School Emergency Preparedness in North Dakota Public School Districts

Steven Wayne Swiontek

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SCHOOL EMERGENCY PREPAREDNESS IN NORTH DAKOTA
PUBLIC SCHOOL DISTRICTS

by

Steven Wayne Swiontek
Bachelor of Science, Mayville State University, 1979
Master of Education Administration, Northern State University, 1983

A Dissertation
Submitted to the Graduate Faculty
of the
University of North Dakota
in partial fulfillment of the requirements
for the degree of
Doctor of Education

Grand Forks, North Dakota
December
2009
This dissertation, submitted by Steven Wayne Swiontek in partial fulfillment of the requirements for the Degree of Doctor of Education from the University of North Dakota, has been read by the Faculty Advisory Committee under whom the work has been done and is hereby approved.

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ACKNOWLEDGMENTS

The researcher expresses sincere appreciation to his wife Susan, who provided him with a great deal of moral support during this huge undertaking of time and commitment and graciously edited many class papers and drafts during the course of my graduate work. The researcher would like to thank Dr. Larry Klundt and Dr. Kent Hjelmstad for their support and tireless efforts in helping me complete my doctoral studies. Additionally, the researcher would like to thank Dr. Marv Erhardt and the North Dakota LEAD Center for their assistance with this project. The researcher would like to thank the Educational Leadership Department and Sharon Fields for their willingness to answer questions and assist in my studies the past six years. The researcher would like to thank his children Frank and Connor for their understanding, as there were many times I was absent from their lives due to my education. Finally, the researcher would like to thank his parents Harry and Celestine Swiontek for their continuous support throughout my entire life.
ABSTRACT

The basis for this study was to determine: (1) If school districts in North Dakota have an emergency response plan; (2) How comprehensive their emergency response plan is; (3) How well prepared school districts in North Dakota are for any type of disaster; and (4) The extent to which North Dakota LEAD Center school emergency response training and resources have impacted school emergency preparedness in North Dakota.

There were 120 school districts and their superintendents that participated in the Emergency Preparedness in North Dakota Public School Districts' survey. School administrators who completed the Emergency Preparedness Survey were asked to indicate the number and types of emergency situations that have occurred in their respective school districts, how those school districts dealt with those incidents, and what type of plan is either in place or not in place for those districts to respond to future crisis situations. The collected data were analyzed to determine frequencies and percentages which were presented in narrative and tabular format. An analysis of variance determined if there was a difference in the size and location of school districts as it relates to their preparedness for emergencies and the comprehensiveness of their emergency response plans.

Analysis of the data revealed while most school districts possess an emergency response plan, a minority of those districts have a comprehensive plan. The research
indicated there is no significant difference between small, medium, or large size school districts regarding their emergency preparedness and the comprehensiveness of their emergency response plans. Further, the research illustrated there was no significant difference in the comprehensiveness of emergency response plans of school districts based on their location in the state. Additionally, the research showed 38% of the North Dakota school districts participated directly in the ND LEAD Center emergency response training.
CHAPTER I
INTRODUCTION

Over the past decade, there have been several school shootings in both public and private schools across the United States. While school shootings have taken place over many years in the United States, most of them have occurred since the mid 1990’s (Newman, Fox, Harding, Mehta, & Roth, 2004). Between the 1992-93 and 2001-02 school years, 116 people were killed in 93 incidents by students in United States Schools (National School Safety Center, 2006). One of these tragic events occurred at Columbine High School in Littleton, Colorado. On April 20, 1999, two students, Eric Harris and Dylan Klebold entered Columbine High School and proceeded to use automatic weapons and explosive devices to kill twelve students, and one teacher while injuring twenty-three others before setting booby traps on the victims’ bodies and then killing themselves (Newman, Fox, Harding, Mehta, & Roth, 2004).

Events of this nature are not immune to our region as was evident on the Red Lake Indian Reservation spring 2005. On March 21, 2005, Jeff Weise, a 16-year-old Red Lake High School student, drove to the Red Lake High School front door armed with two handguns and a shotgun, entered the school, shot and killed one security guard, one teacher, five students and injured another seven people in the school (Borja & Cavanagh, 2005). Red Lake, Minnesota, is approximately 140 miles from Grand Forks, North Dakota.
North Dakota is not immune from these tragic events. On March 5, 1973, a Jamestown High School student shot and killed another Jamestown High School student on the steps of the high school. There are other reports of students bringing guns to school to shoot someone in North Dakota; however in most cases, the students were discovered before they carried out their intentions. One such case took place in Devils Lake in the fall of 1984. According to Bernie Lipp, the Junior High Principal at the time, a high school student brought a 12 gauge shotgun to Devils Lake Central High School, stored it in his locker, planned to shoot another student as the student left his physical science class that day, and then planned to shoot others. Other students became aware of this possibility and informed the school administration that this particular student had a shotgun in his locker (B. Lipp, personal communication, December 10, 2006). That same student had threatened to use an explosive device in school prior to the gun incident (Jorgenson, 2004).

In Dickinson, North Dakota, a 16 year-old boy was charged with terrorizing on October 9, 2006, after he made threats he would harm students (Boy faces, 2006). Dickinson Public School authorities stated a lockdown was ordered Monday morning after they got a report of unspecific threats by a student. The lockdown was in effect for about an hour, until the 16 year-old was taken into custody near his home for questioning. The high school principal, Ron Dockter stated, “In this situation, we like to be proactive so we went into lockdown, which went very well with the Police Department, students, and staff” (Boy faces, 2006, p. B7). During the lockdown students and faculty members remained in their classrooms. No one was to be in the hallways or bathrooms, windows and doors were closed, blinds were drawn and everyone was asked to remain quiet. The
principal in this case went on the public address system of school and announced the school was in lockdown (Boy faces, 2006, p. B7). Students were unsure of what was happening according to comments. One student stated, “Our teacher locked the doors, and we kept singing” (Boy faces, 2006, p. B7). Another student commented, “Our teacher came around to my class and said what he could, but while we were sitting there, we had no idea what was going on. We were like OK, is someone in the school?” (Boy faces, 2006, p. B7). Others said they were not sure what was happening. “I thought it was a drill,” a senior said, “I wasn’t aware of what was going on right away” (Boy faces, 2006, p. B7). After the incident, the school reviewed its emergency procedures. The superintendent, Paul Stremick, stated, “These types of events, unfortunately are not limited to Dickinson, they can happen anywhere, but keeping students safe is number one” (Boy faces, 2006, p. B7).

With the beginning of the 2006 school year, three more school shootings took place in Colorado, Wisconsin, and Pennsylvania. On September 27, 2006, a 53 year old gunman took six female students hostage, sexually assaulted them, and killed one before shooting himself in a classroom at Platte Canyon High School in Bailey, Colorado. Bailey, Colorado is located in the same Colorado County as Columbine High School (Maxwell, 2006). Two days later, a fifteen year old male student shot his principal at Weston High School in Cazenovia, Wisconsin, a farming community about 70 miles northwest of Madison (Maxwell, 2006). And on October 2, 2006, a 32 year-old male entered a one room Amish schoolhouse in Lancaster County, Pennsylvania, and shot and killed five girls, ages seven through thirteen, wounded five other girls, and then proceeded to shoot himself (Maxwell, 2006). That act prompted the Pennsylvania
legislature to consider imposing statewide security measures for all schools (Maxwell, 2006). Among the proposals under consideration were requirements that doors be locked, security officers be hired, and school employees monitor all building entrances.

These last three acts took place in the fall of 2006, prompted the President, George W. Bush, to call a national summit to address school violence and school safety. The summit was sponsored by the U.S. Departments of Justice and Education and was held on October 10, 2006 (White House, 2006). At the summit, the U.S. Secretary of Education made this comment, "We know also that these sorts of incidents can occur in inner-city America, Amish communities, private schools, and public schools. Really every single community needs to be alert" (Zehr, 2006, p. 5). President Bush attended and participated in the summit. President Bush remarked, "The violence we're having in our schools is incredibly sad, and it troubled me and Laura." He added, "Rather than be upset, it's best to be proactive" (Zehr, 2006). However, the federal summit offered no new policy measures for the country or schools in the United States (Zehr, 2006).

These events prompted North Dakota school districts to take measures to make their schools safer for students and employees. After the Pennsylvania tragedy of October 2, 2006, the Sendit list serve was filled with emails regarding steps that were being taken at school districts and school buildings. These steps included locking all entrance doors, identification badges for all school employees, increased visitor identification checks, school lockdown drills, and policy review. It appeared that schools were reacting to these violent issues that occurred in September and October, 2006, rather than working on a long term solution to improve student safety from these types of attacks.
As school districts reacted in North Dakota, it was apparent many school districts in North Dakota did not have a comprehensive emergency operations plan. This was unfortunate as North Dakota school districts had the opportunity to receive emergency preparedness training from the North Dakota LEAD Center located in Bismarck. The North Dakota LEAD Center is a non-profit education organization devoted to making a positive difference for the children of North Dakota by helping to develop excellent leaders for their schools. The North Dakota LEAD Center provides professional development programs and services to public and nonpublic school leaders and individuals preparing to become educational leaders (North Dakota LEAD Center, 2009).

