

INCIDENT RESPONSE PLANNING FOR SELECTED LIVESTOCK SHOWS

A Thesis

by

CHELSEA ROXANNE TOMASCIK

Submitted to the Office of Graduate Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE

December 2011

Major Subject: Agricultural Leadership, Education and Communications

Incident Response Planning for Selected Livestock Shows

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Approved by:

Chair of Committee,	Traci L. Naile
Committee Members,	Jason B. Moats
	John Rayfield
	Chris Skaggs
Head of Department,	John Elliot

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ABSTRACT

Incident Response Planning for Selected Livestock Shows. (December 2011)

Chelsea Roxanne Tomascik, B.S., Texas A&M University

Chair of Advisory Committee: Dr. Traci L. Naile

Incidents affecting the livestock industry are unavoidable in today's society. These incidents can happen at livestock shows across the country putting thousands of exhibitors, visitors, employees and livestock in danger. The purpose of this study was to determine local officials' perceptions and awareness of incident planning and response pertaining to selected livestock shows. Little research has been completed in this area; therefore, this foundational study was needed.

The objectives of this study were to determine local officials' awareness of livestock shows and incident response plans for those livestock shows. In addition, the researcher wanted to describe the roles of local officials in incident planning and response at livestock shows. Level of communication and perceptions of challenges at livestock shows and among local officials were also evaluated. Lastly, the researcher wanted to describe local officials' recommendations for effective incident planning and response related to livestock shows.

Five participants remarked on the value of this study and agreed to participate. These participants included livestock show officials involved in incident planning and response or local emergency management officials. Each participant was interviewed,

and then data were transcribed and categorized to consensus. Nine themes arose including: background information, challenges, communication, example incidents, executing incident response, incident response planning, incident response training, miscellaneous and need for planning.

It was concluded that all participants were aware of the selected livestock shows. However, levels of awareness varied by participant due to work-related experiences with the livestock show. The two livestock show participants were aware of specific incident response plans for the livestock show, while the three local emergency management officials were aware of city emergency management plans. Each participant remarked upon their roles in planning and executing incident response. In addition, communication was thought to be one of the key factors to successful incident planning and response. Challenges ranging from lack of communication to training for incident response were stated. Lastly, participants remarked on recommendations for others planning for incident response at livestock shows. These recommendations included communication, preplanning, building relationship with key stakeholders, training, and a need for more planning and research in this area.

It is recommended that this study be replicated with scaled objectives for measuring awareness of livestock shows and incident response plans. Also, replicate this study to determine level of training in incident response and safe handling of livestock. It is recommended to describe communication between livestock shows and local emergency management officials. Lastly, it is recommended to replicate this study with regional livestock shows and state fairs.

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CHAPTER I

INTRODUCTION

Background and Setting

“We [the livestock show] have a responsibility to provide a safe and secure environment for the public attending the event.”

–Participant Three

“The purpose of the youth livestock program is to teach young people how to feed, fit, and show their animals and to provide an opportunity for personal growth and development of the young person” (Rusk, Brubaker, Balschweid, & Pajor, 2006, p. 105). At any given livestock show, exhibitors and spectators of all ages from across the United States could be in attendance. Many are there to watch livestock competitions, browse the trade show, and take a seat at the rodeo. Therefore, there is a growing need to keep the public and animals in attendance at these events safe.

Incidents affecting the agricultural livestock industry are unavoidable in today’s society. For example, in 1993, hundreds of thousands of pigs were evacuated from farms along the Mississippi River due to flooding, and in 1995, millions of poultry died from a heat wave in Delaware, Maryland, and Virginia (Federal Emergency Management Agency, 2010b). Preparedness for disastrous events need to be of major importance to the organizations running livestock shows.

This thesis follows the style of the *Journal of Applied Communications*.

With increased numbers of exhibitors and members of the public attending these events, it is in livestock organizations' best interests to have viable efficient and effective plans in place should an incident occur. Major livestock shows with exhibitors from multiple states need to respond to and manage incidents effectively, with the goal of maximizing exhibitor and public safety (National Western Stock Show, 2011b, para. 1).

Incidents that could affect livestock shows include “intentional” and “unintentional” natural and man-made disasters (Shaluf, 2007). Shaluf (2007) described natural disasters as those from the result of natural forces, often termed an “act of God” (p. 687). Natural disasters include hurricanes, tornadoes, earthquakes, floods, and disease outbreaks. Man-made disasters result from human decisions and include intentional disease outbreaks and agroterrorism. The common denominator between intentional and unintentional disasters, as explained by Shaluf (2007), is the severe impact they have on life safety, property, and the environment. The impact of natural disasters can be reduced by setting up warning systems that forecast impending disasters and through effective disaster management (Shaluf, 2007).

Livestock shows share many similarities with large-scale sporting events. Thousands of people attend these events, which typically take place in confined areas. Livestock shows and large-scale sporting events differ in the fact that large numbers of livestock are present at livestock shows and can house unexpected issues, such as zoonotic diseases. In addition, large-scale sporting events typically are known for having strict placement of people in certain areas (i.e. seating assignments), whereas at livestock

shows, people can travel freely to almost any part of the facility, which could be up to hundreds of acres in size (Houston Livestock Show and Rodeo, 2011; Kentucky Exposition Center, 2011). The lack of research related to incident planning and response at livestock shows has caused researchers to look at other research pertaining to incident planning and response at large non-livestock events. In a report pertaining to sports disaster management, the authors reported that “effective security management of large-scale spectator sports events is vital nationwide because of the potential for mass casualties and catastrophic economic impact” (Hall, Ward, Cunningham, & Marciani, 2008, p. 9).

Numerous pathways of response to incidents are available. It is the mission of the Department of Homeland Security (DHS) to “secure the nation from the many threats we face” (U.S. Department of Homeland Security, 2011, para. 1). According to the National Response Framework (NRF), the first responders to a disaster are at the local and state levels (U.S. Department of Homeland Security, 2008a). However, in a foreign animal disease outbreak, veterinarians employed with United States Department of Agriculture, members of the National Animal Health Emergency Response Corps, and members of Veterinary Medical Assistance Teams will be called to assist with the response (Wenzel, 2007). Due to the multiple levels and types of responses outlined in the NRF, individuals must understand that their pre-disaster responsibilities can change following a disaster event (Moats, 2007). As a result, officials who manage livestock shows and local emergency management officials should understand the defined roles they are expected to fulfill in an emergency (U.S. Department of Homeland Security, 2008a). Therefore, to

implement the best possible response, effective incident response plans for disasters should be in place and effective incident response planning is essential to meeting this need.

Statement of the Problem

Keim and Kaufmann (1999) studied and discussed the need to determine a systematic structure and recommendations that emergency service officials can use efficiently. Keim and Kaufmann (1999) saw this lack of education for emergency service personnel during a series on anthrax hoaxes in the United States. However, little, if any, information has been reported regarding the effectiveness and efficiency of incident planning and response at major livestock shows in the United States. Thousands of youth, exhibitors, adults, spectators, and officials are in attendance at livestock shows, and safety is a major concern. If precautionary measures are taken, officials at livestock shows will be able to respond to incidents more efficiently and effectively to ensure everyone's safety. Incident plans that include venue and local emergency management officials will be most effective when trained personnel in the area of event incident planning and response are involved in the preplanning process. The lack of research in incident planning and response at livestock shows is a barrier to how local emergency management and livestock shows work separately as well as together in order to execute efficient and effective incident response.

Purpose

The purpose of this study was to describe local officials' awareness and perceptions of incident planning and response at selected livestock shows.

Objectives

The specific objectives of this study were to:

1. Determine if local officials are aware of selected livestock shows in their respective cities.
2. Describe local officials' awareness of incident response plans for the selected livestock shows in their respective cities.
3. Describe the self-reported roles of local officials in incident planning and response for the selected livestock shows in their respective cities.
4. Describe the level of communication among local officials pertaining to selected livestock shows.
5. Describe local officials' perceptions of challenges involved with incident planning and response at the selected livestock shows.
6. Describe local officials' recommendations for effective incident planning and response related to livestock shows.

Scope of the Study

This study included local emergency management officials and livestock show officials from cities in the United States that house livestock shows. These shows were sorted by number of total entries recorded at the last livestock show and were selected from a list compiled through an informal poll of selected livestock and extension professionals at land-grant universities. The final list of selected livestock shows was determined by a panel of experts in the livestock industry field (Appendix A). The local

officials were purposively selected based on their roles in event incident planning and response.

Assumptions

This study was conducted under the following assumptions:

1. Local officials are involved in the incident planning process for the livestock shows.
2. The respondents answered the questions to the best of their knowledge.

Limitations

The following limitations were identified for this study:

1. The results of this study cannot be generalized beyond the population of the local officials and livestock shows selected for this study.

Definition of Terms

The following terms were defined as follows for use in this study:

Agriculture: “The science, art, or practice of cultivating the soil, producing crops, and raising livestock and in varying degrees the preparation and marketing of the resulting products” (Mish, 1999, p. 24).

Disaster: “A sudden calamitous event bringing great damage, loss, or destruction” (Mish, 1999, p. 329).

Effective: “Producing a decided, decisive, or desired effect” (Mish, 1999, p. 368).

Exhibitors: People who display objects in public view (Mish, 1999).

Emergency: “Any natural or human-caused situation that results in or may result in substantial injury or harm to the population or substantial damage to or loss of property” (Moats, 2007, p. 182).

Incident: Something natural or man-made that requires a response to save life and/or property (Federal Emergency Management Agency, 2010c).

Incident response plan: Plan containing general information to manage an incident, can be oral or written. (Federal Emergency Management Agency, 2010c).

Intentional: “Done by intention or design” (Mish, 1999, p. 609).

Local official: Local government authorities (U.S. Department of Homeland Security, 2008a).

Livestock show: Allow youth to compete against one another, where they are usually awarded cash, banners, trophies, and chairs (Rusk, Brubaker, Balschweid, & Pajor, 2006).

Man-made disaster: “Catastrophic events that result from human decisions” (Shaluf, 2007).

National: “A competition that is national in scope” (Mish, 1999, p. 773).

National Response Framework: A guide the Nation follows to respond to different types of hazards. (Federal Emergency Management Agency, 2010c).

Natural disasters: “Catastrophic events resulting from natural hazards” (Shaluf, 2007).

Preparedness: Actions, including procedures to share information and disseminate timely notifications, warning, and alerts, to enhance readiness and the ability to respond quickly and effectively to a potential incident (Moats, 2007).

Public: “A place accessible or visible to the public” (Mish, 1999, p. 944).

Response: Direct action to protect life, property, environment and human needs (Federal Emergency Management Agency, 2010c).

Safety: “The condition of being safe from undergoing or causing hurt, injury, or loss” (Mish, 1999, p. 1030).

Unintentional: Not on purpose or by plan (Mish, 1999).

Significance of the Study

This study will benefit the United States livestock industry, Cooperative Extension, local emergency management agencies and first responders, educators and youth programs across the country. This study provides a foundation to facilitate partnerships between livestock show officials and local emergency management officials. Since little research has been completed in this area, proactive research such as this will benefit all organizations involved in the study.

The United States livestock industry will benefit from the proactive approach taken to secure livestock at livestock shows from animal diseases which could cause damaging effects on the United States livestock industry economy. Cooperative Extension, educators and youth programs across the country will value resources available to teach education and planning for incident response at livestock shows as well as proper handling of livestock in the event of an incident outside of a livestock

show, such as flooding at home. In addition, local emergency management can benefit not only from cooperation with livestock shows in their respective cities but also from information on safe handling of livestock during incidents, and how private facilities plan for and respond to incidents internally.

Chapter Summary

Incident planning and response at large-scale events such as livestock shows should be of the utmost importance to the organizations running these shows. Action must be taken to evaluate local officials' awareness and perceptions of incident planning and response prior to an incident as well as their roles during an incident. The purpose of this study was to determine selected local officials' awareness and perceptions of their roles in and preparation for implementing incident planning and response. The results of this study will benefit the United States livestock industry, Cooperative Extension, emergency management officials and first responders, agricultural educators and youth programs across the country.

