaster/emergency.

2) Describe the primary and backup communication methods and personnel.

3) Identify the organization assigned to coordinate all communication activities.

4) List the organizations that are tasked with specific communications responsibilities and describe those responsibilities.

5) Identify the representative from each tasked organization who will report to the CEOC when activated.

6) Describe plans for notification of next-of-kin and the establishment, on or in the vicinity of campus, of a Family Assistance Center to address the needs of next-of-kin of deceased or seriously injured students, faculty or staff.

e) In addition to subsection (b), the Campus Warning/Disaster/Emergency Information annex should also:
1) Identify the methods used to provide warning/disaster/emergency information for the public and special populations, including limited English proficiency populations.

2) Identify the locations of outdoor warning/disaster/emergency information devices and define the geographical areas covered.

3) Describe the specific warning/disaster/emergency information responsibilities assigned to the tasked organizations.

4) Identify the department or agency responsible for activating public warning/disaster/emergency information systems.

f) In addition to subsection (b), the Campus Public Information annex should also:

1) Assign a person to be the Campus Public Information Officer (CPIO) responsible for coordinating information gathering and production, rumor control, public inquiries, and media relations.

2) Designate a facility or site as the public information center.

3) List the organizations that are tasked with specific public information responsibilities and describe those responsibilities.

4) Assign a public information representative to report to the CEOC when activated.

5) Identify a facility or site for the Joint Information Center during major incidents on campus.

g) In addition to subsection (b), the Campus Disaster Intelligence/Damage Assessment/Recovery Planning annex should also:

1) List the organizations that are tasked with specific disaster intelligence/damage assessment/recovery planning responsibilities and describe those responsibilities.

2) Assign a disaster intelligence/damage assessment/recovery planning representative to report to the CEOC when activated.

h) In addition to subsection (b), the Campus Evacuation/Shelter-in-Place/Lockdown annex should also:
1) List the organizations that are tasked with specific evacuation/shelter-in-place/lockdown responsibilities and describe those responsibilities.

2) Identify the department, agency or organization responsible for coordinating all transportation resources planned for use in an evacuation.

i) In addition to subsection (b), the Campus Mass Care annex should also:

1) List the organizations that are tasked with specific mass care responsibilities and describe those responsibilities, including:

   A) Identification of the department, agency or organization responsible for determining the need to open shelter.

   B) Identification of the department, agency or organization responsible for disaster/emergency mass feeding operations.

   C) Identification of the department, agency or organization responsible for providing health and/or medical care, including mental health services, at shelter and/or congregate care facilities.

2) Assign a mass care representative to report to the CEOC when activated.

3) Identify the mass care representative who will coordinate press releases with the CPIO.

j) In addition to subsection (b), the Campus Health and Medical Services annex should also:

1) List the organizations and individuals that are tasked with responsibilities for providing disaster/emergency health and medical services and describe those responsibilities, including:

   A) Identification of the department, agency or organization responsible for arranging crisis counseling for emergency workers.

   B) Identification of the department, agency or organization responsible for sanitation services.

2) Assign a health and medical services representative to report to the CEOC when activated.
3) Identify the department, agency or organization responsible for providing post-incident mental health care.

k) In addition to subsection (b), the Campus Mortuary Services annex should also:

1) List the organizations and individuals that are tasked with mortuary services responsibilities and describe those responsibilities.

2) Describe how mortuary services will be expanded during a mass casualty incident, if necessary.

l) In addition to subsection (b), the Campus Resource Management annex should also:

1) List the organizations and individuals that are tasked with resource management responsibilities and describe those responsibilities. Include identification of who will organize, manage, coordinate and distribute the donations of money, goods and labor received from individual citizens and volunteer groups during a disaster/emergency.

2) Inventory the resources available, such as emergency supplies and equipment maintained for the campus community to use during a disaster/emergency.

3) Assign a resource management representative to report to the CEOC when activated.

m) The higher education institution may include additional functional annexes in the CEOP as determined by the higher education institution to be necessary for the emergency management efforts of the higher education institution in the event of a disaster, including, but not limited to, the following functions: search and rescue, law enforcement, public works, transportation, energy management, animal welfare, legislative relations, aviation operations and/or others.