The North Dakota LEAD Center has been providing workshops on Weapons of Mass Destruction Awareness and Response Training for Schools since summer 2002. These workshops were the result of early work of several different state entities as they reacted to the school shooting at Columbine, Colorado. From that early work, the North Dakota Council of Educational Leaders (NDCEL) began holding “school violence prevention” workshops using materials developed by the National Association of Secondary Principals (NASSP). These workshops focused on violence prevention through anti-bullying strategies and policies, paying closer attention to students’ emotional development and emotional needs. As these workshops were presented to school personnel, it became apparent that few schools actually had comprehensive crisis response plans, and the most common request for assistance was access to a sample plan (M. Erhardt, personal communication, January 2, 2007). Dr. Marv Erhardt discovered that many school districts in North Dakota had done very little in the area of school emergency response plans. (M. Erhardt, personal communication, January 2, 2007).
In 1999, Heidi Heidkamp, the attorney general of North Dakota, called a meeting of leaders from the North Dakota Division of Emergency Management, the League of Cities, the State Health Department, and the Department of Public Instruction in order to achieve better cooperation and coordination of efforts to improve school safety in the state (M. Erhardt, personal communication, January 2, 2007). During one of these meetings, Dr. Larry Klundt, director of NDCEL, was introduced to the director of training for the North Dakota Division of Emergency Services (DES) (M. Erhardt, personal communication, January 2, 2007). The fall of 1999 DES sponsored Dr. Klundt, several other educators, the state fire marshal, and a police officer from West Fargo to take part in a national school emergency response planning class conducted by FEMA. Dr. Klundt introduced Dr. Erhardt, director of LEAD, to the DES training coordinator. This meeting resulted in a continuing relationship with LEAD and DES for the next seven years. From that point, Dr. Erhardt, working with DES, wrote a grant proposal to have LEAD assume responsibility for conducting school emergency response training in North Dakota. The project was initially funded for three years, 2000 to 2002, and received additional funding later.

The first phase of the project was a Federal Emergency Management Agency (FEMA) planning class offered in 2000. This class was provided to both educators and personnel from the emergency response community. The second phase of the plan began in the fall of 2000. During this phase a number of classes were offered by LEAD, and approximately 270 to 300 K-12 personnel, fire and emergency personnel, and other first responders attended these classes (F. Glasser, personal communication, October 30, 2009). However, the classes were basically theoretical in nature, so after the classes were
completed, schools had a great deal of work to do to develop their own school plan. This resulted in plans that ranged from comprehensive to inadequate. In the spring of 2001, Dr. Erhardt made three major changes to the training program: (1) Rewriting the curriculum. A massive planning theory document was replaced with a few simple planning principles. This was done because the first curriculum was written by first responders for educators and the original document was just too large. The changes to the curriculum also included more interaction by the participants so they were actively engaged in developing their school plan during the training session. (2) A good sample plan was found and was used as a template. The best model was one developed in the community of West Fargo. The plan at West Fargo was developed by the police officer who attended the initial training with Dr. Klundt and school officials from West Fargo. (3) The third and final change was how the trainers were assigned. With this change, Dr. Erhardt began doing most of the training (M. Erhardt, personal communication, January 2, 2007).

According to Dr. Erhardt, the Emergency Response Planning program continues to evolve. The LEAD Emergency Response web site now includes a Power Point presentation, video clips of the Columbine shooting, and a template of a sample emergency response plan and links to others sites (M. Erhardt, personal communication, January 2, 2007).

Dr. Erhardt, director of the ND LEAD Center, from has been providing team training sessions to school districts and school personnel on how to develop an emergency operations plan since 2001. Both of these programs were the result of the increase in school shootings and school violence and the terrorist attacks of September
11, 2001. Some of the funds to develop these programs were received from the North Dakota Division of Emergency Management and the Department of Homeland Security (North Dakota LEAD Center, 2005). The objectives of the emergency operations planning sessions are (North Dakota LEAD Center, 2005):

- Learn the principles of emergency response planning.
- Learn the schools and personal responsibilities under a unified incident command system during a crisis incident.
- Become familiar with the new Bismarck Public School Emergency Response Plan.
- Practice responses using a crisis exercise.
- Plan for follow-up.

Statement of the Problem

Since 1999, two events have taken place in the United States that have had a great deal of impact on the safety and security of schools in this country. The first was the massacre in Littleton, Colorado at Columbine High School where two students killed thirteen people and then killed themselves. The second was the terrorist attack of the World Trade Center on September 11, 2001. Both of these events had the effect of improving school security and safety in schools in the United States and North Dakota. The tragedy at Columbine and other school shootings in America demonstrated that a violent act of this nature could take place anywhere and that the attack in New York on 9/11 meant the United States was no longer immune from terrorist attacks. So schools locked their doors, adopted crisis plans, installed video surveillance equipment, and sought advice on how to produce and implement emergency operation procedures.
However, after only a couple of years, schools seemed to relax their security measures and put safety issues like terrorism and the possibility of a school shooting on the back burner. Then in the fall of 2006, three tragic events took place. The first in Colorado, where a student was shot to death; the second in Wisconsin, where a student shot and killed a principal; and the third in Pennsylvania, where a 50 year old man shot and killed five Amish school girls. School districts in the United States and America suddenly became very interested in school security and school safety issues and procedures again.

Over the past five years, the North Dakota LEAD Center has been providing School Emergency Response Planning for all schools and school districts in North Dakota. This program provides emergency planning guidance to the people responsible for developing or maintaining an effective school safety program (North Dakota LEAD Center, 2005).

Purpose of the Study

The purposes for this study were to determine: (1) If school districts in North Dakota have an emergency response plan; (2) How comprehensive that plan is; (3) How well prepared are North Dakota school districts for any type of disaster; (4) The extent to which North Dakota LEAD Center school emergency response training and resources have impacted school emergency preparedness in North Dakota; (5) If the level of North Dakota school district preparedness for emergencies is dependent on the size and location of the district; (6) If the comprehensiveness of emergency response plans for North Dakota school districts are associated with the size of the school district; and (7) If school administrators in North Dakota believe that school emergency response plans are important. The following research questions were used to facilitate and guide this study:
1. How many public school districts in North Dakota have an emergency response plan, and if they have an emergency response plan, how comprehensive is that plan?

2. How well prepared are public school districts in North Dakota for any type of disaster?

3. What is the impact the North Dakota LEAD Center school emergency training and resources has had on public schools districts in North Dakota?

4. Does the level of preparedness for emergencies vary in North Dakota based on size and location of school districts?

5. Does the comprehensiveness of emergency response plans vary by the size of the school district in North Dakota?

6. What is the level of importance placed on school emergency response plans by public school administrators in North Dakota?

Significance of the Study

Student safety and security in schools has become a major priority for society in the 21st century in the wake of Columbine High School, 9/11 and the school shootings of the fall of 2006. Schools have either reacted to this by taking temporary security and safety measures or have taken a proactive position and have implemented, with the help of others, comprehensive emergency response plans and exercises. This study attempts to determine how many schools in North Dakota have taken steps to improve the safety and security of their students, and how many schools or school districts in North Dakota have implemented a comprehensive emergency response plan. From those data, recommendations were made regarding potential steps that either the Department of
Public Instruction or the North Dakota Legislature should take to ensure all schools in North Dakota have implemented and practice a comprehensive emergency response plan.

Because of the number of horrific events that have taken place in the United States, which include a number of school shootings and the terrorist attack of September 11, 2001, it has become extremely important schools not only possess an emergency planning and response plan, but have an emergency response team that meets at least twice a year, practice emergency response drills at least twice a year, and continue to update and modify their specific emergency response plan yearly (Ashby, C. M., 2007). This study may encourage all schools in North Dakota to develop, implement, and practice a comprehensive emergency response plan. It is apparent that United States K-12 schools, no matter their location, unfortunately, can experience a tragic event like a school shooting or potentially a terrorist attack, whether domestic or foreign. Schools need to be prepared. To be prepared for such a catastrophic event better ensures the security and safety of students and employees within K-12 schools in North Dakota and America.

Definitions

For the purpose of this study, the following definitions apply:

*School shooting*: An event where a student or an adult has brought a gun onto a school campus and has either shot or threatened to kill a student or an adult (Newman, Fox, Harding, Mehta, & Roth, 2004).

*ND LEAD*: Organization that was proposed by educational leaders in the state to provide staff development opportunities to educational leaders in the state. It has existed since 1985 (North Dakota LEAD Center, 2005).
Sendit: Email service for K-12 educators in North Dakota. Often used for sending messages to groups of people, such as all teachers or administrators in the state (Edutech, 2009).


Hazard Risk Analysis: A risk and vulnerability assessment which helps to identify people, property, and resources that are at risk of injury, damage, or loss from hazardous incidents or natural hazards. This information is important to help determine and prioritize the precautionary measures that can make a community more disaster-resistant. (National Oceanic and Atmospheric Administration, 2009, July).

Shelter in Place: Is defined to take immediate shelter where you are—at home, work, school or in between—usually for just a few hours. Local authorities may instruct you to "shelter-in-place" if chemical or radiological contaminants are released into the environment (National Terror Alert, 2009).