CHAPTER II

REVIEW OF LITERATURE

Incident planning and response begin and end locally; however, it can be supplemented by other resources (Perry, 2003; U.S. Department of Homeland Security, 2008b). This chapter examines how incident planning and response is used at the local level in regard to large events such as livestock shows. Livestock shows contribute greatly to the cities that host them through economic impact (Houston Livestock Show & Rodeo, 2011). In addition, it is the positive impression shows make on the lives of youth who exhibit livestock (Rusk, Martin, Talbert, & Balshweid, 2002) that provides a reason for examining how livestock shows plan for incidents. It is in the best interest of everyone associated with the livestock show as well as the city in which the show is held to be aware and prepared for an incident.

Emergency Management and Responding to Incidents

Department of Homeland Security's (DHS) Role in Incident Response

It was proposed by Representative Mac Thornberry in March 2001 to form a National Homeland Security Agency (Elizabeth C. Borja, 2008). This agency would combine the Federal Emergency Management Agency (FEMA), United States Customs Service, Border Patrol of the Immigration and Naturalization Service, United States Coast Guard, Critical Infrastructure Assurance Office and the Institute of Information Infrastructure Protection of the Department of Commerce, National Infrastructure Protection Center and the National Domestic Preparedness Office of the Federal Bureau of Investigation (Elizabeth C. Borja, 2008). This agency would combine infrastructures

which were previously separated and would create one agency responsible for homeland security-related activities (Elizabeth C. Borja, 2008). Following attacks on the United States on September 11, 2001 President George W. Bush announced that he would create the Office of Homeland Security (Elizabeth C. Borja, 2008). On October 8, 2001 two entities were established to determine homeland security policy, the Office of Homeland Security and the Homeland Security Council (Elizabeth C. Borja, 2008). President George W. Bush released the first budget in February 2002 which included \$37.7 billion to homeland security efforts, which included support for first responders (Elizabeth C. Borja, 2008). The Homeland Security Act of 2002 was signed into law on November 25, 2002 (Elizabeth C. Borja, 2008).

Homeland Security Presidential Directive 7 identified 17 critical infrastructure and key resources sectors, two of which include the agriculture and food sector and the commercial facilities sector (Department of Homeland Security, 2010). The agriculture and food sector and the commercial facilities sector both have large roles in this project. The agriculture and food sector is in place to ensure that the food and fiber system in the United States is safe by working with the United States Department of Agriculture, the Department of Health and Human Services and the Food and Drug Administration (U.S. Department of Homeland Security, *n.d.a.*). The agriculture and food sector's priority programs include agroterrorism initiatives, tabletop exercises on how government and industry can work together during a food contamination incident or foreign animal disease outbreak as well as food defense training (U.S. Department of Homeland Security, *n.d.a.*). The commercial facilities sector includes public facilities where the

general public and move freely such as fairgrounds (U.S. Department of Homeland Security, *n.d.b.*). The priority programs of the commercial facilities sector are site assistance visits, where DHS briefs the owner/operator on identified vulnerabilities (U.S. Department of Homeland Security, *n.d.b.*). In addition, the commercial facilities sector has also created mass evacuation planning guides for major events such as NASCAR, and guides of potential threats, terrorist objectives and effective protective measures specific to events (U.S. Department of Homeland Security, *n.d.b.*).

The DHS's mission is "to secure the nation from the many threats we face" (U.S. Department of Homeland Security, 2011, para. 1). The five departmental missions of the DHS are to prevent terrorism and enhance security, secure and manage U.S. borders, enforce and administer immigration laws, safeguard and secure cyberspace, and ensure resilience to disasters (U.S. Department of Homeland Security, 2011).

Ensure resilience to disasters

This study takes a deep look at one of the 5 mission of the DHS: ensure resilience to disasters. This mission provides an overarching structure to emergency management that is used in this study. The U.S. Department of Homeland Security (2011) provides the structure for organized, complete federal response in the event of a man-made disaster, natural disaster, or other large-scale emergency. To be prepared for an incident, the DHS has implemented two preparedness and response guiding documents that describe specific authorities and best practices for managing incidents that range from serious but purely local to large-scale terrorist attacks or tragic natural disasters (U.S. Department of Homeland Security, 2011). The National Incident

Management System (NIMS) and the National Response Framework (NRF) are the two guiding documents. NIMS was created to provide “a consistent nationwide template to enable Federal, State, tribal, local governments, nongovernmental organizations (NGOs), and the private sector to work together to prevent, protect against, respond to, recover from, and mitigate the effects of incidents, regardless of cause, size, location, or complexity” (U.S. Department of Homeland Security, 2008b,p. i). NIMS is the template for general management of incidents, while the NRF provides steps for actual incident management (U.S. Department of Homeland Security, 2008b).

Local Emergency Management Agency Response

The NRF is a guide to how the nation conducts all-hazards responses (U.S. Department of Homeland Security, 2008a). The NRF provides a community with an emergency management guide. The NRF describes specific authorities and best practices for managing incidents that range from the serious but purely local to large-scale terrorist attacks or catastrophic natural disasters (U.S. Department of Homeland Security, 2008b).

“The response doctrine defines basic roles, responsibilities, and operational concepts for response across all levels of government and with NGOs and the private sector” (U.S. Department of Homeland Security, 2008a, p. 8). Government and local officials respond to the response doctrine of the NRF (U.S. Department of Homeland Security, 2008a). The five key principles of the response doctrine include engaged partnership; tiered response; scalable, flexible, and adaptable operational capabilities; unity of effort through unified command; and readiness to act (U.S. Department of

Homeland Security, 2008a). The vast majority of incidents are managed locally (Perry, 2003; U.S. Department of Homeland Security, 2008b). Local individuals and public officials in the county or city affected by the incident are responsible for responding to both natural and man-made incidents (U.S. Department of Homeland Security, 2008a). The first people to respond to an incident are typically but not limited to local police officers, firefighters, and emergency medical and public health personnel (U.S. Department of Homeland Security, 2008a). Local responders are usually the first to arrive at and the last to leave an incident (U.S. Department of Homeland Security, 2008b).

“Local officials are responsible for establishing strong working relationships with local jurisdictional leaders and core private-sector organizations, voluntary agencies, and community partners as well as planning and executing incident response” (U.S. Department of Homeland Security, 2008a, p. 16). The objective of local officials is to proactively coordinate with and train with local agencies and develop relationships in order to execute incident response (U.S. Department of Homeland Security, 2008a, p. 16). This coordination between local emergency management agencies and livestock show officials will enhance the of incident response at livestock shows.

The NRF outlines a way of preparing for incidents called the preparedness cycle. The preparedness cycle includes planning, organizing, equipping, training, exercising, and evaluating and improving (see Figure 1) (U.S. Department of Homeland Security, 2008a).

The planning stage includes identifying what an organization's standard operating procedures should include for ensuring that contingencies are in place and for delivering the response during large-scale disasters (U.S. Department of Homeland Security, 2008a). Organizing and equipping include identifying the competencies and skill sets people delivering a capability should possess and ensuring an organization possesses the correct personnel (U.S. Department of Homeland Security, 2008a). Training provides first responders, homeland security officials, emergency management officials, private and non-governmental partners, and other personnel with the knowledge, skills, and abilities needed to perform key tasks required by specific capabilities (U.S. Department of Homeland Security, 2008a). Exercises assess and validate the speed, effectiveness, and efficiency of capabilities, and test the adequacy of policies, plans, procedures, and protocols in a risk-free environment. The evaluation and improvement of mission and task performance is the final step of the preparedness cycle and is crucial to informing risk assessments, management of vulnerabilities, resource allocation, and other elements of the cycle (U.S. Department of Homeland Security, 2008a).

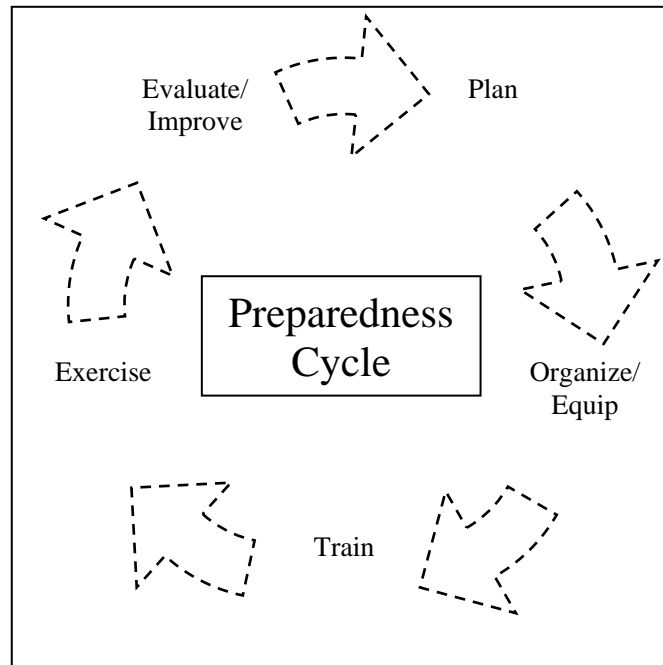


Figure 1: The Preparedness Cycle (Also Known as the POETE Model). Adapted from the National Response Framework, by the U.S. Department of Homeland Security, 2008, Washington, D.C.: GPO.

First responders to incidents at large venues, such as livestock shows, include police officers, fire fighters, and local emergency response officials (U.S. Department of Homeland Security, 2008a). These individuals have been properly trained to respond to incidents. It is the job of both the facility and local emergency management offices to ensure each entity communicates about incident response issues related to specific facilities.

Training to safely handle livestock

In this study, it is important to not only look at incident management it is also important to look at safely handling practices with livestock. Livestock are beyond normal pet planning for first responders and require attention to detail and knowledge of

livestock behavior. In order for a first responder to keep themselves as well as others safe if an incident were to occur, proper training in handling livestock is needed.

Livestock are considered domesticated animals; however, working with livestock involves many risks if precautions are not taken ahead of time (Webster & Gonzalez, *n.d.*). Animal behavior and patterns should be considered when working with livestock (Bean, 2008; Webster & Gonzalez, *n.d.*; Farm Safety Association, Inc., (*n.d.*); & Slocombe & Ebert, 2010). It is important for people who may have to handle livestock to understand why livestock act the way they do. Beef, swine and dairy cattle are usually colorblind with poor depth perception while sheep are colorblind with good depth perception (Bean, 2008). This is important in understanding that these animals may be spooked by shadows. In addition, cattle, horses, and mules have a panoramic field of vision (Bean, 2008). These animals can see everything around them except what is directly behind them, making approaching from the front or side less startling. Males and female livestock with young can exhibit distinct material and territorial instincts (Bean, 2008; Slocombe & Ebert, 2010; Webster & Gonzalez, *n.d.*). Most animal-related incidents are the result of ‘people problems,’ including poor judgment, lack of understanding and lack of common sense (Bean, 2008; Slocombe & Ebert, 2010; Webster & Gonzalez, *n.d.*).

Farmers, local officials, first responders and general public should all learn more about handling livestock, particularly during disastrous events by participating in FEMA’s Independent Study program (Federal Emergency Management Agency, 2010b). The purpose of FEMA’s Independent Study course ‘Livestock in Disasters’ is to

synthesize the knowledge of livestock farmers and emergency managers and develop a unified approach that will mitigate the impact of disasters on livestock agriculture (Federal Emergency Management Agency, 2010b). For emergency managers, the course is designed to give examples of typical problems that can arise with livestock in disasters (Federal Emergency Management Agency, 2010b). This course is designed to provide awareness of issues that arise with livestock in disasters. In addition, FEMA's Independent Study curriculum offers other courses such as 'Animals in Disasters: Awareness and Preparedness' (Federal Emergency Management Agency, 2010a). This course has been prepared to increase awareness and preparedness for animal owners and care providers. This also describes hazards that affect animals and how to reduce the impact. These courses are ways for local officials to be trained to handle livestock safely in the event of an incident or disaster.

Incident Planning and Response at Large Facilities

During the development of the incident command system it was recognized that critical planning for incident response usually was "overlooked and resulted in poor use of resources, inappropriate strategies and tactics, safety problems, higher incident costs, and lower effectiveness" (Federal Emergency Management Agency, 2008, p. 18). The incident command system resource document identifies that it is essential that every event be managed according to a plan (Federal Emergency Management Agency, 2008). In addition, "written action plans provide: a clear statement of objectives and actions, a basis for measuring work effectiveness and cost effectiveness, a basis for measuring work progress and for providing accountability" (Federal Emergency Management

Agency, 2008, pp. 10-11). The essential elements of an action plan include a statement of objectives, organization, tactics and assignments, and supporting material (Federal Emergency Management Agency, 2008, pp. 10-11). Large venues and events have taken into account information published through the incident command system and have created response plans for their organizations, schools and events.