SUBPART C: GUIDELINES FOR THE CAMPUS VIOLENCE PREVENTION PLAN

Section 305.60 Campus Violence Prevention Plan

a) Pursuant to the Act, each higher education institution is required to develop an inter-disciplinary and multi-jurisdictional Campus Violence Prevention Plan (CVPP).

b) The CVPP should have a foreword that includes:
1) A document signed and dated by the president or most senior level administrator of the higher education institution approving the plan.

2) A register for recording changes and entering change dates.

3) A distribution list of the plan recipients, indicating whether complete plans or specific portions were distributed. Specifically, this item should address the method of providing the CVPP to the campus community.

4) A table of contents listing all Sections of the plan.

c) The body of the CVPP should include:

1) Integration of existing campus programs and policies that deal with associated issues (e.g., workplace violence, suicide prevention, anti-bullying, stigma reduction, sexual assault prevention);

2) Incorporation of violence prevention strategies into related policies and/or procedures;

3) Encouragement of zero tolerance policy statements that reaffirm violence prevention strategies; and

4) Development and implementation of a Campus Violence Prevention Committee and Campus Threat Assessment Team.

Section 305.70 Campus Violence Prevention Committee

a) Pursuant to the Act, each higher education institution is required to develop and implement a Campus Violence Prevention Committee (CVPC). The CVPC should be tasked with implementing the CVPP.

b) The CVPC should determine the committee structure and the individuals responsible for education and prevention of violence on campus.

c) Participants from faculty, campus administration, student affairs, law enforcement, human resources, counseling services, residence life, county or major municipal emergency managers and others deemed appropriate are recommended for the CVPC.

Section 305.80 Campus Threat Assessment Team
a) Pursuant to the Act, each higher education institution is required to develop and implement a Campus Threat Assessment Team. The team should conduct threat assessments, address aberrant, dangerous, or threatening behavior on campus and provide guidance and best practices for preventing violence and providing supportive services.

b) The team should consist of faculty, law enforcement, human resources, legal counsel, and mental health professionals. It may also include other persons and organizations deemed appropriate to a particular circumstance.

c) The team should create a written threat assessment policy that provides:

1) Guidance to students, faculty and staff about how to recognize, address and report aberrant and threatening behavior;

2) Identify individuals that will have access to information;

3) Use a fact-based assessment process to investigate threats, actions or conduct that may lead to targeted violence and determine situation specific response action plans;

4) Access a range of support services for students, faculty and staff that includes mental health services, crisis management and comprehensive services for victims, whether provided on campus or by accessing community resources; and

5) Requirements for protecting the privacy of persons providing information to and subject to scrutiny by the threat assessment team.

d) All areas of the campus community should be required to cooperate with requests from the threat assessment team relative to successfully monitoring any threatening behavior.

e) The team should meet regularly to provide post-incident assessments and evaluate the effectiveness and response to incidents on a case or aggregate basis.

SUBPART D: COORDINATION, SUBMISSION AND REVIEW GUIDELINES FOR CAMPUS EMERGENCY OPERATIONS PLAN AND CAMPUS VIOLENCE PREVENTION PLAN

Section 305.90 Coordination, Submission and Review
The CEOP and CVPP should be coordinated with the local ESDA. Where the CEOP and/or CVPP cannot be coordinated with ESDA capabilities, the IEMA Regional Office should provide guidance to help identify resources. Upon completion of the CEOP and CVPP by the higher education institution, a copy of each should be provided to the local ESDA, IEMA Regional Office, and either IBHE or ICCB, as appropriate.

Each higher education institution should conduct an annual review and update. The review and update should include the components in Subparts B and C.

The campus administrators responsible for the execution of the CEOP and CVPP should participate in the review. Participation by the director of campus public safety, campus emergency planning team, local mental health provider, local first responder agency, county or major municipal emergency manager, and other persons deemed appropriate by the higher education institution is recommended.

If amendments are deemed appropriate by the higher education institution, those amendments should be coordinated with the local ESDA. A copy of the amendments should be provided to the local ESDA, IEMA Regional Office, and either IBHE or ICCB, as appropriate.