Incident Command System: Is defined as a system of command where responsibilities for all school personnel during each stage of an incident are clearly outlined and there is a back-up system where everyone has at least one other person that can cover for them (North Dakota LEAD Center, 2005).

Student Accountability System: Is defined as maintaining updated rosters and implementing system to account for every person in the building during an incident (e.g., after an evacuation) (North Dakota LEAD Center, 2005).

Cold Weather Evacuation procedure: Is defined as evacuating to a nearby off-campus site or safe zone within the building (North Dakota Lead Center, 2005).
School Emergency Team: Is defined as a team of school personnel with specific command responsibilities during an emergency incident. Typically, the team also is responsible for organizing training and drills and reviewing and updating the emergency response plan (North Dakota LEAD Center, 2005).

Emergency kit: Is defined as some type of storage device containing critical information and supplies that teachers take with them during an evacuation or drill (North Dakota LEAD Center, 2005).

Assumptions

There are several assumptions that were made about North Dakota schools and their emergency planning and response procedures: (1) The survey instrument indicates that most school districts, have an emergency response plan; (2) The survey instrument demonstrates very few schools or school districts have a comprehensive emergency response plan; (3) The survey instrument shows larger school districts are better prepared for emergencies and have a more comprehensive emergency response plan; (4) The survey instrument shows a majority of the school districts in North Dakota have not participated in the North Dakota LEAD Emergency Response training; and (5) The survey instrument indicates those schools who have a comprehensive emergency operations plan practice response drills on a regular basis and personnel meet on a regular basis to update and refine their specific emergency operations plan. It also is assumed that the responses from superintendents were accurate and honest.
Delimitations

This study was limited to the emergency operations plans of all public schools districts in North Dakota. There are 159 public school districts in North Dakota at this time.

Organization of the Study

Chapter II presents a the literature review of the history of school crisis situations, school emergency planning prior to 9/11 and post 9/11, the level of government and education association participation in school emergency planning and the future of school emergency planning. A presentation of the research design and methodology, a description of the survey instrument, the administration of the survey, and limitations of the study are found in Chapter III. The findings of this study are found in Chapter IV. A summary of the study, conclusions drawn from the results, and recommendations for school administrators, and further study is presented in Chapter V.
CHAPTER II
REVIEW OF LITERATURE

Chapter II presents the review of literature, which has been divided into the following sections: historical overview of school crisis situations, school emergency planning prior to September 11, 2001, school emergency planning post September 11, 2001, levels of government and education association participation in school emergency planning, and the future of school emergency planning.

Historical Overview of School Crisis Situations

Natural Disasters

Over the past 100 years there have been a number of natural disasters that have affected public schools in the United States. One of the most recent natural disasters occurred in North Dakota took place in Northwood on August 27, 2007, when a tornado devastated the Northwood School and community. On August 29, 2005 one of the most destructive natural disasters in the history of the United States, the hurricane Katrina, struck the coast of Louisiana and the city New Orleans (Hoff, 2005).

Floods

In April of 1997, Grand Forks Public Schools and several other school districts up and down the Red River Valley experienced significant damage due to flooding (Bradbury, 1997). Grand Forks, ND suffered the most severe damage due to the spring flooding of the Red River. The schools had to shut down for the remainder of the school
year and their students enrolled in schools outside the district during the months of April and May of that year (Lee, 1997). Several of their school buildings were inundated with flood water and the school district needed to build a new middle school and administrative office on the south side of Grand Forks. These are just a couple of events that took place in our local area that produced crisis situations for those local school districts produced by natural disasters.

*Storms*

The biggest natural disaster in which schools were involved arguably has to be the New Orleans hurricane of August, 2005, Katrina. This hurricane flooded over 80% of the city and inundated the city with as much as 20 feet of water (Hoff, 2005, September 7). Because of the hurricane, 60,000 students were displaced in the city of New Orleans alone, and an estimated 300,000 students were displaced in the gulf coast by Katrina (Hoff, 2005, September 14). The hurricane produced a crisis for the New Orleans school district greater than had ever been seen before in the United States (Gewertz, 2005). Not only were 60,000 students without a school, but faculty and staff were basically without a pay check for some time (Gewertz, 2005). Fortunately, because the hurricane struck New Orleans in late August, no classes were in session. Additionally, the district offices were flooded and many of their computer systems were damaged because of the water, so they were unsure if they had all of the records that they needed to conduct business (Gewertz, 2005).

The only bright side, if there can be a bright side to a hurricane, was the school facilities of New Orleans were in terrible, run-down condition prior to Katrina. Many of the buildings were in a state of disrepair with mold and mildew problems (Sack, 2005).
The city’s school system was already considered in crisis due to financial instability, political infighting, and allegations of corruption (Gerwertz, 2005). More than 100 schools in the city of New Orleans had to be rebuilt (Hoff, 2005, September 14). Later it was determined that 80 of the city’s 126 public school buildings had to be replaced (Hoff, 2005, September 14). Therefore, most of the schools in New Orleans were unable to open for the 2005-06 school year.

Katrina provided a wake up call for many coastal school districts to examine their emergency plan and/or have an emergency plan in place in case their school district was struck by a hurricane. Many of these districts were reinforcing their relationship with local emergency operations and personnel, examining how their district protects their school bus fleet in case it had to be used to evacuate students and/or residents of their community (Gerwertz, 2005). They wanted to make sure their fleet was safe from flooding and did not want a situation like the one which occurred in New Orleans when the school bus fleet was completely flooded and basically rendered useless (Gerwertz, 2005). Districts were also determining if their emergency planning procedures provided for safeguards for their school records. Many of these districts were making sure that they were recording their school records from academic to the business office information on CDs (Jacobson, 2005). In New Orleans, many of their records were lost because they were not backed up when the computer system was flooded by the hurricane.

The storm had a great effect on the students of New Orleans and the surrounding areas. Students were displaced to other school districts in order to attend school (Gewertz, 2005). When they returned to their home district in New Orleans, often their
living conditions were completely different from before Katrina. Upon their return, many of the schools, were not yet opened, so there was a great deal of chaos when students did try to enroll in a public school in New Orleans (Gewertz, 2005). Students were filled with a great deal of anxiety because of all the changes that had occurred in their lives since August of 2005. The New Orleans school district, because of all the issues confronting their students, found it necessary to add counselors, social workers, and psychologists to help students cope. In addition, school administrators found it necessary to keep their buildings open far after the regular closing time because many of their students had no where to go (Maxwell, 2008).

On August 26, 2007, a tornado hit Northwood, North Dakota, and caused millions of dollars of damage (Kolpack, 2007). One of the structures damaged in this F-4 tornado was the K-12 public school. (The F scale, or Fujita-Pearson scale, is a scale for rating tornado intensity, based on the damage tornadoes inflict on human-built structures and vegetation. The scale, F0 to F5 rates the intensity of tornadoes, with F5 being the most intense.) The school suffered heavy damage to the gym roof, windows, and commons area (Kolpack, 2007). The superintendent, Kevin Coles, estimated that the cost to repair the building would be in excess of six million dollars (Ricker, 2007). School was not in session as the tornado struck Northwood on a Sunday evening. The damage to the school forced the Northwood students in first through twelve grades, to attend school in Hatton, North Dakota. Kindergarten kids attended school in Portland, North Dakota (Ricker, 2007). The Northwood School Board eventually decided to raze the building and build an entirely new elementary and high school at a cost of approximately 14 million dollars (Coles, K. personal communication, September 1, 2008). The 14 million
dollars to build the school came from a combination of sources including the North Dakota Insurance Fund which provided almost 8 million dollars, the Federal Emergency Management Agency which contributed almost five million dollars, and the State of North Dakota provided the balance of the funds (Hoeven, J., 2008, May 13). The school held its first graduation exercise in the new building in May of 2009.

Other Natural Disasters
There have been several earthquakes that have either damaged or destroyed schools over the past 100 years. Earthquakes in San Francisco in 1906, Santa Barbara in 1925, Long Beach in 1933, and Anchorage in 1964 all caused damage to schools in those communities. It was the Long Beach earthquake of 1933 which caused elected officials and builders to realize that schools needed to be built differently. Up until this time, public officials in the state of California refused to change codes to increase the resistance of school buildings to earthquakes (Alden, 2009). They felt that changing building codes would cost too much and would scare people from moving to California to live or to visit because they would see California as earthquake country (Alden, 2009). This state of affairs changed when the Long Beach earthquake of 10 March 1933, shook down 15 school buildings in Long Beach and 41 schools in Los Angeles were forced to close. The public realized it was pure luck the quake occurred at 5:54 p.m.; had it struck during school hours, children would have been injured or killed by the thousands (Alden, 2009). This time scientists were ready, informing the public of the need for better building codes through newspaper stories and commissions of inquiry. Under the resulting public pressure, the state passed the Field Act within a month, ensuring that school buildings across the state pass new guidelines enforced by state inspectors (Alden,
2009). By the end of May, the Riley Act was passed, making earthquake safety a legal requirement for all buildings in California (Alden, 2009).