Researchers have looked at how hospitals, schools, and public event venues are preparing for incidents. In a 2006 survey about mass-casualty events at schools (e.g., a terrorist incident, a bombing, a shooting, or a biological organism release), it was found that 86.3% of schools reported having response plans but 57.2% have plans for prevention (Graham, Shirm, Liggin, Aitken, & Dick, 2006). In addition, 95.6% of the schools had evacuation plans but 30% of those schools had conducted a drill (Graham et al. 2006). Graham et al. (2006) concluded several preparedness shortages exist in schools and those should be examined further.

A need for integrating hospitals into community emergency preparedness planning also has been identified (Braun, Wineman, Finn, Barbera, Schmaltz & Leob, 2006; Hick, Hanfling, Burstein, DeAtley, Barbisch, Bogdan & Cantrill, 2004). A study was conducted with 1,750 medical-surgical hospitals in the United States in 2006. A majority (72.8%) of hospitals reported involvement with community planning before 2001, and 27% reported involvement before 1990. In addition, 86% of hospitals reported using an incident management system, with 65% of those hospitals reporting that they work together with the local emergency management agency (Braun et al. 2006). Hick et

al. (2004) remarked that how well hospital staff operated was increased through involvement with the community emergency preparedness planning process.

Best Practices in Incident Planning and Response

There is a large number of best practices material available for planning and exercising incident response. Best practices can be categorized into communication, emergency management, and incident response. However, almost all categories have the same overlapping best practices. Some of the more common best practices used by organizations include: policy development, pre-event planning, relationship with the public, community organizations, and local officials; listen to the public's concerns and understand the audience; collaborate and coordinate with credible sources; meet the needs of the media and remain accessible; communicate properly with compassion, concern, and empathy; have proper facilities and equipment; and have proper personnel, training, and documentation (Seeger, 2006; University of Tennessee, 2008). Some approaches to best practices have fewer strategies, others have more.

Livestock Shows

Economic Impact of Livestock Shows

The economic impact livestock shows have on particular cities is unlike other events. Larger shows last approximately three weeks and draw in many people from multiple states and countries and produce profit for cities. The impact a livestock show can have on a city can be judged in many different ways, including number of jobs created, number of visitors to the city, and number of dollars made by the show and by the community. For example, in 2010, the North American International Livestock

Exposition drew 23,733 entries and 215,000 visitors and resulted in an estimated economic annual impact of \$11.6 million for the state of Kentucky (Kentucky State Fair Board, 2010).

The Houston Livestock Show and Rodeo (HLSR) increases total invoice value of sales by nearly \$500 million, regional output by \$320 million, and regional personal income by more than \$290 million (Smith, 2010). The HLSR generates more than 7,200 full-time equivalent jobs each year and an excess of 16,000 in additional population above what would have existed within the regional economic environment without the rodeo (Smith, 2010). The HLSR set a world record with 1,264,074 paid rodeo attendees and 2,144,077 regular attendees in 2010, as well as 27,013 livestock entries (Smith, 2010).

The National Western Stock Show in Denver, Colorado, increased its attendance by 11,815 attendees with 644,818 total attendees in 2011 and had an economic impact of approximately \$100 million (B. Blitz, personal communication, May 2, 2011; National Western Stock Show, 2011a). The Denver Metro Chamber of Commerce and the National Western Stock Show reported that the 2005 National Western Stock Show had an economic impact of approximately \$84.1 million (National Western Stock Show, 2010).

Impact of Youth Livestock Projects

As one of the first youth development organizations in America, 4-H was created for young people to learn leadership skills and how to give back (National 4-H Organization, 2011). In addition, 4-H teaches how to use hands-on experiences outside

the classroom environment (National 4-H Organization, 2011). Its goal is to help young people and their families gain the skills they need to be proactive forces in their communities and to develop ideas for a more innovative economy (National 4-H Organization, 2011). Ward's (1996) study of 4-H alumni in New Jersey revealed that 4-H participation built seven life skills, including responsibility, relating to others, spirit of inquiry, decision making, public speaking, maintaining records, and building self-esteem.

The National FFA Organization (FFA), like 4-H, makes a positive difference in the lives of students by developing their potential for “premier leadership, personal growth and career success through agricultural education.” Though not as old as 4-H, FFA’s foundational mission is to “prepare future generations for the challenges of feeding a growing population” (National FFA Organization, 2011). These organizations have many things in common, but one that stands out in relation to this study is that both organizations use livestock projects as a building block to teach leadership, personal growth, career success, and how to be proactive forces in their communities (National 4-H Organization, 2011; National FFA Organization, 2011).

“The purpose of the youth livestock program is to teach young people how to feed, fit, and show their animals and to provide an opportunity for personal growth and development of the young person” (Rusk, Brubaker, Balschweid, & Pajor, 2006, p. 105). Personal growth can be described in a variety of ways. In this context, personal growth refers to the information gained from livestock projects that positively impact youth’s

life. A study by Rusk, Martin, Talbert, & Balshweid (2002) concluded that the Indiana 4-H livestock judging program has positively affected the lives of its participants.

Boleman, Cummings, and Briers (2004) conducted a study to determine life skills gained by youth participating in the 4-H beef project in Texas. This study asked parents to determine their children's life skills in relation to their beef project. The rank order for the top five mean scores was: "accepting responsibility," "setting goals," "develop self-discipline," "self-motivation," and "knowledge of the livestock industry" (Boleman et al., 2004). This study agrees with Ward (1996) for "accepting responsibility." Rusk, Martin, Talbert, and Balschweid (2002) found similar results in relation to the "knowledge of the livestock industry" life skill in a study of Indiana's 4-H livestock judging program.

Participation in youth programs provides young people the opportunity to work with other youth and adults; set goals and priorities; accept responsibility; and participate in planning, decision-making, and evaluation (Department of Health, Education, and Welfare, 1977). Dormody and Seevers (1994) identified fairs and livestock shows as a contributor toward leadership life skill development.

Theoretical Framework

The need for livestock show organizations to have incident response plans that are consistent with federal guidelines and that are fully implemented lies within the theory of diffusion of innovations (Rogers, 2003). Society must adapt to new and constantly changing environments, and as a result, the implementation of innovations is crucial to organizational success (Fidler & Johnson, 1982). Organizations should realize

that characteristics of an innovation will yield expected benefits when adopted (Downs & Mohr, 1976), and adopting incident response plans based on federal guidelines will help organizations that manage livestock shows minimize incident impacts and maximize exhibitor and public safety.

Within Roger's (2003) model (see Figure 2), the innovation process in organizations consists of two stages, initiation and implementation. Agenda-setting and matching fall into the initiation stage, and redefining, clarifying, and routinizing fall into the implementation stage.

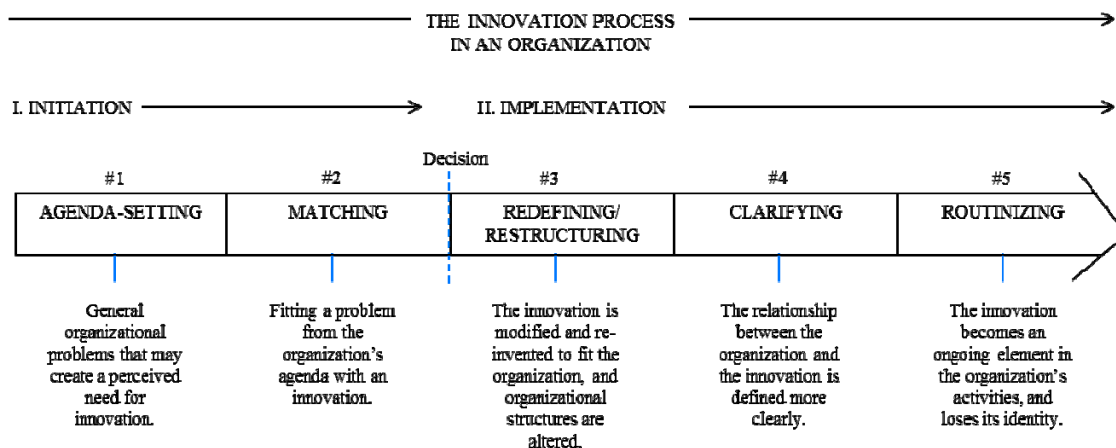


Figure 2: Five Stages in the Innovation Process in Organizations. Adapted from *Diffusion of Innovations*, by E. M. Rogers, 2003, New York: Free Press.

Agenda-setting occurs when a “general organizational problem is defined that creates a perceived need for an innovation” (Rogers, 2003, p. 422). Agenda-setting

consists of identifying the problem in the organization and finding a solution or innovation to fix the problem. Matching occurs when the innovation found in the agenda-setting stage is fit with the organization. “Effectively matching an innovation with an organization’s need is key to whether the new idea is sustained over time” (Rogers, 2003, p. 423). In Mohr’s (1969) study of the major factors as to why organizations implement an innovation, size of the organization was one of the largest factors.

Redefining/restructuring starts the implementation stage (Rogers, 2003). This stage accounts for the innovation being changed to accommodate the organization and vice-versa. “Both the innovation and organization are expected to change, at least to some degree” (Rogers, 2003, p. 424). The next stage, clarifying, is where the innovation is put to use in the organization and where all members can see it being used (Rogers, 2003). Care should be taken during this stage, as the innovation is new to all members of the organization.

Routinizing occurs when the innovation is used on a regular basis and is completely implemented in the organization (Rogers, 2003). At the organizational level, the move from considering an innovation to successfully routinizing it is generally a rocky process characterized by multiple shocks, setbacks, and unanticipated events (Van de Ven, Polley, Garud, & Venkataraman, 1999). Additional elements that can be associated with successfully routinization are organizational structure, leadership and management, human resource issues, funding, and intraorganizational communication, especially in health care organizations (Greenhalgh, Robert, MacFarlane, Bate, &

Kyriakidou, 2004). Leonard-Barton (1988) wrote there have been “remarkably few attempts to study post-adoption behavior;” that is, behavior after the initial organizational adoption decision (Kimberly, 1981, p. 90).

Chapter Summary

Incident management occurs at all levels of government and organizations. Because of this, the DHS developed the NIMS and the NRF for individuals, communities, and organizations to help plan for and recover from incidents. Livestock shows are just as likely to have incidents occur as any other event in the United States. Since livestock shows involve many different factors such as livestock, large numbers of visitors, location, and economic impact to cities, it is important to study how officials in the cities that host for these shows are preparing for incidents. It is imperative for livestock show organizations and local city officials to take into account planning for incidents to occur during these livestock shows in their incident response plans. In this study, Rogers’s (2003) diffusion of innovations theory is used to describe how officials have adopted the use of incident response plans for livestock shows.

CHAPTER III

METHODOLOGY

Previous research related to incident planning and response at livestock shows was not found, making qualitative methodology the most fitting approach to building a foundation for this line of research. Strauss and Corbin (1990) claimed qualitative methods can be used in studies where little information is known or to gain more detailed information about things that already are known. This study sought to describe officials' awareness and perceptions of incident response at livestock shows. By asking local officials involved in incident response about their awareness and perceptions, the academic community will gain a better understanding of incident response at livestock shows in the United States.

Institutional Review Board

According to Texas A&M University policy and federal regulations, all research studies involving human subjects must be approved before investigators can begin research studies. This study was reviewed and approved by the Texas A&M University Institutional Review Board and assigned study number 2010-0722 (Appendix C).

Purpose

The purpose of this study was to describe local officials' awareness and perceptions of incident planning and response at selected livestock shows.

Objectives

The specific objectives of this study were to:

1. Determine if local officials are aware of selected livestock shows in their respective cities.
2. Describe local officials' awareness of incident response plans for the selected livestock shows in their respective cities.
3. Describe the self-reported roles of local officials in incident planning and response for the selected livestock shows in their respective cities.
4. Describe the level of communication among local officials pertaining to selected livestock shows.
5. Describe local officials' perceptions of challenges involved with incident planning and response at the selected livestock shows.
6. Describe local officials' recommendations for effective incident planning and response related to livestock shows.

These research objectives helped form the interview questions (Appendix B) used in this study.