SUBPART E: TRAINING AND EXERCISE GUIDELINES

Section 305.100 Training

Pursuant to the Act, each higher education institution shall conduct training on its CEOP and CVPP annually. Training should include all administrators, faculty, staff, students and any other members of the campus community so they are familiar with key components of the CEOP and CVPP.

Section 305.110 Exercise Guidelines for the Campus Emergency Operations Plan and Campus Violence Prevention Plan

Pursuant to the Act, each higher education institution shall conduct an annual exercise of its CEOP and CVPP. This requirement should be in coordination with the local ESDA and can be satisfied with a full scale, functional or tabletop exercise.

CEOP and CVPP exercises should be conducted to examine the objectives identified in this Part.
APPENDIX I

Disaster Preparedness Plan

Planning is often the most crucial element of disaster preparedness. The National Response Framework (NRF) is required by Homeland Security Presidential Directive (HSPD)-5 that provides a manual to describe how the Nation carries out an all-hazards response—from the slightest incident to the largest catastrophe (HHS, 2010). Laying the foundation for an integrated national response, the NRF provides guidance for first responders, decision-makers, and supporting entities responding to disasters or emergencies (HHS, 2010). The NRF is an all-inclusive, national, all-hazards method of response to domestic incident response (HHS, 2010; FEMA, 2010c).

Development of a response plan is the most fundamental step of preparedness and is not occurring in 45% of states, based off of 76% of state public health departments responding (Watkins, et. al, 2011). When a state lacks a comprehensive plan it exposes the residents to inefficient, ineffective and delayed responses that leave residents exposed to increased risks (Watkins, et. al, 2011). Preparedness requires commitment to the planning, preparation, and development of an operations plan. The emergency management professionals in State agencies and affiliates work to update and enhance the IEOP based off of training exercises and real-life response and recovery operations (IEMA, 2010b).

The National Preparedness Guidelines (Guidelines) were developed after the December 17, 2003, Homeland Security Presidential Directive-8 (HSPD-8) with the intention to establish a national domestic all-hazards preparedness goal (DHS, 2011). The purpose of the Guidelines is five-fold: to coordinate and orchestrate national efforts to bolster national preparedness; direct national investments in national preparedness;
integrate lessons learned from previous disasters into national preparedness priorities; facilitate a capability-based and risk-based investment planning process; and establish readiness metrics to measure progress and a system for assessing the nation’s overall preparedness capability to respond to major events (DHS, 2011).

The Guidelines give rise to the National Preparedness System that presents the opportunity for all levels of government, the private sector, nongovernmental organizations, and citizens to join forces to realize the precedence and capabilities (DHS, 2011). Part of that involves constant supervision of national policy and doctrine for function and preparedness, including NIMS, National Response Plan, National Infrastructure Protection Plan, and the Guidelines (DHS, 2011).

The Centers for Disease Control and Prevention (CDC) established an orderly means for state and local health departments to tackle strategic planning and strengthen public health preparedness (OPHP, 2011). It is crucial to be equipped to prevent, respond to, and rapidly recover from public health threats that exist continuously (OPHP, 2011). The CDC established Public Health Preparedness Capabilities: National Standards for State and Local Planning, (henceforth referred to as “public health preparedness capabilities”) creating national standards for capability-based planning (OPHP, 2011). State and local planners can use the public health preparedness capabilities to identifying gaps in preparedness, establishing exact jurisdictional priorities, and developing plans for building and sustaining capabilities (OPHP, 2011).

Response

Emergency response includes measures engaged in a brief time preceding, throughout, and following disaster impact intended to diminish casualties, damage, and
interruption and to respond to the immediate needs of disaster victims (Tierney, et. al, 2001). Pre-planning the response to an emergency is crucial (Vernon, 2010). Planning is a key to mitigation, preparedness, and response, but just because there is a plan in place also does not ensure everything will run smoothly.