Other Emergencies

Fire

Over the past half century there have been no fires in schools in which a life was lost. This is not to say that fires do not occur in schools, in fact according to the United States National Fire Incident Reporting System (NFIRS) approximately that 14,700 fires requiring a fire department response each year occur in schools (Federal Emergency Management Agency, 2007). A number of school fires prior to 1959 did take a number of lives; some of those school fires include:

- Chicago fire in 1958 at “Our Lady of the Angels” school, where 90 students and 3 nuns died. Students and teachers were trapped in the building as the fire started in the basement and quickly jumped to the 2nd and 3rd floors of the building. Children died trying to get out of the building by jumping out the 3rd story, or of asphyxiation as they sat in their desks or from being engulfed in flames (Butler, 1975). Although the building technically conformed to Chicago’s fire codes covering old buildings, it was admitted by a city building inspector that schools erected after 1949 were much safer. Despite the fact that Our Lady of Angels School had been modernized in 1951, it was listed on city records as a “pre ordinance” building, unaffected by a new building code established in 1949. The 1949 code, among other things, required that stairwells be enclosed with fire-resistant doors and material at each floor, a
precaution that would have saved many lives had Our Lady of the Angels been so equipped (Butler, 1975)

• New London, Texas, 1937, in which a school building experienced an explosion and subsequent fire due to a gas leak killed over 350 people, most of them children. The school building used natural gas from oil wells recently discovered in that area to heat the building, even though the architect had recommended to the school board that they use a boiler system. After that explosion and fire, natural gas producers were required to add an odor to natural gas so that leaks could be detected. (McDonald, 2008).

• Hobart, Oklahoma in 1924, over 30 children died during a stage performance of the annual Christmas songfest when a candle fell into the branches of a Christmas tree causing it to burst into flames in the one-room schoolhouse. (Beitler, 2007, October).

• Beulah, South Carolina, 1923, at the Cleveland school, 47 children died of fire when a lamp fell down and started a fire during a school play (Butler, 2007).

• Collinwood, Ohio, on March 4 1908, 175 people, 172 students and 3 adults perished in the deadliest school fire in American history at the Lakeview Elementary School. The fire started as a steam pipe overheated under a stairwell and then quickly spread throughout the building. A stampede resulted when the fire was discovered because there was no orderly escape routes for the students and the exit doors opened to the inside. Because of the fire, a new school was built with steel framing, fire alarm systems, doors that opened to the outside, and fire safe stairwells (Centennial Anniversary, 2008).
Additionally, as a result of the Collinwood fire, new laws were enacted by state legislatures across the United States requiring new standards for school construction including the mandate of having “panic bar” latches on doors in schools (Smith, 1978).

There have been several school fires in North Dakota over the past 100 years, but very few in which lives were lost. A fire that caused the death of a teacher and three pupils near Belfield, North Dakota is recorded in the Fargo Forum on November 7, 1914 was not a school fire but a prairie fire. Apparently the teacher and the children left their one-room school building and attempted to escape from a prairie fire and were caught in the grass (Three children burned, 1914, November 7, p. 7). There was no record of damage to the school building. In Fargo over the past 90 years, they have experienced at least three school fires resulting in a great deal of damage but again, no loss of life. In 1916, the Fargo High School was destroyed by a fire that started in a wood burning stove (Spectacular blaze destroyed, 1916, November 17). In 1960, a fire was started by a student who wanted to burn the school. It resulted in a great deal of damage to the Roosevelt Elementary school building (Blaze hits Roosevelt, 1960, November 5, p. 1). In 1966 Fargo Central High School, which had an enrollment of 1017, burned to the ground. The fire was believed to have started in the attic above the auditorium (Fire rages in school, 1966, April 19, p. 1).

There are several reasons why there has not been a loss of life in the past fifty years, those reasons are: educational institutions are governed by strict inspections and fire and safety codes, schools are equipped with fire and smoke alarms, and schools are
required to practice fire evacuation drills for all students (Federal Emergency Management Agency, 2007).

**Terrorism**

Terrorism is the use of force or violence against persons or property in order to threaten national security, cause mass casualties, weakens a country’s economy, and damage morale and confidence (North Dakota Department of Emergency Services, 2007). Terrorists often use threats to: create fear among the public, try to convince citizens that their government is powerless to prevent terrorism, and get immediate publicity for their causes. Acts of terrorism include threats of terrorism; assassinations; kidnappings; hijackings; bomb scares and bombings; cyber attacks (computer-based); and the use of chemical, biological, nuclear and radiological weapons. High-risk targets for acts of terrorism include military and civilian government facilities, international airports, large cities, and high-profile landmarks. Terrorists might also target large public gatherings, water and food supplies, utilities, and corporate centers. Further, terrorists are capable of spreading fear by sending explosives or chemical and biological agents through the mail (Are You Ready, 2004). In general terms, terrorists seek to destroy, incapacitate, or exploit critical infrastructure and key resources across the United States in order to threaten national security, cause mass casualties, weaken our economy, and damage public morale and confidence (Terrorism protective measures, 2007).

It is considered highly unlikely a terrorist attack upon a school in the United States could take place; however, it was thought that a terrorist attack on a school in Belsan, Russia, in 2004 was almost as unlikely (Trump & Lavarello, 2003). Belsan was the site where separatist rebels attacked a small school in September of 2004. On the
third day of the attack, at least 330 people were killed, more than half of them children (McAllister, Quinn-Judge & Zarckhovich, 2004). Kennet Trump, president of National School Safety and Security Services, has recommended that all schools in the United States need to prepare for the possibility of a terrorist attack (Schools & terrorism, 2007). A terror attack on American schools would create fear and panic, disrupt the economy if the “business” side of school operations were shut down on a large scale, and instill a lack of confidence in our school and community leadership (Schools & terrorism, 2007).

In 2002 school-based resource police officers (SRO) were surveyed regarding how well their respective schools were prepared for a terrorist attack (Trump, 2002, September). The survey found 95% of the responding SRO’s stated that their schools are vulnerable to terrorist attacks and 79% stated that their schools are not adequately prepared for such attacks (Trump, 2002). SRO’s also reported significant gaps in school security and emergency preparedness measures at their schools. The school resource officers indicated in the survey there is a need for SRO training to help them prevent or prepare for, school terrorist attacks (Schools & terrorism, 2007). A follow-up survey was given in 2003 and again SRO’s believed schools are “soft targets” for potential terrorist attacks. Over 76% of the officers in this follow-up survey believed their schools are not adequately prepared to respond to a terrorist attack upon their schools. And over 51% of the respondents’ schools do not have specific, formal guidelines to follow when there is a change in the national homeland security color code/federal terrorism warning system (Trump, 2003). According to Trump & Lavarello (2003), American schools could be targets of terrorism just as utility plants, water reservoirs, transportation systems, financial institutions, and similar entities are. Since 9/11 threats to children in American
schools have been connected to terrorists in multiple news reports (Trump, 2003). Trump and Lavarello, recommended several steps to make American schools safer from the threat of terrorism, those recommended steps that schools need to take include:

the development of comprehensive emergency plans that include the possibility of terrorist threats; provide ongoing staff training related to school safety; conduct periodic tests and drills of crisis response plans; coordinate emergency management plans with other city, county, and state officials at the leadership, managerial, and front-line levels; screen vendors and their employees who provide services to schools, such as food or maintenance services; and enact and implement safety and crisis preparedness policies based on established standards and “best practices” in the school safety field. (p. 20)

Trump & Lavarello (2003), suggested several cost effective measures to increase the safety of schools when the country moves to a heightened alert level, these include:

Provide special attention to perimeter security and access control issues; stress the importance of staff greeting and challenging strangers and reporting suspicious individuals; train custodial and maintenance personnel to identify and manage suspicious items found on campus; stress the importance of adult supervision before, during, and after school; verify the identity of service personnel and vendors visiting the school; secure access to maintenance and facilities operations locations and outside utility controls; evaluate food and beverage stock, storage, and protection procedures; assess school health and medical preparedness, including nurse staffing; maintain adequate emergency kits and medical supplies; identify higher-risk facilities, organizations, and potential terrorist targets in the
community surrounding schools and plan accordingly; and provide crime prevention and crisis preparedness training to staff. (p. 21)

School Shootings

The idea of students gunning down other students in schools prior to 1990 was completely surreal (Newman, Fox, Harding, Mehta, & Roth, 2004). Unfortunately, since the late 1990's, school shootings have increased significantly. During the seventies and eighties there were a total of six school shootings in the United States (Newman, Fox, Harding, Mehta, & Roth, 2004). In 1990’s there were at least 14 school shootings across America (Newman, Fox, Harding, Mehta, & Roth, 2004). Several of these incidents during the nineties were what are called “rampage shootings.” Rampage shootings are defined as attacks on multiple victims, selected at random (Newman, Fox, Harding, Mehta, & Roth, 2004). The shooters may have a specific target to begin with, but they let loose with a barrage that hits others. It is not unusual for the perpetrator to be unaware of who has been shot until long after the shootings began. Shooters choose schools as the site for a rampage because they are the heart and soul of public life in small towns. Rampage shootings tend to take place in rural and suburban settings and rampage shooters are predominantly white boys (Newman, Fox, Harding, Mehta, & Roth, 2004). This study examined three school shootings: Jamestown, North Dakota; Columbine, Colorado, and Red Lake, Minnesota. These school shootings were chosen due to their impact and/or their location.