Population

The target population for this study included local officials involved in incident planning and response for livestock shows and emergency management in selected cities. These individuals were selected because they had the knowledge the researcher wanted to gather about incident response. The researcher employed a purposive sampling strategy, intentionally selecting five knowledgeable people involved with services in selected communities that host large livestock shows.

Coyne (1997) identified that while conducting qualitative research, “sample selection has a profound effect on the ultimate quality of the research” (p. 623). Patton (1990) concluded: “There are no rules for sample size in qualitative inquiry. Sample size depends on what you want to know, the purpose of the inquiry, what will be useful, what will have credibility, and what can be done with available time and resources” (p. 244). Wiersma and Jurs (2005) defined purposeful sampling as “a sample selected in a nonrandom manner, based on member characteristics relevant to the research problem” (p. 491). Fraenkel and Wallen (2009) stated the selected representatives in purposive sampling have the needed information for the study. In this study, five officials, during the initial contact, remarked on the value of this line of inquiry and agreed to participate in individual interviews. Once contacted, participants stated that they had not seen any research of this kind and it was needed to help guide them in improving their practices related to planning and implementing incident response at their respective venues.

Research Design

Qualitative research is completed by researchers who wish to obtain a complete impression of something and to describe in detail all of what is going on in a particular activity (Fraenkel & Wallen, 2009; Strauss & Corbin, 1990). “If you want people to understand better than they otherwise might, provide them information in the form in which they usually experience it” (Lincoln & Guba, 1985, p. 120). Researchers using qualitative research want to study relationships, activities, situations, or materials, not only look at numbers (Fraenkel & Wallen, 2009). Qualitative data is collected in the form of “words or pictures rather than numbers” and is concerned with a “process as

well as product” (Fraenkel & Wallen, 2009, p. 423). Qualitative researchers analyze their data as they go, constantly constructing a picture with the information they acquire (Fraenkel & Wallen, 2009). These pictures, over time, form a complete view of the activity in the study. Strauss and Corbin (1990) stated that qualitative research, broadly defined, means “any kind of research that produces findings not arrived at by means of statistical procedures or other means of quantification” (Strauss & Corbin, 1990, p. 17).

The qualitative process involves identifying the phenomenon to be studied, identifying the participants, generating a hypothesis, collecting data, analyzing data, and interpreting the data (Fraenkel & Wallen, 2009; Strauss & Corbin, 1990). Many ways to conduct qualitative research exist; some of the more common ways are conducting in-depth interviews, observing people in their daily routines, and analyzing documents for content analysis (Fraenkel & Wallen, 2009; Strauss & Corbin, 1990). Bogdan and Bilken (1982) stated the two major types of qualitative research are participant observation and in-depth interviewing. This study used interviews to provide information about local officials’ awareness and perceptions of incident response at selected livestock shows. In qualitative research, the researcher usually plays the role of the instrument. Lincoln and Guba (1985) stated a researcher must do three things. First, adopt the stance suggested by the characteristics of the naturalist paradigm. Second, develop skill to be the instrument. Third, prepare a research design that utilizes accepted approaches for naturalistic investigation.

Instrumentation

Thirty-minute phone interviews were used to collect data about local officials' awareness and perceptions of incident response planning at selected livestock shows in their cities. Phone interviews were used for various reasons, including usefulness in short interviews (Harvey, 1988), anonymity (Greenfield, Midanik, & Rogers, 2000), and to access groups who are difficult to access in person (Tausig & Freeman, 1988). The five cities used in this study are spread throughout the United States, and phone interviews were the best choice to alleviate costs. Tausig and Freeman (1988) stated telephone interviewing is a cost-effective method of data collection. However, Creswell (1998) noted use of a telephone deprives the researcher of seeing respondents' nonverbal communication but is appropriate when the researcher does not otherwise have access to the respondents. The interview protocol consisted of six questions with probing questions (Appendix B), and was approved by the Institutional Review Board of Texas A&M University (Appendix C). These questions reflected the research objectives in this study.

Participants were asked direct questions to find out if they were aware of selected livestock shows. In addition, participants were asked if they were aware of or knew of written incident response plans for these livestock shows. Probing questions were added to find out roles in creating incident response plans as well as agency's roles in responding to incidents at livestock shows. Participants were asked about their perceptions of challenges at livestock shows with both planning and response. Lastly, participants were asked if they were aware of activations of incident response plans for

livestock show and for final recommendations to facilitate effective incident response at livestock shows. Listed below are the questions and order the researcher asked during the interview.

1. Are you aware of the (*livestock show name*)?
2. Are you aware of an incident response plan for the *livestock show name*?
 - a. If so, what is your role in creating the incident response plan for the *livestock show name*?
 - b. What would be your agency's role in responding to an incident that occurs at the *livestock show name*?
3. Is there a comprehensive written incident response plan for the *livestock show name*?
4. What are your perceptions of challenges with this type of event in both planning and response?
5. Are you aware of an activation of the incident response plan for the *livestock show name*? What was the situation?
6. What are your recommendations to help a show to facilitate effective incident response planning?

Data Collection

Data collection for this study included interviews and document analysis of materials pertaining to the incident response planning at livestock shows. Patton (1990) notes that “studies that use only one method [of data collection] are more vulnerable to errors linked to that particular method” (p. 248). Data were collected during the fall of 2010. Five interviews were conducted via telephone from October 19, 2010, to October 22, 2010. The audio files of the interviews were transcribed by the researcher immediately following the interview period. The transcription process is both a measure of soundness as well as a way to analyze data. Member checks were performed to check

for reliability. The documents used to analyze the data were general incident response and planning guidelines obtained by the researcher.

Interviews

Interviewing includes asking appropriate questions pertaining to the study (Fraenkel & Wallen, 2009). The reason for interviewing is to find out what is on people's minds, what they know, and what the researcher wants to find out (Fraenkel & Wallen, 2009). Patton (1990) described interviewing as finding out from participants those things that cannot be directly observed. Semi-structured interviews are verbal questionnaires that consist of a series of questions designed to elicit specific answers from respondents (Fraenkel & Wallen, 2009). Semi-structured interviews were used in this study.

Once participants were identified, an introductory phone call (Appendix B) was made to each of the five participants in the study to explain the purpose and benefits of the study and ask permission to set up a date to interview the participants. The researcher allowed participants to choose to be interviewed during the initial phone call. If they chose this method, after the researcher explained the study and that the participants would be recorded, the researcher then started with the interview questions. The interviews were recorded for ease of transcribing and to ensure accuracy. All five participants chose to be interviewed during the initial phone call.

The researcher used a script (Appendix B) to ask the participants specific questions related to incident response planning for livestock shows in their respective cities. The initial questions were open-ended; the researcher asked participants to

describe, in their own way, their experiences and response concerning certain situations. As the interview continued, questions remained open-ended but became more specific. Hoepfl (1997) stated that research questions are usually open-ended because these types of questions tend to bring up new material.

Questions were structured as knowledge questions, which are questions that obtain the “factual information respondents possess;” experience questions, which focus on “what a respondent is currently doing or has done in the past;” experience questions, which “elicit descriptions of experience, behaviors, or activities that could have been observed but were not;” and opinion questions “aimed at finding out what people think about some topic or issue” (Fraenkel & Wallen, 2009, p. 448). Once all questions had been asked, the researcher asked the participants if they would be involved in a member check to ensure recorded data and interpretations were reliable.

Member Checks

Member checks are ways of verifying information put together by the researcher for the participant (Erlandson, Harris, Skipper, & Allen, 1993). Participants were offered the opportunity to edit answers from their respective interviews. No participants made substantial changes to the transcripts.

Document Analysis

A source of triangulation used in this study was document analysis. Triangulation is using a variety of instruments to collect data, therefore, enhancing validity (Fraenkel & Wallen, 2009). Documents can be used to verify information given in the interviews. The researcher used general guidelines pertaining to incident response planning to gain

additional perspective on communication and planning for incidents. By looking through documents pertaining to incident response planning, the researcher was able to see how organizations and emergency management plan for incidents and what should be included in written incident response plans.

Data Analysis

Patton (1990) offered a view of analyzing qualitative data: the goals of the process are “to make sense of massive amounts of data, reduce the volume of information, identify significant patterns, and construct a framework for communicating the essence of what the data reveal” (p. 432).

For this study, the researcher analyzed the data from the interviews following guidelines proposed by Lincoln and Guba (1985) for content analysis of qualitatively obtained data, including unitizing, categorizing, and conducting member checks. The researcher used the constant comparative method of data analysis, in which the smallest possible units of data were defined (utilizing) and then continually examined and contrasted with one another to find recurring ideas, topics, and categories (categorizing). This process required an understanding of the data and constant manipulations.

The audio data were transcribed verbatim, sorted, and organized based on major themes from the study immediately following the interview period. The researcher compiled the information for each of the phone interviews and emailed the information to the participants for member checks.

Unitization of data refers to the sorting of information obtained from the interview into complete thoughts. These complete thoughts were taken from the

transcribed interviews, printed, and cut into individual pieces. Each of these individual thoughts identified the coded participant as well as the page number from the transcript. A total of 340 data units were identified.

The transcribed interviews were coded, and subcodes emerged in the details of words, phrases, and key words relevant to the major themes. The next step in content analysis is categorizing. Categorizing refers to placing each of the individual data units into related content areas. Each of these categories must be defined to justify why the data unit fits into the category. The researcher and an independent rater categorized the 340 data units separately. The researcher came up with twenty categories (Appendix D), and the independent rater came up with eleven categories (Appendix E). While comparing each set of categories, the researcher saw similarities in the two sets.

The researcher and independent rater combined similar categories and came up with a final set of nine categories (Appendix F). From these nine categories, the researcher and independent rater separately sorted the 340 data units into the nine new categories. Upon review of the new sorting, the researcher and independent rater sorted 281 data units alike and 59 different. The researcher and independent rater reviewed the 59 different data units and came to consensus as to the category in which data units should be placed.

Trustworthiness

In this study, the researcher examined participants' awareness and perceptions of incident response planning for selected livestock shows in the United States. In qualitative research, trustworthiness is one of the main ways to describe quality. The

researcher followed an ordered process of inquiry while remaining aware of her own bias to support trustworthiness in this study. Lincoln and Guba (1985) described criteria that can be used to establish trustworthiness: credibility and dependability.

Credibility asks “Are the findings and interpretations plausible, and is it reliable?” (Lincoln & Guba, 1985, p. 301). Three methods used to establish credibility in this study are triangulation, peer debriefing, and member checks. The researcher obtained triangulation by using document analysis, member checks and multiple coders. Peer debriefing is exposing the study to an individual outside of the study (Fraenkel & Wallen, 2009). Member checks involve asking participants to review the transcribed phone interviews for accuracy. After the transcription process, each participant received the transcribed phone interviews to review for accuracy.

Dependability asks “Are research processes clearly defined and can you expect the same results if the study was duplicated?” (Erlandson, Harris, Skipper, & Allen, 1993, p. 33). The research processes for this study were clearly defined. This is beneficial for replication of this study.

Chapter Summary

Qualitative research is used to describe a phenomenon and describe a large impression of something (Fraenkel & Wallen, 2009; Strauss & Corbin, 1990). Little, if any, research has been completed on incident planning and response at livestock shows therefore, qualitative research was best suited. The researcher conducted five phone interviews with local officials involved in incident response planning for large events within a community. The phone interviews covered topics such as awareness of the

selected livestock shows, perceptions of challenges involved in incident planning for these events, and local officials' involvement in the planning of the incident response for these livestock shows. After the data were collected, the researcher transcribed the phone interviews, completed member checks, looked for emerging themes, sorted into complete thoughts, and categorized the data reflected from the research questions.

Trustworthiness was established through credibility and dependability. The researcher used member checks, document analysis and multiple coders to create triangulation which establishes credibility.

CHAPTER IV

FINDINGS

In this study the researcher asked local officials about their awareness and perceptions of incident planning and response at livestock shows in the United States. After reviewing the literature, it was apparent that studies focused on livestock shows are few, but studies that concentrate on incident planning and response at livestock shows are almost nonexistent. It was important for the researcher to use this qualitative study as foundational research in this area.

In this study, five local officials, during the initial contact, remarked on the value of this line of research and agreed to participate. Once contacted, participants stated that they had not seen any research of this kind and it was needed to help guide them on how they could improve their incident response practices.

Purpose

The purpose of this study was to describe local officials' awareness and perceptions of incident planning and response at selected livestock shows.