The federal government aids state and local authorities when their resources are overwhelmed; it is not the intention of the federal agencies to take over whenever called for assistance (FEMA, n.d.b). Disasters create an environment that the multiple agencies respond to and provide help. The Incident Command System (ICS) provides a standardized model that facilitates coordination and collaboration among all responding entities (FEMA, n.d.b). NIMS and ICS is a management system designed to improve integration of facilities, equipment, personnel, procedures, and communications within the organizational structure by aiding in effective and efficient incident management (FEMA, n.d.b). The ICS, Command and Management Component of NIMS, is the ‘gold standard’ for emergency management across the nation (FEMA, n.d.b). ICS characteristics include 14 key features such as: the use of a common language, a command structure that provides for a line of authority, designated supervisors, and unified command, incident action plans, and accountability (FEMA, n.d.b.; Perry & Lindell, 2007).

The National Response Framework (NRF) is created on five principles: “engaged partnerships; tiered response; scalable, flexible, and adaptable operational capabilities; unity of effort through unified command; readiness to act” (FEMA, 2008). Also included in the NRF are 15 Emergency Support Function (ESF) annexes; each ESF is organized through a Primary Agency selected on the basis of its authorities, resources, and capabilities in a particular functional area (see Appendix B) (HHS, 2010). The ESF supplies the structure for
coordination of interagency Federal response support to an incident (FEMA, 2008). ICS provides flexibility that allows ESF assets to be assigned related to their capabilities to augment and support the integration of multiple agencies responding (FEMA, 2008).


Frequently, federal disaster assistance and Presidential declarations of disasters are thought of as the same, however federal assistance can be presented in a variety of ways through numerous methods and authorities (FEMA, 2008). The Department of Homeland Security (DHS) often coordinates federal assistance, which may be provided with an emergency or presidential major disaster declaration (FEMA, 2008). Some incidents that
do not require DHS coordination may be directed by other federal departments in accordance with their authorities (FEMA, 2008).

The Stafford Act provides Federal support to states in a variety of ways during a major disaster (FEMA, 2008). The governor can request federal assistance in the event a disaster goes beyond local or state resources under the Stafford Act (FEMA, 2008). The Stafford Act also provides financial and other assistance to support response, recovery, and mitigation endeavors after a presidential emergency or major disaster declaration (FEMA, 2008). The most widely recognized means by which the federal government can provide assistance to state and local government is the Stafford Act; however, it is not the only one (FEMA, 2008). As mentioned Federal assistance does not require coordination from DHS. In accordance with their abilities, federal departments and agencies can provide assistance directly to state or local governments through the three major categories of disaster aid: individual assistance (disaster housing, grants, low-interest disaster loans, counseling, disaster-related unemployment assistance), public assistance (assistance with costs of rebuilding the community’s infrastructure), and hazard mitigation (FEMA, 2008).

Another mechanism in place for federal assistance is the elements for national defense through the Department of Defense (DOD) (FEMA, 2008). The DOD’s resources are only committed after approval by the Secretary of Defense or by the direction of the president (FEMA, 2008). Several components and agencies of the DOD have authority to respond to save lives, protect property and the environment, and mitigate human suffering in the event of impending “ominous circumstances” (FEMA, 2008). The DOD efforts coordinate with National Guard units, which are under the command of the governor, within the state in which the incident has taken place (FEMA, 2008).
Presidential Policy Directive/PPD-8 relates to national preparedness and is focused on strengthening the security and resilience of the nation through systematic preparation for using an all-hazards approach for the 21st century threats that jeopardize the security of the nation such as: acts of terrorism, cyber attacks, pandemics, and catastrophic natural disasters (HHS, 2012b).

The President may declare a major emergency or disaster if an event exceeds the state’s combined response capabilities at the request from the governor of an involved state (HHS, 2010). The declaration of an emergency by the president without the gubernatorial request may occur if the emergency includes a subject area for which the United States maintains sole responsibility and authority (HHS, 2010). In a situation which a hastened need for Federal support and assistance is needed to save lives, prevent human suffering, or mitigate severe damage the President may expedite the process without the request of the State (HHS, 2010).