North Dakota has experienced a school shooting. On March 5, 1973, a Jamestown High School student, John Buegel, walked up to Donald Bradley, also a student at Jamestown High School and shot him to death with a .38 caliber revolver on 26
the steps of Jamestown High School as buses were loading to leave for the day (Smorada, 1973). According to Larry Ukestad, a teacher during that time at Jamestown High School, “As school was being let out, and the buses were parked in front of the building, the student, John Buegel came out of a car and shot the kid, Donald Bradley, on the steps and the kid was dead on the spot” (L. Ukestad, personal communication, December 1, 2006). Rick Grinsteiner, who was a student at the time of the shooting at Jamestown High School, and now a teacher in the Devils Lake School System stated, “When this kid came up and shot this other kid, Bradley, it was scary and chaotic for everyone. Nobody knew what was going on for sure” (R. Grinsteiner, personal communication, December 20, 2006). The student, according to Robert Toso, current Superintendent at Jamestown Public Schools, Buegel, who shot Bradley, was given five years for manslaughter and was ordered to stay out of the county for several years after (R. Toso, personal communication, December 5, 2006). Beugel would later be in the news as he attempted to start an automatic weapons firing range in Grand Forks in 1988, but was denied by the Grand Forks City Council (Smith, 1988).

The most tragic K-12 school shooting in America occurred at Columbine High School in Littleton, Colorado. On April 20, 1999, two students, Eric Harris and Dylan Klebold entered Columbine High School and proceeded to use automatic weapons and explosive devices to kill twelve students, one teacher, and injuring twenty-three others before setting booby traps on the bodies and then killing themselves (Newman, Fox, Harding, Mehta, & Roth 2004). This event, probably because it was watched worldwide on television and the internet as it was happening, is one that people remember what they were doing on that day in the same way they remember the assassinations of John F.
Kennedy and Martin Luther King Jr, the Challenger explosion and the September 11, 2001 terrorist attacks (Hammond, 2009). The Columbine tragedy, while there were other school shootings prior to April 20, 1999, is an event that changed the attitudes and perceptions about the young people of this nation and the safety of our schools (Hammond, 2009). Columbine became the tragedy in which all school violence incidents were then measured by. The Columbine shootings caused school officials to take student threats more seriously (Vail, 2009). School officials who were at Columbine, believed that the shooting rumors before the incident took place were just a senior day prank. This would never happen again in the post-Columbine world (Vail, 2009). The Columbine shootings taught schools to lock their doors and screen those coming into the schools more closely (Vail, 2009). Additionally schools started to look at and examine the social climate of their buildings and added anti-bullying programs in order to prevent violence in schools. One such organization that provides anti-bullying programs is the “Committee for Children.” (Vail, 2009) The Committee for Children is based in Seattle Washington and its mission is to foster the social and emotional development, safety, and well-being of children through education and advocacy (Committee for Children, 2009). The Committee for Children saw a huge surge in a request for their anti-bullying and violence prevention curriculum post-Columbine (Vail, 2009). The organization’s programs are now in about 30,000 schools across the country (Vail, 2009). Jane Hammond, who was a superintendent of Jefferson County, Colorado schools during the Columbine shootings, interviewed several key figures from the Columbine school district ten years after April 20, 1999, and came away with four lessons learned from that tragedy:
(1) In times of tragedy, we search for a strong belief or value system to guide us; (2) People cannot wait until bad things happen to develop relationships of trust; (3) Strong systems can result in increased student achievement. By increasing a commitment to continuous improvement, schools can reach the goal of providing a safe education where all children can be successful; and (4) Safety means prevention, intervention and crisis response. The Columbine tragedy galvanized the country around safety with a new focus on prevention and intervention in addition to response. Schools developed comprehensive safety plans with the input of parents, staff members and the community (Hammond, 2009, p.16).

The attack at Columbine provided the initiative for schools to improve their emergency planning nationwide. Emergency planning includes:

- Crisis teams and plans. Most schools have some type of written crisis plan and school safety crisis team.

- Drills and exercises are now practiced. Lockdowns, evacuation, and shelter-in-place drills have joined traditional fire and tornado drills. First responders are given access to schools to conduct tactical training when school is not in session.

- Schools have produced computerized floor plans and blueprints. Mapping system technology is being used for improved school and first responder access in an emergency.

- Schools have trained personnel in threat assessment and protocol. Schools have created threat assessment teams and protocols, trained staff, and partnered with police to better evaluate threats.
• School districts have provided time for staff for professional development. Administrators, teachers and support staff have received professional development training on school security and emergency planning details.

• Relationships with schools and community agencies have been strengthened. School districts have developed stronger partnerships with police, fire, emergency medical services, emergency management agencies, mental health agencies, and other community partners.

• Schools have improved their communication systems. Improvements have been made to facilitate classroom to office communications, strengthen two-way radio communications capabilities among key administrators and staff, maintain public address systems and speakers, and expedite communications messages from schools to parents in an emergency. Many school districts now have instant alert systems that can provide an emergency message to all parents in the district in a matter of seconds (Trump, 2009, April, p. 28).

Even with all of the steps that have been taken to increase the safety of students in the United States over the past ten years, Ken Trump (2009, April), an expert in the area of school security, has noted that there are still glaring gaps in school security. Some of these gaps include:

• A lack of staff, student and community awareness regarding safety and security issues.

• A failure of school districts to keep their emergency response plans current. Many crisis plans are now on the shelf. These plans need to be reviewed and updated on a annual basis.
• Emergency preparedness training for school support staff. School staff tends to be under trained and underutilized in school emergency planning. Food service employees, office support staff, day and night janitors, and school bus drivers are often not included in faculty meetings, or included with crisis teams and in drills.

• Funding for school violence prevention, security and emergency planning have decreased. Federal and state legislators rode the “school safety bandwagon” in the months following Columbine, providing new laws and funding streams for school safety. Following the terrorist attacks of 9/11, most legislators jumped on the “homeland security bandwagon.” Those legislators have never come back to school safety and, in fact actually repeatedly reduce funds for school violence prevention, security, and preparedness. These issues along with increased complacency, denial and school-community politics are obstacles for improving school crisis preparedness and, thus, can leave a school vulnerable (Trump, 2009, April, p. 28).

Events of this nature are not immune to our region as was evident on the Red Lake Indian Reservation the spring of 2005. On March 21, 2005, Jeff Weise, a 16-year-old Red Lake High School student, drove to the front door of the Red Lake High School armed with two handguns and a shotgun, entered the school, shot and killed one security guard, one teacher, five students and injured another seven people in the school (Borja, 2005). This was the nation’s deadliest school attack since the 1999 slayings at Columbine (Borja, 2005). The Red Lake school district, according to their superintendent, Stuart Desjarlait had a crisis plan and conducted drills during the 2004-05 school year. The school also had metal detectors and security guards posted at the
entrances (Borja, 2005). Red Lake, Minnesota is approximately 130 miles east of the Minnesota/North Dakota border and 120 miles south of the Minnesota/Manitoba border.

Other Emergencies

Since September 11, 2001, schools in the United States have been preparing for a number of large-scaled emergencies and disasters from both intentional hazards and unintentional hazards, such as pandemic influenza (North Dakota Department of Health, 2009). Pandemic flu is defined as an influenza outbreak or epidemic that must be occurring worldwide, not just in a single country or continent (North Dakota Department of Health, 2007). A pandemic can start when three conditions have been met: a new influenza virus emerges for which there is little or no immunity in the human population; it infects people and begins to cause serious illness; and it spreads easily from person to person (North Dakota Department of Health, 2007). The world has seen three pandemics of influenza during the 20th century, these were: (1) 1918 influenza pandemic which caused at least 5,100 deaths in North Dakota, 500,000 deaths in the United States and over 40 million deaths worldwide; (2) 1957 influenza pandemic caused at least 70,000 U.S. deaths and 1 million to 2 million deaths on the planet; and (3) 1968 influenza pandemic caused the death of some 34,000 American citizens and 700,000 deaths worldwide (North Dakota Department of Health, 2007). The 1918 influenza pandemic, which was called the Spanish flu, was the most serious of the three pandemics that have occurred in the state of North Dakota. The Spanish flu was first detected in New Rockford, North Dakota in late September of 1918 and was traced to an ill Marine (McDonough, 1989). Because the 1918 pandemic was so contagious and caused so many deaths, school was cancelled on October 8, 1918 ("Public Gathering," 1918). An article
appearing in the October 9, 1918 edition of the Grand Forks read as follows: “The gathering of crowds in Grand Forks was prohibited yesterday by County Health Officer J. E. Hethurington at the instance of state health authorities and military officials in an effort to prevent the spread of Spanish influenza. All theaters, schools, and churches were ordered closed and all public meetings prohibited” (“Public Gathering,” 1918, p. 8). During that time, many people from across North Dakota volunteered to help, some examples include: teachers whose schools were closed volunteered to help care for the sick; dentists closed practices to help physicians provide medical care; in Stutsman County alone, more than 150 women volunteered to be nurses; children with ill parents were cared for by neighbors; and farmers donated milk and food to families in need (McDonough, 1989). The football season in the fall of 1918 was cancelled. An article in the Grand Forks Herald that fall contained the following:

“The high school (football team) has also been caught in the same fix. A late start combined with influenza has heaped gobs of gloom on what joyous hopes the boys once held. The season started on the run the other way. The first game that was to have been played at Crookston, on Saturday, has been called off and no other games have been scheduled, it is probable that after the epidemic dies off, contests will come in quick succession” (“Football Games,” 1918, p. 6).