Objectives

The following are the objectives that guided this study:

1. Determine if local officials are aware of selected livestock shows in their respective cities.
2. Describe if local officials' awareness of incident response plans for the selected livestock shows in their respective cities.

3. Describe the self-reported roles of local officials in incident planning and response for the selected livestock shows in their respective cities.
4. Describe the level of communication among local officials pertaining to selected livestock shows.
5. Describe local officials' perceptions of challenges involved with incident planning and response at the selected livestock shows.
6. Describe local officials' recommendations for effective incident planning and response related to livestock shows.

Population

The target population for this study included local officials involved in incident response planning for livestock shows and emergency management in selected cities. These individuals were selected because they would have the knowledge the researcher wanted to gather about incident planning and response. The researcher employed a purposive sampling strategy, intentionally selecting five knowledgeable people involved with services in selected communities that host large livestock shows.

Data Collection

Five male officials participated in this study. The participants' identities were kept confidential. However, aliases were given to each case (Participant One, Two, Three, Four, and Five). The research objectives helped form the interview questions (Appendix B) used in this study. Upon Institutional Review Board approval from Texas A&M University (Appendix C), data was collected from the five male officials.

During the opening of the phone interview, the researcher explained to each participant who she was and that she was interviewing local officials involved in incident planning and response in selected cities within the United States that host major livestock shows. The researcher explained why she chose each particular participant as well as the risks and benefits associated with this study. In addition, it was stated that this study was confidential and the researcher provided information on who to contact for more questions about this project. From this point forward, the researcher asked each participant if he wished to participate in the study at this time or if he would like to set up an appointment at a later time. All participants chose to be interviewed during the initial phone call.

After completing the interviews, the researcher transcribed the phone interviews verbatim. The researcher sorted individual data units from the transcribed interviews, ending with 340 data units. This step of the data analysis process is called unitizing. These data units were categorized by the researcher and one independent rater. The first sort of the data units resulted in 20 categories from the researcher (Appendix D) and 11 categories from the independent rater (Appendix E). The researcher and independent rater noted the similarities in their categories and came to a consensus with nine final categories (Appendix F). The researcher and independent rater sorted the 340 data units into the nine new categories. Upon review of the new sorting, the researcher and independent rater sorted 281 data units alike and 59 different. The researcher and independent rater reviewed the 59 different data units and came to consensus in which these data units should be placed.

Themes

The final nine themes that emerged from the 340 data units in this study were: background information (26 data units), challenges (67 data units), communication (18 data units), example incidents (15 data units), executing incident response (61 data units), incident response planning (72 data units), incident response training (15 data units), need for planning (29 data units) and miscellaneous (37 data units) (see Appendix F).

Information supporting objective 1, awareness of selected livestock shows sorted into the theme of background information. Objective 2, local officials' awareness of incident response plans was supported by the theme of incident response planning. Objective 3 describe the self-reported roles of local officials in incident planning and response for the selected livestock shows resulted in information from the themes of incident response planning and executing incident response. The data units supporting objective 4, describe the level of communication among local officials, fell into the theme of communication. Objective 5, local officials' perceptions of challenges involved with incident planning and response, was supported by the themes of challenges and example incidents. Objective 6, local officials' recommendations of effective incident planning and response related to livestock shows, were reinforced by the themes of communication, incident response planning, incident response training, and need for planning. The theme of miscellaneous contained information such as rhetorical questions and information that did not pertain to incident response planning at livestock shows. This theme did not support any of the research objectives.

Findings for Objective 1: Are Local Officials Aware of Selected Livestock Shows?

“Are you aware of the *[insert livestock show name]*?” This was the first question the researcher asked of all participants in her study. This general, yes or no question, started as the baseline as to how the interviews with local officials were going to go. Of course, there were laughs, the “uh, yeah” and “can I get more specific than yes?” answers. Clearly, it seemed silly to ask local officials who worked in these specific cities if they were aware of an event that brings tens of thousands of people to their city every year and millions of dollars in revenue. The way the participants answered this one, very basic, question through their tone and style was the more interesting finding. By starting the interview with this question, it was evident that the two participants involved with actual livestock shows were more intense, guarded and to-the-point while answering questions during the entire interview.

Since the researcher is creating foundational research, it is important to start at the bottom, with the lowest, most obvious question. This creates a base to start. All participants stated that they were aware of the livestock shows in their respective cities, some even stating that they currently worked there or had worked at the livestock show in the past. The data units supporting objective 1 were sorted into the theme of background information.

Background Information

The data units that formed the theme of background information included but were not limited to: evidence of past work history, past show history, and previous facility history. One participant remarked that they “used to work as a policeman down

at the livestock show” and another stated that their facility was used “almost every day of the year.” In addition, participants stated that local fire stations are in close proximity to their show facility. Another participant stated that they volunteered at the livestock show in the horse barn and in the radio room.

The information found in background information clearly define objective 1 by discovering if local officials were aware of the selected livestock show in their city. Participants included information they felt needed to be stated about their knowledge of the livestock show, thus creating a foundation.

Findings for Objective 2: Awareness of Incident Response Plans for Selected Livestock Shows and to What Degree

To thoroughly answer objective 2, an initial question and additional probing questions were used. The additional questions were needed to understand the level of awareness local officials knew about incident response plans for selected livestock shows and to what degree. Since the participants worked in different local agencies, whether at the livestock show or within local emergency management, the researcher wanted to learn from each participant what they knew about livestock show specific incident response plans. It is important to conclude if all local agencies are aware of livestock show specific incident response plans to judge the level of communication and reliance each agency has on the other. The theme that arose from the participants interviews that directly relates to objective 2 was incident response planning.

Incident Response Planning

When participants were asked if they were aware of an incident response plan for specific livestock shows, the participants' answers varied. Answers ranged from one participant being actively involved with the process of creating the incident response plan while another participant was more hesitant, saying "to some extent, yes." It was clear that livestock show officials were more involved and knew more about specific livestock show incident response plans. One local emergency management official stated that there was an emergency operations plan for city "which includes responding to *Arena Name*, and our other venues" but remarked that there was not a plan "specifically for the livestock show." A livestock show official stated that he was part of a team with the sheriff's department, police department, fire department, FBI and other agencies that "have been involved with this facility in creating the emergency response plan for the facility."

Although all participants were not aware of specific livestock show plans in their respective cities, all stated that they believed there was a plan, whether it be a city emergency operations plan or specific livestock show plan, which included the facility where the livestock show was held. An emergency operations plan is an "ongoing plan maintained by various jurisdictional levels for responding to a wide variety of potential hazards" while an incident action plan is an "oral or written plan which dictates overall strategy for managing and incident" (Federal Emergency Management Agency, 2010c). Data units that formed the theme incident response planning included all of the information participants identified about their specific job for incidents. One participant

went into great detail about how he was directly involved with the actual livestock show plan. Another participant spoke about how he was involved with the implementation of the city emergency operations plan that included the show facility. One participant went as far as to say “I believe the organization, the [*Show Name*], and in conjunction with [*City*] Police, helped to create that plan [incident response plan for the livestock show] for each individual stock show that comes up.” Yet another participant stated that “it [comprehensive written incident response plan for the livestock show] is incorporated into our emergency response procedure plan for the [*State Name*] State Fair Board.”

Findings for Objective 3: Describe the Roles of Local Officials in Incident Planning and Response

When the participants were asked to describe their roles in incident planning and response at selected livestock shows some had direct involvement with executing incident response while others were in charge of directing incident response efforts. Those involved with direct response actually responded to the incident and was there to help. Participants involved with directing incident response efforts may have had to notify the correct emergency services of the incident or staff an emergency operations center to make critical emergency management decisions. The data units that answered objective 3 were found in the themes of incident response planning and executing incident response.

Incident Response Planning

One livestock show official was “part of the actual team that collectively, with SMG, the County Sheriff’s department, Police Department, Fire Department, FBI, and

other agencies that have been involved with this facility in creating the emergency response plan.” Another livestock show official stated he had input in making the plan and its implementation. However, one participant stated he did not have a role in creating the emergency operations plan because he had an individual planner in his office at the time but he had reviewed the plan.

Executing Incident Response

Executing incident response includes detailed information about how livestock shows and/or city emergency management offices go about executing incident response in their community or at the livestock show. To answer objective 3, the role of the local officials, participants stated how they would be involved during an incident. One participant stated “we [the emergency management agency] would coordinate the response from police and fire and other necessary responders.” That participant would also activate the emergency operations center and coordinate response from other emergency services. Another local official said that his role at local emergency management would be to “coordinate a response to a large incident, open or we would activate our emergency operations center.” A livestock show official said his role in incident planning and response would be to “determine who actually responds and to what level of response is necessary.” The same livestock show official stated the livestock show may have dumpster fires on the grounds and someone would call 911 to report the fire, but “we can respond quicker because we have assets here on the grounds to handle the fire.” Although each official interviewed knows his own role, he also knows when it is time to hand it over to someone else. One livestock show official

responded “We [the livestock show] have protocols that we follow. If a bomb threat is called in, and depending on what is determined, we may transfer it over to the appropriate agencies to take the lead on the investigation.”

Following protocol is also an important step conveyed by many of the participants. “The first thing we [the livestock show] do in the event a threat is called in, we follow a notification procedure of the proper groups, then we will determine the level of the threat, credible or not, and if so, we will start a search procedure.”

Findings for Objective 4: Level of Communication Among Local Officials

It was interesting that even though the researcher did not ask direct questions about the level of communication among local officials how many times participants remarked upon communication. The researcher was interested in seeing how well, if at all, livestock show and local emergency management agencies communicated. Since little research has been completed in this area and livestock show facilities are typically private run facilities, it is important to look at the communication paths between these important groups.

Communication

Some participants remarked on how they communicated with other agencies and officials, while others remarked on how valuable communication is in the planning and execution process of incident response. Building relationships among livestock show, city officials, and local agencies was one of the main objectives the participants stated for successful incident response planning. Participants went as far as meeting battalion chiefs, police captains, Federal Bureau of Investigation, and Joint Terrorism TaskForce

in order to make sure everyone was coordinated and prepared if. An interesting statement by one participant was that “you don’t want to meet somebody for the first time in the parking lot as their building burns to the ground.” That same participant said he would suggest giving a tour of his facility to local responders so they are familiar with it. He left me with a few final statements about communication that clearly sum up how all he felt about the importance of communicating.

You know any good plan...you could go through a mass exercise to formulate any kind of an evacuation plan, but it’s only as good as how well it’s communicated, and getting that to the appropriate people and making sure that it’s followed. The simple fact is, communicating the plan is the single key to making the facility a safe place to be.

All of these statements formed the theme of communication that defines objective 4. All participants understand the value of communication in incident response planning and execution. It was clear that these local officials understand the value of communication in the area of incident response. In addition, all participants commented on how they were involved in the communication process in their respective cities. Each participant stated examples of communication that is held with a wide array of stakeholders in communities.

Findings for Objective 5: Perceptions of Challenges Involved with Incident Planning and Response at Selected Livestock Shows

Large livestock shows come with the challenge of large amounts people, and the inclusion of livestock. These increase the complexity of incident planning and response.

Again, all participants remarked on how hard they work to keep a safe environment at livestock shows but there are always challenges that arise. This information presented by participants formed the themes challenges and example incidents.

Challenges

The data units that formed challenges included but were not limited to, information pertaining to what type of threats and vulnerabilities livestock shows and emergency management offices have in the area of incident planning and response. Out of the nine themes of this study, challenges had the second largest amount of data units with 67 data units. Each of the participants remarked about a type of challenge, some being the same, others different. Below is a list of some of the challenges the participants were concerned with: introduction of livestock and rodeo animals, some of which are valuable, large cities with multiple interstates, flooding, fire, tornado, bomb blast, moving livestock between venues, evacuating people and livestock, out of town visitors who do not know the area, large mass of people, communicating the plan, getting the right players to the table, coordinating the plan, accountability – where to take people and how to account for them, keeping panic levels low, and the expenses of practicing and evacuating in today's economy.

It is evident that data units forming challenges answer objective 5 in this study. Objective 5 wanted a description of local official's perceptions of challenges involved with incident planning and response at selected livestock shows for others to draw upon and prepare for. As seen in the above example of challenges, participants had a vast array of challenges that could result from this type of event. Challenges range from

natural disasters, communication failures, visitor safety, to crowd control. Each participant remarked on an incident that had occurred at the livestock show in his respective city, although he may not have been directly involved with the incident. Challenges in incident planning and response was a large concern at the beginning of this foundational study because livestock shows present such a large variety of issues that could happen at any given time. This is evident in the wide range of incidents spoke of by each of the participants.