There are additional national stakeholders in addition to Federal Emergency Management Agency (FEMA), Department of Homeland Security (DHS), Health and Human Services (HHS), and Center for Disease Control and Prevention (CDC), which include: U.S. Geological Survey (USGS), Army Corps of Engineers, National Weather Service (NWS), Environmental Protection Agency (EPA), Department of Transportation (DOT), and National Science Foundation (Lindell, et. al, 2007).

In the event of a domestic incident the Federal government will employ the National Response Plan to synchronize a large-scale response using the 15 ESFs (Courig, et. al, 2005). ESF #8 pertains to providing supplemental support to state and local resources for public health and medical needs (OPHP, 2011). Functional areas of ESF #8 “include (1)
assessment of public health and medical needs; (2) public health surveillance; (3) medical personnel; (4) medical equipment and supplies; and (5) coordination of federal health and medical assistance" within the scope of public health, medical, mental health services, and mass fatality management (Courig, et. al, 2005, p. 37; FEMA, 2008; OPHPR, 2011).

Once activated, the HHS Secretary’s Operation Center (SOC) organizes the ESF #8 response, begins communication with the DHS Homeland Security Operations Center, and initiates staffing of the SOC with the pertinent intra-, interdepartmental, and private sector organizations (Courig, et. al, 2005). Then HHS begins the coordination of risk analysis, evaluation of needs, and support to state and local officials (Courig, et. al, 2005). HHS is the primary agency, coordinator, and provides administration for all functions under ESF #8 (Courig, et. al, 2005).

The 2005 hurricane season served as a mechanism for considerable modifications in the DHS, markedly federal policy and the organization of responsible federal divisions (Bea et al., 2006). The “Post-Katrina Emergency Reform Act of 2006” (referred to as Post-Katrina Act), provides for changes for FEMA by expanding its statutory power, and necessitates new obligations and provisions of the agency (Bea et al., 2006).

**Department of Health and Human Services (HHS)**

The U.S. public health system found itself in a position of featured prominence after the terrorist acts in 2001. This allowed for system-level endeavors to evolve from a varied compilation of small and independent ventures to synchronized, far-reaching endeavors (Scutchfield, Mays, & Lurie, 2009). The HHS is the United States government’s foremost agency for defending the health of all American’s and supplying fundamental human services, particularly for those who are least able to assist themselves (HHS, 2012a). The
history of the HHS travels back to the beginning of our country as a nation. In 1798, a precursor for today's U.S. Public Health Services was the enactment of an act for the aid of sick and disabled seamen; this act recognized a federal network of hospitals for the care of merchant seamen (HHS, 2012a).

In 1871, the foundation for the Surgeon General was established through the appointment of the first Supervising Surgeon for the Marine Hospital Service (which was established in 1870) (HHS, 2012a). In 1902, the Marine Hospital Service was transformed into the Public Health and Marine Hospital Service in acknowledgment of its increasing actions in the field of public health. The name was ultimately shortened in 1912 to the Public Health Service (HHS, 2012a).

In 1946, the precursor for the Centers for Disease Control and Prevention (CDC) was the formation of the Communicable Disease Center (HHS, 2012). Oversight for the U.S. public health system and CDC are responsibilities of the Secretary of the HHS (HHS, 2012a). CDC provides funding and technical assistance to prepare local and state public health departments to respond to all types of emergencies (CDC, 2012). It also assists to recover and restore the public health role and provides resources such as scientific and logistic expertise, personnel and essential medical assets to the emergency location (CDC, 2012).


HHS works in partnership with state and local governments, and many HHS-funded services are delivered at the local level by state or county agencies, or via private sector
grantees (HHS, 2012a). The mission of the HHS is to “enhance the health and well-being of Americans by providing for effective health and human services and by fostering strong, sustained advances in the sciences, underlying medicine, public health, and social services” (HHS, 2007, mission).

Guidance for HHS is given by the Office of the Secretary and includes eight agencies in the U.S. Public Health Service, three human service agencies, and oversight of 11 operating divisions (HHS, 2012a). The operating divisions execute an extensive assortment of undertakings and benefits that includes research, public health, food and drug safety, grants and other funding, health insurance, and several others (HHS, 2012a).