The Spanish flu spread quickly with devastating results and many lessons were learned from this experience as highlighted in the editorial of University of North Dakota Quarterly Journal, “We errored thru ignorance, not knowing in advance how the epidemic might operate, and not realizing the seriousness of the situation. It came upon in a rush and caught us unprepared” (“Influenza at the University,” 1919, p. 190). Schools resumed
around November 18, of that year (Schools to re-open, 1918, November 14, p. 5). A column found on page five of the Devils Lake Journal read, “The city schools will re-open Monday after a five weeks’ enforced vacation. Superintendent Sauvain has notified all the teachers, most of who had gone to their homes” (Schools to re-open, 1918, November 14, p. 5). Devils Lake Public Schools lost at least one faculty member during the Spanish flu epidemic of 1918, the junior high principal, Catherine McClusker (Miss McClusker popular teacher, 1918, November 11). Since 2005, North Dakota school administrators have been told to be prepared for two potential pandemics, the Avian Influenza in 2006 and the Swine flu or the H1N1 flu in 2009 (North Dakota Department of Health, 2009).

School Emergency Planning Prior to 9/11

There have been two points of history that have influenced school emergency planning over the past ten years, the Columbine shootings of April 21, 1999 and the terrorist attacks on the World Trade Center on September 11, 2001. On September 11, 2001 (9/11), the United States was victim of a terrorist attack. This was followed within a month by the intentional release of anthrax spores placed in letters. These events permanently changed the American way of life. Some of the lessons learned in these and subsequent terrorist events is that domestic terrorism exists as a new part of society; gone are the days when terrorism and release of weapons of mass destruction were focused solely on the military theater (Chung, Danielson, & Shannon, 2009). In 1995, the North Dakota Department of Health provided all North Dakota schools with emergency guidelines in booklet form. In that booklet, emergency guidelines were listed for a number of health issues from allergic reactions, how to administer CPR, rashes, tick
bites, pregnancy (Emergency guidelines, 1995). In 2009, if a school official received a booklet from the State Department of Health, they might believe it would contain procedures for a much different array of situations than what were listed in the 1995 booklet.

While the Columbine tragedy certainly alarmed schools that students could potentially kill other students in a school building, most emergency planning guides for school districts saw very little change, except for the addition of an armed suspect included in a school district’s flip chart of what to do when an emergency arises, sometimes called the crisis manual (Emergency crisis manual, 1999). Even the legislature, prior to 911, did very little to increase emergency preparedness. The 2001 North Dakota Century School Code contains the following statement on emergencies, “15.1-06-12, each school district superintendent shall implement fire, tornado, and other emergency or disaster drills” (North Dakota Century Code, 2009, p. 253). The North Dakota legislature did add a law, as required by the federal government, requiring all school districts to have a policy prohibiting students from possessing weapons on school property and prescribing the type of punishment the student shall receive if the student is found to be in violation of said policy (North Dakota Century Code, 2009).

According to a study conducted by the Center for Biopreparedness at the Harvard Medical School, prior to 9/11, there was relatively little planning around terrorist events, leaving the U.S. unprepared and vulnerable (Chung, Danielson, & Shannon, 2009). Danny Taoos, superintendent of the Vigo County School Corporation in Terre Haut, Indiana, stated, “The 9/11 tragedy changed the way educators address school safety. Schools have planned for terrible events, like school shootings, but we must now plan for
attacks that can take place from terrorists from outside our cities and even our great nation” (Trump, 2003, p. 43). This exposed weakness resulted in a massive post-event effort at Federal, State and local levels to correct deficiencies and better prepare for terrorist acts. The formation of a new Cabinet office, The Department of Homeland Security, has been the most important and symbolic product of these efforts (Chung, S., Danielson, J., Shannon, M., 2009).

School Emergency Planning Post 9/11

Emergency planning for schools changed considerably after the tragedy of September 11, 2001, as schools now faced a completely different potential threat, terrorism. Eric Andell, who was a deputy undersecretary for the Office of Safe and Drug Free Schools for the U. S. Department of Education stated, “While no schools were directly attacked on 9/11, that day and subsequent events have had a significant impact on schools throughout the country. Educators recognize that their processes, procedures, policies and programs for ensuring the safety of students and staff have to be carefully reviewed” (Trump, 2003). According to Trump (2003), school safety expert at the National School Safety and Security Services, provided the following information regarding school safety planning post 9/11:

“The September 11 terrorist attacks on America affected many school administrators in a manner similar to the school shooting incidents of recent years. School leaders have been asked to identify the steps they have taken to maintain adequate school security and crisis guidelines in the event of a high-profile crisis in their schools. Administrators have been forced to do a reality check of their school safety measures, while also re-assuring school and
community members that they indeed have done their homework in this area.” (p. 22).

Not only has terrorism changed the way schools look at emergency planning since 9/11, but natural disasters like Hurricane Katrina have also forced school districts to re-examine their procedures. Emergency preparedness plans around both terrorism and unintentional disasters like hurricanes and floods, or manmade, such as plane crashes or hazardous material releases have now been created and promulgated by both homeland security and public health agencies. However, across the Nation, the needs of children remain largely unmet (Chung, Danielson, & Shannon, 2009). Many events have occurred from 2006 to 2009 have demonstrated not only the vulnerability of children in schools but, more disturbingly, children in schools may become specific targets of terrorism. Such events include the school hostage disaster in Beslan, Russia, that resulted in more than 300 casualties, and numerous school shootings. Collectively, these acts of terrorism make clear the need to create mechanisms that assure the safety of children when disasters occur (Chung, Danielson, & Shannon, 2009). According to Curt Lavarello, executive director of the National Association of School Resource Officers, schools are but a blip on the terrorism radar screen when, in reality, schools and our children should be an absolute first priority when it comes to homeland security issues (Trump, 2003, p. 42). However, though school officials and policy makers understand the need for schools to be better prepared, there has been little money set aside by either federal, state or local entities for schools to write a better crisis plan to address emergency preparedness issues or implement their plan. According to the United States Office Government Accountability Office (GAO), there are no federal laws requiring all school districts to
have emergency management plans, many states have laws or other policies that do so (U.S. GAO, 2007). Congress has not enacted any broadly applicable laws requiring all school districts to have emergency management plans, nor have federal agencies issued any regulations imposing such a requirement of all school districts. The No Child Left Behind Act of 2001 requires local education agencies, applying for sub-grants under the Safe and Drug Free Schools and Communities Program, include in their grant application an assurance that they have "a plan for keeping schools safe and drug-free that includes a crisis management plan for responding to violent or traumatic incidents on school grounds (U.S. GAO, 2007). However, because the plans required under the No Child Left Behind Act are not required to address multiple hazards, GAO does not consider these plans to be a requirement for an emergency management plan (U.S. GAO, 2007). North Dakota still has the same law on the books for emergency and disaster drills as they did in 1999 (Emergency and disaster drills, 2009). In contrast, thirty two states have laws or other policies requiring school districts or schools to have a written emergency management plan and further require the school districts to include in their safe schools plan specific components including drills for lockdowns, fires, tornadoes, etc. (U.S. GAO, 2007). The State of Washington's safe school plan law requires schools in that state to adopt, no later than September 1, 2008, an emergency response plan. The state of Washington requires that the plan include: school safety policies and procedures, emergency mitigation procedures, process for emergency preparedness, and disaster recovery procedures. The plan also needs to include provisions for assisting and communicating with students and staff, including those with special needs or disabilities, and use the training guidance provided by the Washington emergency management
division of the state military department (Washington State Legislature, 2009).

Washington State further requires school districts to: have the building principal be
certified regarding the incident command system and set guidelines for requesting city or
county law enforcement agencies, local fire departments, emergency service providers,
and county emergency management agencies. (Washington State Legislature, 2009).

Further, the schools of the state of Washington are required annually to:

- Review and update safe school plans in collaboration with local emergency
  response agencies; conduct an inventory of all hazardous materials; update
  information on the school mapping system to reflect current staffing; provide
  information to all staff on the use of emergency supplies and notification and alert
  procedures; to conduct no less than one safety-related drill each month when
  school is in session including one drill using the school mapping information
  system; conduct one drill for lockdowns; hold one drill for shelter-in-place; and
  practice six drills for fire evacuation in accordance with the state fire code
  (Washington State Legislature, 2009).

The State of Washington also recommends that school districts conduct drills for
earthquakes, tsunamis, or other high-risk local events. In Washington school districts are
also required to document the date and time of all drills (Washington State Legislature,
2009).