Example Incidents

The recollection of past incidents that have occurred at livestock shows make up the theme of example incidents. One participant stated “we’ve had some heavy rains and stuff that have been problematic but never an emergency that we’ve had to activate for.” Another participant said “the biggest thing that I have seen that would cause a response plan to go into effect has mostly been medical, either someone fell off of a horse or someone was injured in some way related to that, or a spectator or visitor on the grounds you know slipped and fell or something like that.”

Findings for Objective 6: Recommendations for Effective Incident Planning and Response Related at Livestock Shows

Local officials interviewed for this study brought up interesting recommendations for others who wish to facilitate effective incident planning and response at livestock shows. The largest recommendations were summed up in the themes of communication, incident response planning, incident response training, and need for planning.

Communication

In terms of communication, one local emergency management official's recommendations were to give tours so responders are familiar with facilities and to build relationships with them. In addition, a livestock show official stated "I really think it's [facilitating effective incident response planning] all about communicating your emergency, safety, and security plan to the correct parties and having a complete understanding of how it is to be implemented."

Incident Response Planning

In terms of incident response planning, recommendations that came up were preplanning, writing stand-alone plans for private facilities, inviting important local agencies to tour facilities, being knowledgeable of general incident management and the planning process, and to take precautions early.

Incident Response Training

Incident response training included information about actions taken by livestock shows as well as city emergency management officials in training for incident response. Each participant stated the need for real, hands-on training in incident response. This training could be in forms of table-top exercises or real-life drills. An emergency management official said he has his management within the city go through extensive Incident Command System, and NIMS classes. "One [purpose of training city management in Incident Command System and National Incident Command System] is it helps them understand how a response to their facility would be organized, but also so they can help come staff emergency operations center, if we have a large event that

doesn't affect their facility." Another participant has run table-top exercises which use the stock show fairgrounds as the basis for the incident with his team.

Another official said to actually practice the incident response plan, declare an emergency, and practice evacuations and responsibilities. He stated that successful incident response includes "getting down to the details of the implementation of the program." "Not just writing the program, but also practicing the program."

Need For Planning

An interesting category that came out of the transcribed interviews was the need for planning. This category addressed information where the participants noted that there was not enough planning and research in the area of incident response for livestock shows. They recommended that research take place so that they too could learn from the findings. "So as I sit here and start to think about the specifics, of the *Livestock Show Name*, we, [the emergency management agency], probably don't have enough plans in place and need to make that." In addition, it was noted by multiple participants that there was not enough planning in this area for events such as livestock shows. With numerous different obstacles that come with livestock shows research in this area needs to become more readily available for people who wish to plan for this type of event.

Miscellaneous

The miscellaneous category included information that did not necessarily pertain to incident planning and response. This included but is not limited to rhetorical questions and questions about other information the researcher had received from other cities.

Chapter Summary

The nine categories that emerged from the 340 data units in this study were background information, challenges, communication, example incidents, executing incident response, incident response planning, incident response training, miscellaneous, and need for planning (see Appendix F). These categories were obtained by sorting data units from the transcribed interviews into categories until a consensus was reached. The categories represent the major ideas that came out of the five participant interviews in smaller, more direct categories. All objectives of this study were answered by the nine categories that emerged from the transcribed interviews, and some answered more than one objective.

CHAPTER V

CONCLUSIONS, RECOMMENDATIONS, AND IMPLICATIONS

The intricate system of incident planning and response causes many organizations to overlook the basic protocol needed to provide a safe environment in their facilities or at their events. The DHS's mission is "to secure the nation from the many threats we face" (U.S. Department of Homeland Security, 2011). Through this mission, the DHS has created guidelines for incident planning and response. It is in an organization's best interest to implement these guidelines. Large organizations and events, such as the national sporting events, hospitals, and schools, have implemented these guidelines, and it is time that livestock shows look at them as well.

The economic impact a livestock show has on a particular city is equal to or more than a large sporting event taking place in a city. The difference is that a livestock show takes place in one city every year and runs for approximately three weeks. With gross sales in the millions for cities that house national livestock shows, it is important to look at safety at these livestock shows. In addition, the one main purpose behind a livestock show is they provide an arena where youth who exhibit livestock projects can demonstrate their hard work. With large numbers of visitors and exhibitors at livestock shows, it is time to develop foundational research about how local officials view incident planning and response at livestock shows. Since little information in the area of incident response at livestock shows has been studied, this is an important topic of study.

In this study, five officials, during the initial contact, remarked on the value of this line of research and agreed to participate. Once contacted, participants stated that

they had not seen any research of this kind and it was needed to help guide them on how they could improve their incident response practices.

Purpose

The purpose of this study was to describe local officials' awareness and perceptions of incident planning and response at selected livestock shows.

Objectives

The following are the objectives that guided this study:

1. Determine if local officials are aware of selected livestock shows in their respective cities.
2. Describe local officials' awareness of incident response plans for the selected livestock shows in their respective cities.
3. Describe the self-reported roles of local officials in incident planning and response for the selected livestock shows in their respective cities.
4. Describe the level of communication among local officials pertaining to selected livestock shows.
5. Describe local officials' perceptions of challenges involved with incident planning and response at the selected livestock shows.
6. Describe local officials' recommendations for effective incident planning and response related to livestock shows.

Data Collection

Five male officials participated in this study. The participants' identities were kept confidential. However, aliases were given to each case (Participant One, Two,

Three, Four, and Five). The research objectives helped form the interview questions (Appendix B) used in this study. Upon Institutional Review Board approval from Texas A&M University (Appendix C), data was collected from the five male officials.

During the opening of the phone interview, the researcher explained to each participant who she was and that she was interviewing local officials involved in incident planning and response in selected cities within the United States that host major livestock shows. The researcher explained why she chose each particular participant as well as the risks and benefits associated with this study. In addition, it was stated that this study was confidential and the researcher provided information on who to contact for more questions about this project. From this point forward, the researcher asked each participant if he wished to participate in the study at this time or if he would like to set up an appointment at a later time. All participants chose to be interviewed during the initial phone call.

After completing the interviews, the researcher transcribed the phone interviews verbatim. The researcher sorted individual data units from the transcribed interviews, ending with 340 data units. This step of the data analysis process is called unitizing. These data units were categorized by the researcher and one independent rater. The first sort of the data units resulted in 20 categories from the researcher (Appendix D) and 11 categories from the independent rater (Appendix E). The researcher and independent rater noted the similarities in their categories and came to a consensus with nine final categories (Appendix F). The researcher and independent rater sorted the 340 data units into the nine new categories. Upon review of the new sorting, the researcher and

independent rater sorted 281 data units alike and 59 different. The researcher and independent rater reviewed the 59 different data units and came to consensus in which these data units should be placed.

Themes

The nine themes that emerged from the 340 data units in this study were background information (26 data units), challenges (67 data units), communication (18 data units), example incidents (15 data units), executing incident response (61 data units), incident response planning (72 data units), incident response training (15 data units), need for planning (29 data units), and miscellaneous (37 data units) (see Appendix F).

Summary of Findings

Findings for Objective 1: Are local Officials Aware of Selected Livestock Shows?

All participants were aware of the selected livestock shows in their specific cities. It was important to ask this baseline question because a foundation needed to be set as to where participants stood on the subject of livestock shows in general, before going into detail on how they handle incident planning and response. Objective 1 was also used to investigate how much interaction the participant had with selected livestock shows. All participants gave background information as to whether they had worked specifically with the livestock show previously.

Findings for Objective 2: Awareness of Incident Response Plans for Selected Livestock Shows and to What Degree

The two livestock show participants remarked on how they were involved in the process of creating the incident response plan for each specific show and venue. Participants who worked primarily with local emergency management agencies remarked that they were aware of emergency operations plans or all-hazards plans for their city which all include responding to the venue where the livestock show is held. In addition, the local emergency management participants were involved with city emergency response planning processes. All local emergency management officials reported that they were aware of city emergency management plans that included responding to the venues in which the livestock shows were held.

Findings for Objective 3: Describe the Roles of Local Officials in Incident Planning and Response

It was concluded that each participant was involved with creating the specific incident response plan for their specific job. Some of those plans may involve planning for the entire community while other plans are venue specific (livestock show facility). It was concluded that participants expressed their self-reported roles through two different channels. One channel was how they planned for incidents that could occur. The second channel participants stated their role included examples of how they executed incident response. It was clear that each participant knew their individual role. One participant stated that depending on the nature of the incident determined who would respond. For this participant, his main role was getting the correct personnel, whether it be EMS, fire,

police or safety committees to the appropriate places to do their job. A participant who works as a local emergency management official stated that their main role in incident response was to activate the emergency operations center in response to a large incident. In addition, it was their job to get the necessary resources needed by the incident commander on scene.

It is important for individuals at the local level and in the livestock organizations to understand their roles in incident planning and response. The NRF defines roles and responsibilities for the local level which can include emergency managers and department heads for cities. Three people in this line of work were interviewed for this study. Each participant remarked on their role as being the coordinator of components of local emergency management and making sure those components are available and ready to use if an incident were to happen. This aligns with the roles set forth by emergency managers and department heads in the NIMS (U.S. Department of Homeland Security, 2008b).

Findings for Objective 4: Level of Communication Among Local Officials

Participants were not directly asked to define levels of communication among local officials during their interview; however, each participant remarked on the value of communication between both the livestock show staff and facility and the local emergency management agencies and offices. In addition, participants stated it was important to look at communication and building of relationship between other key stakeholders in communities such as police officers and fire fighters. This is in line with

Seeger (2006) who stated that communication is a key factor to best practices in incident planning and response.

Findings for Objective 5: Perceptions of Challenges Involved with Incident

Planning and Response at Selected Livestock Shows

When it comes to challenges involved with incident planning and response at livestock shows all participants identified different examples, leading us to believe the likelihood of an incident happening at a livestock show is very high. This information was compiled in two themes: challenges and example incidents. Specific identified challenges such as inclusion of livestock, large masses of people, communication errors or lack thereof, accountability, and training are examples of challenges when it comes to incident planning and response at livestock shows. In addition, example incidents reported by the participants also show the variety of challenges that can and have occurred at livestock shows already.

The purpose of this study was to identify whether livestock shows are prepared for incidents to occur at their venue. As seen above, incidents can occur with a wide variety of complexity. You cannot plan for all types of incidents; however, you can be prepared to respond if something does happen. In the theme, example incidents, participants stated incidents that had already happened at their livestock show. With the sheer volume of different types of incidents it is important to be prepared.

Findings for Objective 6: Recommendations for Effective Incident Planning and Response Related at Livestock Shows

The participants of this study gave ample recommendations on how to execute effective incident planning and response at livestock shows for other individuals and/or organizations to use. These recommendations are spread throughout four themes: communication, incident response planning, incident response training and need for planning. Recommendation included preplanning, communicating with key emergency management agencies, training for possible incidents through table-top exercises and real life drills, inviting local agencies to tour your facility, building relationship with key organizations, being knowledgeable of general incident management and planning process and to take precautions early. Two participants suggested table-top and real life training for people involved with incident planning and response at major events such as livestock shows. This aligns with the preparedness cycle set forth by the U.S. Department of Homeland Security (2008a). Communication and building relationship, as identified by engaged partnership is also a key guideline of the response doctrine of the NRF (U.S. Department of Homeland Security, 2008a). Last but not least, understanding basic incident management principles will be of tremendous help in planning for and responding to incidents.

Conclusions

Are Local Officials Aware of Selected Livestock Shows?

It can be concluded that since all participants were aware of livestock shows in their respective cities, that the livestock shows are important to the communities that

house them. As stated in the background information category, some participants were directly involved by either currently working or volunteering at the livestock show in the past. It can be inferred that these participants are more aware of the livestock show and how they plan and respond to incidents than the participants who have not actively participated in working for the livestock show.