The Assistant Secretary for Preparedness and Response (ASPR) serves as the Secretary’s prime counselor on affairs connected to bioterrorism and other public health emergencies. The mission of the ASPR office is to guide the nation in preventing, responding to, and recovering from the harmful health effects of public health emergencies and disasters. The ASPR also synchronizes interagency proceedings between HHS, other Federal departments, agencies, and offices, and State and local officials accountable for emergency preparedness and the protection of individuals and communities from acts of bioterrorism and other public health emergencies (ASPR, 2001).

The basis that shapes the HHS’ legal authority for responding to public health emergencies is the Public Health Service (PHS) Act (HHS, 2010). The PHS Act enables the HHS Secretary to:

- Direct all Federal public health and medical response to public health emergencies and incidents included by the National Response Framework (NRF)
• Lead the U.S. PHS and other elements of the Department to act in response to a public health emergency

• Declare a public health emergency (PHE) and take such measures as may be appropriate to take action to the PHE consistent with existing authorities

• Support states in meeting health emergencies

• Maintain the Strategic National Stockpile (SNS)

• Provide for the operation of the National Disaster Medical System

• Establish and maintain a Medical Reserve Corps (HHS, 2010)

The Pandemic and All-Hazards Preparedness Act (PAHPA) was enacted in 2006 to advance the nation’s capacity to detect, prepare for, and respond to a range of public health emergencies (ASPR, 2011). The PAHPA created the ASPR and provided authorization for numerous programs, formation of a quadrennial National Health Security Strategy (NHSS), as well as the advancement and attainment of medical countermeasures (HHS, 2010).

The function of the National Health Security Strategy (NHSS) is to redirect the mélange of diverse public health and medical preparedness, response, and recovery tactics in order to make certain the nation is equipped for, protected from, and buoyant in the face of health threats or events with potentially harmful health detriments (ASPR, 2011). The NHSS was presented to congress by the Secretary of HHS in 2009 and will be revisited every four years, should provide for a collective purpose of how the nation will realize national health security by strengthening the community, integrating response and recovery systems, and constructing a framework for accountability and continuous quality development (ASPR, 2011). This systems approach attitude will be a key advantage for identifying, leveraging, and concentrating resources (Wholey, Gregg, & Moscovice, 2009).
Federal Emergency Management Agency (FEMA)

Nationwide FEMA has a team of nearly 7,500 employees working to assist citizens and first responders to “ensure that as a nation we work together to build, sustain, and improve our capability to prepare for, protect against, respond to, recover from, and mitigate all hazards” (FEMA, 2012). Regarded as the first related legislation passed, the Congressional Act of 1803 provided support to a town in New Hampshire after a massive fire (FEMA, 2010). In 2003, FEMA merged with 22 other federal agencies, programs, and offices to become part of the Department of Homeland Security (FEMA, 2010).

Special Mandates and Resources for State Preparedness

Changes made to the Disaster Mitigation Act of 2000 (DMA 2000) that affected states are contained in Sections 203 (Pre-Disaster Hazard Mitigation) and 322 (Mitigation Planning) of the Stafford Act (IEMA, 2011). Section 203 creates a “National Pre-Disaster Mitigation Fund” that will institute a program that will:

- Provide technical assistance to States and local governments to assist in the implementation of pre-disaster hazard mitigation measures that are cost-effective and designed to reduce injuries, loss of life, and damage and destruction of property, including damage to critical services and facilities under jurisdiction of the States or local governments (IEMA, 2011).

Section 322 “provides a new and revitalized approach to mitigation planning by specifically doing the following” (IEMA, 2011):

- Establishes a new requirement for local and tribal mitigation plans;
• Authorizes up to 7 percent of the Hazard Mitigation Grant Program (HMGP) funds available to a state to be used for development of state, local, and tribal mitigation plans; and

• Provides for states to receive an increased percentage of HMGP funds (from 15 percent to 20 percent) if, at the time of the declaration of a major disaster, they have in effect an approved State Mitigation Plan that meets the factors in the law (IEMA, 2011).
## APPENDIX J