In 2005, the National Center for Education Statistics surveyed public schools
across the United States regarding crime, violence, discipline, and safety and asked how
many schools drilled students on a written plan for a specific crisis. They found 39.7% of
the schools surveyed drilled for school shootings; 83.3% drilled for natural disasters;
33.5% drilled for hostages; 54.9% drilled for bomb threats; and 28% drilled for chemical, biological or radiological threats or incidents (Nolle, Guerino, & Dinkes, 2007).

Levels of Government and Association Participation in School Emergency Planning

Since 1999 and the Columbine shootings, local, county, state, and national agencies have gotten involved in school emergency planning. Each of these agencies understands that schools contain a great number of children and people located in a small area. Local, state and national agencies understand that the safety of school children is extremely important and it is essential to include school district officials in their safety/emergency planning (United States Government Accountability Office, 2007, May). Further, local, state, and federal emergency agencies need to include school districts in any local, state, or national drills or practice scenarios (United States Government Accountability Office, 2007, May).

FEMA

The Federal Emergency Management Agency or FEMA, was the creation of President Jimmy Carter in 1979, when he merged several federal disaster agencies (Federal Emergency Management Agency, 2009). According to their internet site, FEMA’s mission is to support citizens and first responders to ensure that as a nation these people work together to build, sustain, and improve the country’s capability to prepare for, protect against, respond to, recover from, and mitigate all hazards (FEMA, 2009). In 2001, within a month of the terrorist attacks of September 11, the agency changed its focus from disaster recovery to issues of national emergency preparedness and homeland security (FEMA, 2009). In March of 2003, FEMA joined 22 other federal agencies,
programs, and offices in becoming the Department of Homeland Security (FEMA, 2009). FEMA’s mission, for almost 30 years, was to lead America to prepare for, prevent, respond to and recover from disaster with a vision of “A Nation Prepared” (FEMA, 2009).

Locally FEMA has provided over 15 million dollars to the East Grand Forks Public School System in order for that district to rebuild three elementary schools after the 1997 flood (Grams, 1997). FEMA provided over 40 million dollars to rebuild and renovate several school buildings in the Grand Forks Public School district after the 1997 flood (City briefs, 1998). FEMA has provided five million dollars to the Northwood, North Dakota public school system to help rebuild their school after a tornado hit their school in August of 2007 (Hoeven, 2008).

FEMA produces a number of documents to assist schools for terrorist attacks, tornado protection, high winds, earthquakes, floods, etc. Two examples of the purpose of their publications follow: (1) The FEMA primer to design safe school projects in case of terrorist attacks is written to provide the design community and school administrators with the basic principles and techniques to make a school safe from terrorist attacks, and at the same time, is functional, aesthetically pleasing and meets the needs of the students, staff, administration, and general public. Protecting school buildings and grounds from physical attack across the country is very challenging due to the many building codes that exist in the United States (Chipley, Lyon, Smilowitz, & Williams, 2003). Likewise, the FEMA school construction guide for improving school safety in earthquakes, floods, and high winds is intended to provide design guidance for the protection of school buildings and their occupants against natural hazards, and concentrates on grade schools (K-12);
the focus is on the design of new schools, but the repair, renovation, and extension of
existing schools is also included within the design guide (Arnold et al., 2004). FEMA has
written a tornado protection booklet, which provides guidance for school building
administrators, architects, and engineers to select the best available refuge areas in
existing schools in case of a tornado (Florida Department of Community Affairs, 2003,
November).

Several state and national education associations provide information, resources,
and guidance regarding school emergency planning. The emergency preparedness
services that are provided by those associations follow.....

**NDSBA**

North Dakota School Boards Association (NDSBA) is a fee based organization in
which most K-12 school boards in the state of North Dakota are members. The NDSBA
provides services and resources to local school boards in the state. Other than writing
sample policies regarding fire drills or emergency drills for public schools in the state the
organization does not produce emergency drill procedures or documents on how schools
should be prepared if a disaster were to strike (North Dakota School Board Association,
2009, July).

**AASA**

The American Association of School Administrators (AASA) is a professional
organization founded in 1865 to assist their membership, which is over 13,000 school
superintendents and school CEO’s throughout the world, advance the goals of public
education and champion children’s causes in their districts and nationwide (American
Association of School Administrators, 2009). The AASA provides school administrators
with resources for a number of topics ranging from the academic progress of students to student safety. Regarding school safety or emergency planning, the AASA web site offers school leaders information on what they consider to be the most critical issue of the day. For example, the AASA web site on July 31, 2009 posted guidance from the United States Center for Disease Control on how schools deal with H1N1 (Swine flu) and if schools should or should not dismiss students from school in response to this illness (AASA, 2009).

**NASSP**

The National Association of Secondary School Principals (NASSP), is an organization of middle and high school principals and assistant principals from across the United States and more than 45 countries. Its mission is to promote excellence in middle and high school leadership. NASSP provides programs for many aspects of middle and high school education including the improvement of school safety (National Association of Secondary Principals, 2009, August). Regarding school safety, the NASSP provides a number of articles of guidance in the areas of: assessing student threats, how to evaluate the school culture, pandemic situations, and how to conduct evacuation drills (National Association of Secondary Principals, 2009).

**NAESP**

The National Association of Elementary School Principals (NAESP) is an organization of more than 30,000 pre-kindergarten to eighth grade elementary principals from across the United States (NAESP, 2009). The mission of the National Association of Elementary School Principals is to lead in the advocacy and support for elementary and middle level principals and other educational leaders in their commitment for all
children (NAESP, 2009). NAESP does provide information regarding school emergency situations such as flu pandemic preparation and on their website list a number of publication resources that can assist schools with emergency preparedness (NAESP, 2009, August).

**NEA**

The National Education Association (NEA) is an organization that actually began before the American Civil War in 1857. It is composed of educators from across the country from pre-school to higher education. The mission of the NEA is to advocate for education professionals and to unite its members and the nation to fulfill the promise of public education in order to prepare every student to succeed in a diverse and interdependent world (NEA, 2009). NEA produces a school safety crisis management guide that includes steps a school can take before, during and after a crisis (NEA, 2009).

**North Dakota State Emergency Planning**

The federal government requires all states to have an “Emergency Operations Plan” (EOP). An emergency plan describes the set of protocols for managing emergency events and details the specific actions to be undertaken in emergencies (Alexander, 2005). In a study conducted in 2008 by Dr. Carl Botan of George Mason University, only fifty eight percent of the states had an emergency operations plan (Contingency Planning and Management, 2008). Seven years after Sept. 11, and in the wake of many major natural disasters such as forest fires, hurricanes and flooding, nearly half of U.S. states either have no state-level emergency plan or do not provide it readily to the public (Botan & Penchalaphadu, 2008). North Dakota was one of the 21 states found as not having an EOP or failed to submit an EOP for the study. (Botan & Penchalaphadu, 2008).
It was later discovered North Dakota does have a state emergency operations plan (SEOP) (A. Anton, personal communication, June 30, 2009). Amy Anton of the North Dakota Division of Homeland Security stated that North Dakota has possessed an SEOP since 2000 (North Dakota Department of Emergency Services, 2007, January). The plan contains very little regarding public schools in North Dakota, other than a communication sequence including the Department of Public Instruction (North Dakota Department of Emergency Services, 2007).

**North Dakota Department of Public Instruction**

The North Dakota Department of Public Instruction (DPI) does not provide information for specific emergency preparedness other than information regarding the “Safe and Drug Free Schools program” (DPI, 2009). The purpose of Safe and Drug Free Schools and Communities (SDFSC) is to support programs that: prevent violence in and around schools; prevent the illegal use of alcohol, tobacco, and drugs; involve parents and communities; and, are coordinated with related efforts and resources to foster a safe and drug free learning environment that promotes student achievement. (DPI, 2009). To comply with the SDFSC program requirements, DPI works with issues surrounding: guns; school environment; climate & safety; weapons and violence; bullying/harassment; drugs, alcohol, tobacco; and character education (DPI, 2009). DPI is responsible to monitor districts according to federal protocol, provide technical assistance, training, and curriculum regarding these issues, and work to unify and support the prevention approaches between schools, parents and the community. The DPI Safe and Drug Free Schools and Communities unit works diligently to provide current and accurate information, resources, curriculum and technical assistance to every school district.
Likewise, the DPI Coordinated School Health unit is often contacted to assist with sensitive situations and issues; any school is only an incident away from a tragic event which could impact and change the lives of students and a community forever. The Safe and Drug Free Schools web site found on the North Department of Public Instruction website does contain internet links to the National Clearinghouse for Educational Facilities – Disaster Preparedness and Response for Students, the National Education Association – Crisis Communication Guide, Toolkit, Safe and Civil Schools, and the United States Department of Health and Human Services – Disaster and Emergencies (North Dakota Department of Public Instruction, 2009).