Awareness of Incident Response Plans for Selected Livestock Shows and to What Degree

It can be concluded that the participants directly involved with the livestock shows knew more about specific livestock show incident response plans than the local emergency management participants. Initially, the fact that the local emergency management participants could not remark as to whether the livestock show had a specific incident response plan reveals lack of communication between the livestock show and essential local response agencies. In terms of responding to an incident, not using the correct communication procedures to build relationship between these two entities ahead of time could cause problems if an incident were to happen. This falls into the engaged partnership principle of the response doctrine (U.S. Department of Homeland Security, 2008a). The response doctrine specifically states that leaders at all levels should communicate so that no one entity is overcome in time of crisis (U.S. Department of Homeland Security, 2008a). In addition, creating these partnerships between organizations contribute to the overall preparedness of the organizations involved (U.S. Department of Homeland Security, 2008a).

However, lack of communication can only be inferred because this study spoke to either livestock show officials or local emergency response officials in each city. Therefore, it cannot be concluded that lack of communication between the two entities was apparent in each city. As stated in Objective 1, it can be concluded that awareness of livestock shows having incident response plans can be related to previous experience working with livestock shows.

Describe the Roles of Local Officials in Incident Planning and Response

It can be concluded that each participant understood their role in incident planning and response for their specific job. In addition, all participants stated they understood when they would need to give their role to another entity to properly handle the situation if it was out of their normal incident planning and response protocol. This will benefit the livestock shows because allowing emergency management personnel will lessen the impact of casualties. The NRF states that “chief elected or appointed officials must have a clear understanding of their roles and responsibilities for successful emergency management and response” (U.S. Department of Homeland Security, 2008a).

Level of Communication Among Local Officials

It can be concluded that participants think that communication is one of the key factors in successful incident planning and response. This is in line with the response doctrine of the NRF’s which states that engaged partnership includes communicating at all levels to no one is stunned in times of crisis (U.S. Department of Homeland Security, 2008a). One participant went as far to say that “the simple fact is, communicating the plan is the single key to making the facility a safe place to be.” The response doctrine of

the NRF states that engaged partnerships are “essential to preparedness” (U.S. Department of Homeland Security, 2008a, p. 9).

However, as stated while addressing Objective 2 of this study, although participants felt that communication is a key to success in incident planning and response at livestock shows, there seemed to be a lack of awareness between these two entities when it came to knowledge about specific livestock show incident response plans from local emergency management.

Proper communication between local livestock show and emergency management officials would drastically improve the effectiveness of incident response. In addition, each entity would be knowledgeable of the other entities practices and feel they can talk to them effectively and come to a proper conclusion.

Perceptions of Challenges Involved with Incident Planning and Response at Selected Livestock Shows

Livestock produces another level of challenge to large-scale events and it was noted by one local emergency management participant that livestock “are outside of our normal pets planning.” This brings up a new question. Do local officials have the proper training in livestock safety to properly handle an incident at a livestock show? Also, do livestock show officials have proper training in emergency management to properly facilitate incident response? As noted in Chapter II, livestock safety is a major concern to both youth and adults. Livestock in the United States are domesticated animals (Webster & Gonzalez, *n.d.*), however, that does not mean that they are docile or should be trusted. Proper training of all personnel who work with these livestock shows as well

as local emergency management and first responders should be of high priority.

Firemen, who are first responders, are trained to fight fires. Therefore, if they are called to an incident involving 1,000 head of cattle, shouldn't they be trained to contain and safely handle livestock? It can be inferred that not all local officials have had the necessary training to handle livestock properly and safely.

Training is available through FEMA's Emergency Management Institute in the form of independent study courses (Federal Emergency Management Agency, 2010a). In addition, some land grant universities have brochures and factsheets available to help people understand animal behaviors in order to work with them safely.

Recommendations for Effective Incident Planning and Response Related at Livestock Shows

It can be concluded that these participants understand the need for this research and are willing to help others in planning for incident response at livestock shows.

Recommendations for Further Study

The following recommendations were proposed based on the findings of this study.

1. It is recommended to create scaled objectives for measuring awareness of livestock shows and specific incident response plans.
2. It is recommended that this study be replicated to find out how much incident response training participants in the study had prior to taking their current positions.
3. It is recommended that a study be replicated to find out how much livestock training participants in the study have received.

4. It is recommended that this study be replicated with only livestock show officials in order to compare how livestock shows conduct incident planning and response.
5. It is recommended that this study be replicated with only city emergency management officials in order to see how cities across the United States deal with the issue of incident planning and response at private facilities that house livestock shows.
6. It is recommended to describe communication between livestock show officials and local emergency management officials from the same city that houses a major livestock show.
7. It is recommended that this study be replicated with regional livestock shows and state fairs.
8. It is recommended that further research be conducted to identify specific roles of livestock show officials involved in incident response for their organization.
9. It is recommended that further researcher be conducted to identify if local emergency management officials have been trained to safely handle livestock.

Implications of the Study

With the increasing number of exhibitors and public attending livestock shows in the United States, it is important to look at how incident planning and response has been viewed at the managerial level through livestock show and emergency response officials. As one participant in this study noted, “obviously, just because something hasn’t happened doesn’t mean it won’t happen.” This statement is a testament as to why

research needs to be conducted in this area. Little research has been completed in the area of incident planning and response at livestock shows. Because of this, educators should look into the fact that research in this area will have a large impact on livestock show organizations as well as cooperative extension, emergency management and cities that house livestock shows. Livestock shows need to be concerned with getting the necessary first responders to the scene if an incident were to occur. Emergency management should be concerned that their first responders are trained in areas necessary to effectively respond to livestock shows, such as proper handling of livestock. Cooperative extension should understand the need for effective planning and execution of incident response in order to keep youth exhibiting livestock at these events safe. Cities that house large livestock shows should fully understand the economic toll that would come upon their city if an incident were to cause a livestock show to shut its doors. Lastly, thousands of public attending these events will have ease of mind knowing these organizations have planned for their safety and well-being.

This foundational study, which included five participants in selected cities across the United States that host livestock shows, opened doors to a new research area for agricultural education and communications. The information gained from this study can be used to pilot more research projects in the area of incident planning and response for livestock shows and exhibitor projects.

In addition, this study shed light onto areas where livestock show organizations and local emergency management officials are possibly lacking in terms of communication and training. Identifying local officials' awareness and perceptions of

incident planning and response at livestock shows is the first step to preparing the agricultural and the livestock industry for adverse events. As one participant stated in his interview, “We [the livestock show] have a responsibility to provide a safe and secure environment for the public attending the event.”

REFERENCES

- Bean, T. L. (2008). Working safely with livestock. The Ohio State University Extension. Retrieved from http://ohioline.osu.edu/aex-fact/pdf/AEX_990_08.pdf
- Bogdan, R.C., & Bilken, S. K. (1982). *Qualitative research for education: An introduction to theory and methods*. Boston: Allyn and Bacon.
- Boleman, C. T., Cummings, S. R., & Briers, G. E. (2004). Parents' perceptions of life skills gained by youth participating in the 4-H beef project. *Journal of Extension*, 42(5), 1-7.
- Borja, E. C. (2008). Brief Documentary History of the Department of Homeland Security: 2001-2008. *History Associates Incorporated*, p. 1-34. Retrieved from http://www.dhs.gov/xlibrary/assets/brief_documentary_history_of_dhs_2001_2008.pdf
- Braun, B. I., Wineman, N. V., Finn, N. L., Barbera, J. A., Schmaltz, S. P., & Loeb, J. M. (2006). Integrating hospitals into community emergency preparedness planning. *Annals of Internal Medicine*, 144 (11), 799-811. Retrieved from <http://www.annals.org/content/144/11/799.full.pdf+html>
- Coyne, I. T. (1997). Sampling in qualitative research. Purposeful and theoretical sampling; merging or clear boundaries? *Journal of Advanced Nursing*, 26, 623-630. Retrieved from <http://onlinelibrary.wiley.com.er.lib.k-state.edu/doi/10.1046/j.1365-2648.1997.t01-25-00999.x/pdf>
- Creswell, J.W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage.

- Department of Health, Education, and Welfare. (1977). Youth Participation in organizations. Pamphlet #2. Washington, D.C., Office of Youth Development Division of Youth Activities, Publication #OHD/OYD 76-26045.
- Dormody, T. J., & Seevers, B. S. (1994). FFA Participation in Leadership Development Activities: A Tri-State Study. *Journal of Agricultural Education*, 35(4), 49-54. Retrieved from <http://eric.ed.gov/PDFS/ED378390.pdf>
- Downs, G. W., Jr., & Mohr, L. B. (1976). Conceptual Issues in the Study of Innovation. *Administrative Science Quarterly*, 21(4), 700-714. Retrieved from <http://www.jstor.org/stable/2391725>
- Erlandson, D. A., Harris, E. L., Skipper, B. L., & Allen, S. D. (Eds.). (1993). *Doing naturalistic inquiry a guide to methods*. Newbury Park, CA: SAGE Publications.
- Farm Safety Association. (n.d.). Handling farm animals safely. Retrieved May 2011 from http://www.farmsafety.ca/factsheets/handling_farm_animals.pdf
- Federal Emergency Management Agency. (2008). ICS Review Document. Emergency Management Institute ICS Resource Center. Retrieved from <http://training.fema.gov/EMIWEB/IS/ICSResource/assets/reviewMaterials.pdf>
- Federal Emergency Management Agency. (2010a, August 9). Animals in disasters: Awareness and preparedness. Emergency Management Institute Independent Study Program. Retrieved from <http://training.fema.gov/EMIWeb/IS/is10a.asp>
- Federal Emergency Management Agency. (2010b, November 24). Livestock in disasters. Emergency Management Institute Independent Study Program. Retrieved from <http://training.fema.gov/emiweb/is/is111st.asp>

Federal Emergency Management Agency. (2010c, August 11). NRF Resource Center.

Retrieved from <http://www.fema.gov/emergency/nrf/glossary.htm>

Fidler, L. A., & Johnson, J. D. (1982). *Characteristics of innovations and organizational structure related to innovation implementation*. Speeches/Meeting Papers;

Opinion Papers. Paper presented at the Annual Meeting of the International

Communication Association in Boston, MA, May 2-5, 1982. Retrieved from

<http://eric.ed.gov/PDFS/ED218682.pdf>

Fraenkel, J. R., & Wallen, N. E. (Eds.). (2009). *How to design and evaluate research in education* (7th ed.). New York, NY: McGraw-Hill.

Graham, J., Shirm, S., Liggin, R., Aitken, M. E., & Dick, R. (2006). Mass-casualty events at schools: A national preparedness survey. *Pediatrics*, *117*(1), e8—e15.

doi: 10.1542/peds.2005-0927

Greenfield, T. K., Midanik, L. T., & Rogers, J. D. (2000). Effects of telephone versus face-to-face interview modes on reports of alcohol consumption. *Addiction*,

95(2), 277-284. doi: 10.1046/j.1360-0443.2000.95227714.x

Greenhalgh, T., Robert, G., MacFarlane, F., Bate, P., & Kyriakidou, O. (2004).