### Emergency Support Functions and ESF Coordinators

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<td>Restoration and recovery of transportation infrastructure</td>
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<td>Movement restrictions</td>
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<td>Protection, restoration, and sustainment of national cyber and information technology resources</td>
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<td>Oversight of communications within the Federal incident management and response structures</td>
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<td>Emergency contracting support for life-sustaining services</td>
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<td>ESF # 4 - Firefighting</td>
<td>Coordination of Federal firefighting activities</td>
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<td>Support to wild land, rural, and urban firefighting operations</td>
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<td>ESF # 6 - Mass Care, Emergency Assistance, Housing, and Human Services</td>
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<td>ESF Coordinator: DHS (FEMA)</td>
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<td>Disaster housing</td>
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<td>Human services</td>
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<td>ESF # 7 - Logistics Management and Resources Support</td>
<td>Comprehensive, national incident logistics planning, management, and sustainment capability</td>
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<td>ESF Coordinator: General Services Administration and DHS (FEMA)</td>
<td>Resource support (facility space, office equipment and supplies, contracting services, etc.)</td>
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<td>ESF # 8 - Public Health and Medical Services</td>
<td>Public health</td>
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<td>ESF Coordinator: Department of Health and Human Services</td>
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<td>Mental health services</td>
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<td>Oil and hazardous materials (chemical, biological, radiological, etc.) response</td>
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<td>ESF # 11 - Agriculture and Natural Resources</td>
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<td>ESF Coordinator: Department of Agriculture</td>
<td>Animal and plant disease and pest response</td>
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<td>Food safety and security</td>
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<td>Natural and cultural resources and historic properties protection</td>
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<td>Safety and well being of household pets</td>
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ESF # 12 - Energy
ESF Coordinator: Department of Energy
Energy infrastructure assessment, repair, and restoration
Energy industry utilities coordination
Energy forecast

ESF # 13 - Public Safety and Security
ESF Coordinator: Department of Justice
Facility and resource security
Security planning and technical resource assistance
Public safety and security support
Support to access, traffic, and crowd control

ESF # 14 - Long-Term Community Recovery
ESF Coordinator: DHS (FEMA)
Social and economic community impact assessment
Long-term community recovery assistance to States, tribes, local governments, and the private sector
Analysis and review of mitigation program implementation

ESF # 15 - External Affairs
ESF Coordinator: DHS
Emergency public information and protective action guidance
Media and community relations
Congressional and international affairs
Tribal and insular affairs

APPENDIX K

U.S. Department of Health and Human Services-Organizational Chart

Source: http://www.hhs.gov/about/images/orgchart041412.jpg
APPENDIX M

Illinois Terrorism Task Force-Organizational Chart

- Governor
  - Governor's Homeland Security Adviser
    - Illinois Emergency Management Agency
    - TTFF Chair
      - Communications
        - Chair: Illinois Association of Chiefs of Police and Illinois Fire Chiefs Association
      - Crisis Response and Prevention
        - Chair: Illinois State Police
      - Cyber Security
        - Chair: Illinois Department of Management Services
      - Elected Officials
        - Chair: Illinois Municipal League and Illinois Association of County Officials and Members of Commissioners
      - Emergency Management
        - Chair: Illinois Emergency Services Management Association
      - Fire Service Mutual Aid
        - Chair: Illinois Mutual Aid Box Alarm System
      - Information Technology
        - Chair: Illinois State Police
      - Law Enforcement Mutual Aid
        - Chair: Illinois Law Enforcement Box Alarm System
    - Private Sector
      - Chair: Caterpillar, Chicago PD, and JPMorgan Chase & Co.
    - Public Health and Medical Services
      - Chair: Illinois Department of Public Health
    - Public Information
      - Chair: American Red Cross and Office of the State Fire Marshal
    - Science and Technology
      - Chair: Argonne National Laboratory and Illinois Department of Management Services
    - Training
      - Chair: Illinois Fire Service Institute and Illinois Law Enforcement Training and Standards Board
    - Transportation
      - Chair: Illinois Department of Transportation
    - Urban Area Security Initiative
      - Chair: City of Chicago/Cook County
    - Volunteers and Donations
      - Chair: Illinois Emergency Management Agency