Diffusion of innovations in service organizations: Systematic review and

recommendations. *The Milbank Quarterly*, *82*(4), 581-629. Retrieved from

<http://www.jstor.org/stable/4149085>

Hall, S., Ward, R., Cunningham, T., & Marciani, L. (2008). Developing a new

curriculum in sport security management. *Journal of Homeland Security and*

Emergency Management, *5*(1), 1-10. doi: 10.2202/1547-7355.1439

- Harvey, C. D. (1988). Telephone survey techniques. *Canadian Home Economics Journal*, 38(1), 30-35. Retrieved from http://eric.ed.gov/ERICWebPortal/search/detailmini.jsp?_nfpb=true&_&ERICExtSearch_SearchValue_0=EJ364495&ERICExtSearch_SearchType_0=no&accno=EJ364495
- Hick, J. L., Hanfling, D., Burstein, J. L., DeAtley, C., Barbisch, D., Bogdan, G. M., & Cantrill, S. (2004). Health care facility and community strategies for patient care surge capacity. *Annals of Emergency Medicine*, 44 (3), 253-261. doi: 10.1016/g.annemergmed.2004.04.011
- Hoepfl, M.C. (1997). Choosing qualitative research: A primer for technology education researchers. *Journal of Technology Education*, 9(1), 47-63.
- Houston Livestock Show and Rodeo. (2011). Reliant Park – Houston Livestock Show and Rodeo. May 11, 2011, from: <http://www.rodeohouston.com/about/reliant-park.aspx>
- Keim, M., & Kaufmann, A. F. (1999). Principles for emergency response to bioterrorism. *Annals of Emergency Medicine*, 34(2), 177-182. doi: 10.1016/S0196-0644(99)70227-1
- Kentucky Exposition Center. (2011). Kentucky Exposition Center. Retrieved May 11, 2011, from: <http://www.kyfairexpo.org/>
- Kentucky State Fair Board. (2010). Annual Report. Retrieved May 11, 2011, from <http://www.kyfairexpo.org/pdfs/Annual%20Reports%20&%20Economic%20Impact%20Studies/2010%20Annual%20Report.pdf>

- Kimberly, J. R. (1981). *Managerial innovation* (Handbook of organizational design vol. 1: 84-104 ed.). New York: Oxford University Press.
- Leonard-Barton, D. (1988). Implementation Characteristics in Organizational Innovations. *Communication Research*, 15(5), 603-631. doi: 10.1177/009365088015005006
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage Publications, Inc.
- Mish, F. C. (1999). *Merriam-Webster's collegiate dictionary*. Springfield, MA: Merriam-Webster.
- Moats, J. B. (2007). *Agroterrorism: A guide for first responders*. College Station: Texas A&M University agriculture series, no. 10.
- Mohr, L. B. (1969). Determinants of Innovation in Organizations. *The American Political Science Review*, 63(1), 111-126. Retrieved from <http://www.jstor.org/stable/1954288>
- National 4-H Organization. (2011). About 4-H | 4-H. March 8, 2011 from <http://www.4-h.org/about/>
- National FFA Organization. (2011). National FFA Organization – Home. March 8, 2011 from <https://www.ffa.org/about/whoweare/pages/default.aspx>
- National Western Stock Show. (2010). National Western reports new economic impact numbers. Retrieved from <http://www.nationalwestern.com/media/files/ALL/ecoimpact.pdf>

- National Western Stock Show. (2011a). Attendance Figure – About Us – National Western Stock Show. February 4, 2011, from <http://www.nationalwestern.com/about/attendance-figures.aspx>
- National Western Stock Show. (2011b). Safety & Animal Care – Livestock – National Western Stock Show. June 11, 2011, from <http://www.nationalwestern.com/livestock/safety-animal-care.aspx>
- Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). Thousand Oaks, CA: Sage.
- Perry, R. W. (2003). Incident management systems in disaster management. *Disaster Prevention and Management, 12*(5), 405-412. doi: 10.1108/09653560310507226
- Rogers, E. M. (2003). *Diffusion of innovations*. New York: Free Press.
- Rusk, C. P., Brubaker, K. M., Balschweid, M. A., & Pajor, E. A. (2006). Evaluation of a livestock ethics curriculum for high school youth. *Journal of Agricultural Education, 47*(3), 105-116. Retrieved from <http://pubs.aged.tamu.edu/jae/pdf/Vol47/47-03-105.pdf>
- Rusk, C. P., Martin, C. A., Talbert, B. A., & Balschweid, M. A. (2002). Attributes of Indiana's 4-H livestock judging program. *Journal of Extension, 40* (2). Retrieved from <http://www.joe.org/joe/2002april/rb5.php>
- Seeger, M. W. (2006). Best practices in crisis communication: An expert panel process. *Journal of Applied Communication Research, 34*(3), 232-244. doi: 10.1080/00909880600769944

- Shaluf, I. M. (2007). An overview on disasters. *Disaster Prevention and Management*, 16,(5), 687-703. doi: 10.1108/09653560710837000
- Slocombe, J., & Ebert, K. (2010, December). Livestock Safety. Kansas State University Agricultural Experiment Station and Cooperative Extension. Retrieved from <http://www.ksre.ksu.edu/library/ageng2/mf2656.pdf>
- Smith, B. (2010, August). The economic impact of Houston Livestock Show and Rodeo. Accessed on February 4, 2011, from http://www.hlsr.com/about/downloads/hlsr_econ_impact_2010.pdf
- Strauss, A. & Corbin, J. (1990). *Basics of qualitative research*. Newbury Park, CA: Sage Publications.
- Tausig, J. E., & Freeman, E. W. (1988). The next best thing to being there: Conducting the clinical research interview by telephone. *American Journal of Orthopsychiatry*, 58(3), 418-427. doi: 10.1111/j.1939-0025.1988.tb01602.x
- University of Tennessee. (2008). Incident response process best practice. Retrieved from <http://security.tennessee.edu/pdfs/IRPBP.pdf>
- U.S. Department of Homeland Security. (2008a, January). National response framework. Retrieved from <http://www.fema.gov/pdf/emergency/nrf/nrf-core.pdf>
- U.S. Department of Homeland Security. (2008b, December). National incident management system. Retrieved from http://www.fema.gov/pdf/emergency/nims/NIMS_core.pdf
- U.S. Department of Homeland Security. (2011, March 14). DHS | About. Retrieved May 2, 2011, from: <http://www.dhs.gov/xabout/>

- U.S. Department of Homeland Security. (n.d.a). National infrastructure protection plan agriculture and food sector. Retrieved July 21, 2011 from http://www.dhs.gov/xlibrary/assets/nipp_snapshot_agriculture.pdf
- U.S. Department of Homeland Security. (n.d.b). National infrastructure protection plan commercial facilities sector. Retrieved July 21, 2011 from http://www.dhs.gov/xlibrary/assets/nipp_snapshot_commercialfacilities.pdf
- Van de Ven, A. H., Polley, D. E., Garud, R., & Venkataraman, S. (1999). *The innovation journey*. New York: Oxford University Press.
- Ward, C. (1996). Life skill development related to participation in 4-H animal science projects. *Journal of Extension*, 34(2). Retrieved May 3, 2011 from <http://www.joe.org/joe/1996april/rb2.php>
- Webster, J., & Gonzalez, M. (n.d.). Livestock safety [Fact Sheet]. Retrieved May 2011 from <http://extension.usu.edu/files/publications/factsheet/AHS-11.pdf>
- Wenzel, J. G. (2007). Organizational aspects of disaster preparedness and response. *Journal of the American Veterinary Medical Association*, 230(11), 1634-1637. Retrieved from <http://avmajournals.avma.org/doi/pdf/10.2460/javma.230.11.1634>
- Wiersma, W., & Jurs, S. G. (2005). *Research methods in education an introduction*. Boston: Allyn and Bacon.

APPENDIX A**PANEL OF EXPERTS****Russell Gosz, Assistant Extension Specialist**

Department of Animal Science
Oklahoma State University
20F Agriculture Hall
Stillwater, OK 74078
Phone: 405-744-6058

John Rayfield, Assistant Professor

Department of Agricultural Leadership, Education, and Communications
Texas A&M University
104A Scoates Hall, 2116 TAMU
College Station, TX 77843
jrayfield@aged.tamu.edu
Phone: 979-862-3707
Fax: 979-845-6296

Chris Skaggs, Associate Dean for Student Development

College of Agriculture and Life Sciences
Texas A&M University
109 Kleberg
College Station, TX 77843
cskaggs@tamu.edu
Phone: 979-845-3712

APPENDIX B

INTERVIEW QUESTIONS AND SCRIPT

Opening

Hello, my name is Chelsea Tomascik, and I am a master's student in the Agricultural Communications and Journalism program at Texas A&M University. As part of my thesis research, I am interviewing emergency response officials involved in incident response planning in selected cities within the United States that host major livestock shows.

As the *(title of person)*, I would like to set up an interview with you to discuss your role as well as your agency's role in incident response planning for the *(livestock show name)*. The risks associated with this study are minimal, and are not greater than risks ordinarily encountered in daily life. The benefit of this study is that we will help bridge the communication gap between emergency response officials and members of livestock shows organizations.

Your participation is voluntary, and there is not compensation for this study. You may decide not to participate or to withdraw at any time without your current or future relations with Texas A&M University being affected.

This study is confidential. The researcher and co-investigator will be the only people allowed to access the data. In addition, all identifiers linking you to this study will be disposed of. If you choose to participate in this study, you will be audio recorded. Any audio recordings will be stored securely, and only the researcher and co-investigator will have access to this data.

If you have any questions about this project, please feel free to call Chelsea Tomascik at 979-458-3391 or Traci Naile at 979-458-3705. This research study has been reviewed by the Human Subjects' Protection Program and/or the Institutional Review Board at Texas A&M University. For research-related problems or questions regarding your rights as a research participant, you can contact these offices at (979)458-4067 or irb@tamu.edu.

Will you please take a few moments to set up a time when I can interview you for this important research?

If "yes," proceed to making appointment for a later call and interview.

If "yes, and would like to be interviewed now," proceed to question 1.

If "no," thank them for their time and proceed to the next available respondent.

Interview

Please answer these questions fully and as elaborate as possible.

7. Are you aware of the (*livestock show name*)?
8. Are you aware of an incident response plan for the *livestock show name*?
 - a. If so, what is your role in creating the incident response plan for the *livestock show name*?
 - b. What would be your agency's role in responding to an incident that occurs at the *livestock show name*?
9. Is there a comprehensive written incident response plan for the *livestock show name*?
10. What are your perceptions of challenges with this type of event in both planning and response?
11. Are you aware of an activation of the incident response plan for the *livestock show name*? What was the situation?
12. What are your recommendations to help a show to facilitate effective incident response planning?

APPENDIX C

INSTITUTION REVIEW BOARD APPROVAL

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Page 1 of 1

TEXAS A&M UNIVERSITY
DIVISION OF RESEARCH AND GRADUATE STUDIES - OFFICE OF RESEARCH COMPLIANCE

1186 TAMU, General Services Complex
 College Station, TX 77843-1186
 750 Agronomy Road, #3500

979.458.1467
 FAX 979.862.3176
<http://researchcompliance.tamu.edu>

Human Subjects Protection Program

Institutional Review Board

APPROVAL DATE:

28-Jul-2011

MEMORANDUM

TO: TOMASCIK, CHELSEA R
FROM: Office of Research Compliance
 Institutional Review Board
SUBJECT: Amendment

Protocol Number: 2010-0722
Title: Incident Response Planning at Selected Livestock Shows
Review Category: Exempt from IRB Review

It has been determined that the referenced protocol application meets the criteria for exemption and no further review is required. However, any amendment or modification to the protocol must be reported to the IRB and reviewed before being implemented to ensure the protocol still meets the criteria for exemption.

This determination was based on the following Code of Federal Regulations:
<http://www.hhs.gov/ohrp/humansubjects/guidance/45cfr46.htm>

Provisions:

Comments: Amendment to change the title from "Local Government Emergency Service Officials' Awareness and Perceptions of Incident Response Pertaining to Selected Livestock Shows" to "Incident Response Planning at Selected Livestock Shows"

This electronic document provides notification of the review results by the Institutional Review Board.

APPENDIX D
RESEARCHER'S 20 THEMES

<u>Name</u>	<u>Abbreviation</u>
Random	R
City Plan/OEM Plan	OEMP
Livestock Show Plan	LSP
Making Decisions	Decision
Government	Gov
Responsibility	Resp
Private Facility	Private
Making the Plan	MTP
Outside Services on Grounds	OSOG
No issue	No issue
Challenges	Chal
Training	Train
Recommendation	Recommend
Large Facility/Size	Lg
Preplan/Prepare	P/P
Small Incidents	Small Inc
Outside Services	OS
Need for more Planning	Need 4
Communication	Comm
Build Relationships with Outside Sources	Relate

APPENDIX E**INDEPENDENT RATER'S 11 THEMES**Name

Incident Response Training

Incident Response Definitions/Descriptions

Incident Response Planning

Rhetorical Questions

Conversation Misc.

Background Information

Historical Incidents

Incident Response Planning- Livestock Show

Incident Response Implementation

Incident Response Communication

Incident Response Challenges

APPENDIX F
FINAL NINE THEMES

Background Information

Challenges

Communication

Example Incidents

Executing Incident Response

Incident Response Planning

Incident Response Training

Miscellaneous

Need for Planning

VITA

Name: Chelsea Roxanne Tomascik

Address: 214 Weber Hall
Manhattan, KS 66506

Email Address: tomascik@ksu.edu

Education: B.S., Animal Science, Texas A&M University, 2009
M.S., Agricultural Communications & Journalism, Texas A&M
University, 2011

Professional: Extension Assistant/Youth Livestock Coordinator
Department of Animal Sciences and Industry
Kansas State University, Manhattan, KS
November 2010 – Present

Graduate Assistant
Department of Agricultural Leadership, Education &
Communications
Texas A&M University, College Station, TX
August 2009 – November 2010