*County Emergency Services*

Counties in North Dakota are required by the Homeland Security Act of 2002 to have an Emergency Operations Plan (Ramsey County Emergency Management, 2007, September). The emergency operations plan assigns tasks and responsibilities to county and city agencies and establishes a broad concept for conducting preparedness, response, recovery and mitigation efforts if an emergency or disaster threatens or occurs (Ramsey County Emergency Management, 2007). Public schools are included in these plans so if a threat of a disaster or a disaster occurs, local and county officials know who to communicate with at their respective local school district (Ramsey County Emergency Management, 2007). Public schools are also included in these plans because it may be necessary for emergency officials to utilize school buildings for emergency command and control centers, housing for displaced people and treatment centers for those who may have been injured (Ramsey County Emergency Management, 2007).
County emergency management services also provide local school districts with table top exercises in order for schools and local emergency officials to:

- Demonstrate an understanding of response procedures established in the local emergency operations, plan and standard operating procedures for respective public and private response elements.
- Test the school district’s emergency response plan.
- Discuss and analyze communications procedures and protocol.
- Gain a better understanding of each response element’s role and responsibility in a school related emergency incident.
- Test interoperability and cooperation and control between local response elements and the local school district.
- And determine the following: how would response personnel perform; what decisions would need to be made and who would make them; are personnel trained to perform this task; are other resources needed and how will they be obtained; do plans, policies, and procedures support the performance of emergency response; and are response personnel familiar with policies and procedures. (Ramsey County Emergency Management, 2005, September, p. 2).

The Future of School Emergency Planning

A school’s priority is to provide students with the knowledge and skills to be successful and lead productive, responsible lives (Minnesota School Safety Center, 2008). Students who feel safe and attend school in healthy, orderly and supportive environments tend to be more successful and achieve academically (Minnesota School Safety Center, 2008). Karen M. Hawkins, of the Educational Research Services, states, “The goal of any school is to be a place of learning, and for students to learn they must feel emotionally and physically secure. In an arena where lethal shootings can share headlines with teasing and bullying, the safety of school children is a critical challenge for educators” (Minnesota School Safety Center, 2008, p. 2).

The future of school emergency planning will certainly include a great deal more time on prevention (Miners, 2007). It will be necessary for educators, administrators and
community members to reach out to loners, students who by no means are programmed to “snap” but can always benefit from adult involvement and support and adopt measures to monitor and examine other behaviors that could lead to violence (Miners, 2007).

To make schools safer in the future, it will be necessary to design or retrofit school buildings that not only provide a warm and inviting environment that stimulates learning and development, but also integrates security functions into remodeling and new construction plans (Kosar & Ahmed, 2000). Some design principles include: (1) School entrances and doorways must create a positive and welcoming first impression, while incorporating appropriate and necessary security devices, such as locking mechanisms, intercoms, access-card readers; (2) School buildings must include air-conditioning systems so that windows and doors can be kept shut; and (3) Other design features of a future school might include bathrooms for each classroom because the problems that can result in un-monitored large bathrooms and reduce or eliminate stairwells, which work well to hide people or perpetrators (Kosar & Ahmed, 2000, p. 25).

Schools will need to develop or update their safety and crisis plans so they are comprehensive and include the four phases of crisis management: mitigation/prevention, preparation, response, and recovery (Salmans, 2007). While most school districts in the United States have an emergency plan they have a tendency to put on the book shelf to collect dust (Trump, 2009, spring). School crisis plans are not being updated and reviewed annually (Trump, 2009, April). Time and distance from a major high-profile tragedy breeds complacency and fuels denial. Absent a major school shooting in the news or a politically hot school safety situation, it has become far too easy to over-shadow safety, security, and emergency planning (Trump, 2009, spring). Schools will need to
work with their county emergency management agency and/or local fire department to make their plans compliant with the concepts of the National Incident Management System (NIMS) (Trump, 2009, spring). Key components include a focus on use of "plain language," not codes, and developing incident command structures for managing emergency situations (Trump, 2009, spring).

In order for plans to be written and/or updated, implemented, reviewed at least twice a year, and be effective, it will be necessary to provide time in school calendars so all staff can be trained in the plan (Trump, 2009, spring). The academic demands resulting from No Child Left Behind have left school administrators with less time for non-instructional activities, such as the delivery of prevention support services and staff training on school security and emergency preparedness (Trump, 2009, April). Emergency and crisis training for school staff will not only need to include procedures, but also sessions on enhanced communication skills; methods of nonviolent intervention, including conflict resolution alternatives; and notification protocols (Salmans, 2007, p. 32). This type of future training is essential because every staff member must be prepared to identify and mitigate potentially threatening situations (Salmans, 2007, p. 32). School personnel will need staff development programs to combat fighting, bullying and behavioral issues that arise in schools every day (Colgan, 2005, p. 10). School staff will also become much better at collaboration between school and home and schools themselves. Collaboration is the most effective way to address safety issues (Colgan, 2005, p. 11).

In the future, school personnel will need training in the areas mentioned previously but will need professional development in "threat assessment."
assessment is a process for identifying, assessing, and managing students who may pose a threat of targeted violence in schools (Fein, Vossekuil, Pollack, Forum, Modzeleski, & Reddy, 2002). School personnel, in the future must get into the habit of taking seriously and responding to student tips (Miners, 2007).

In addition, training must include time for practice drills. Schools in the United States have been practicing fire drills. In the future it will be necessary for schools to practice lockdowns, evacuations, shelter-in-place, and other exercises. Some states have legislated requirements for local schools to conduct non-traditional drills, such as lockdowns (Trump, 2009, April). North Dakota does not have this requirement.

Future school emergency planning will include the acquisition and implementation of up-to-date or the state-of-the-art technology that will assist school personnel in monitoring or assessing behaviors of students and adults. Examples of this state of the art technology include face-recognition cameras. In 2007, Nashville public school systems installed these cameras into three of their buildings. These cameras take digital photos of students and workers and store them in the camera system. The cameras send an alert to those monitoring the system when they detect an unfamiliar face or someone barred from school grounds (Miners, 2007). Another example of modern technology that will be used in future school security systems, will include visitor management systems that have the ability to scan a visitor’s driver’s license to check visitors against sexual offender databases and produce visitor identification cards (Trump, 2009). And most, if not all schools in the future, will be equipped with some sort of security video cameras. Cameras are expensive, with some high-end systems costing $500,000 or more, plus annual maintenance fees. But some school administrators
seem to think installing security cameras will not only reduce violence in their schools, but will also deter other potential crimes like vandalism and theft (Rapp, 2009). Cameras do not come without controversy however. There are some, including the American Civil Liberties Union (ACLU), that believe by placing security closed circuit cameras in schools that school officials are violating a student’s right to privacy (Rapp, 2009). However, principals state the reduction in crime, student altercations, and time spent on these issues in schools far out weighs the negatives that come with security cameras (Rapp, 2009). Schools may also see the implementation of biometric devices, which allow access based on fingerprint, handprint, or iris identification (Colgan, 2005).

To make sure schools have trained staff, up-to-date safety plans, state of the art technology to increase the security of schools in the future, funds are needed. Federal and state legislators rode the “school safety bandwagon” in the months following the Columbine incident, providing new laws and funding streams for school safety (Trump, 2009). Following the terrorist attacks of 9/11, most legislators jumped on the “homeland security bandwagon” (Trump, 2009). These legislators have never come back to school safety and, in fact, have actually repeatedly cut funds for school violence prevention, security and preparedness (Trump, 2009). Because of these dwindling resources, school districts must establish line items in their operating budget for school security and emergency preparedness issues (Trump, 2009).

If the future of school emergency planning is to look like what has been described, it will be important for school officials to implement these measures without making schools look like prisons. School boards and school officials must also be able to answer the basic question of school security: are the security measures that lower the risk
of a rare event like a rampage shooting worth the loss of freedom they impose (Newman et al., 2004)?

The research design and methodology are presented in the next chapter.
CHAPTER III
RESEARCH DESIGN AND METHODOLOGY

Purpose of the Study

The purposes for this study were to determine: (1) If school districts in North Dakota have an emergency response plan; (2) How comprehensive that plan is; (3) How well prepared are North Dakota school districts for any type of disaster; (4) The extent to which North Dakota LEAD Center school emergency response training and resources have impacted school emergency preparedness in North Dakota; (5) If the level of North Dakota school district preparedness for emergencies is dependent on the size and location of the district; (6) If the comprehensiveness of emergency response plans for North Dakota school districts are associated with the size of the school district; and (7) If school administrators in North Dakota believe that school emergency response plans are important.

Research Questions

This study addressed the following research questions:

1. How many public school districts in North Dakota have an emergency response plan, and if they have an emergency response plan, how comprehensive is that plan?

2. How well prepared are public school districts in North Dakota for any type of disaster?
3. What is the impact the North Dakota LEAD Center school emergency training and resources has had on public schools districts in North Dakota?

4. Does the level of preparedness for emergencies vary in North Dakota based on size and location of school districts?

5. Does the comprehensiveness of emergency response plans vary by the size of the school district in North Dakota?

6. What is the level of importance placed on school emergency response plans by public school administrators in North Dakota?

Description of the Research Population

In the fall of 2007 there were 159 public school districts in North Dakota (Educational Directory, 2007). Those school districts vary in size from less than 50 students K-12 to over 10,000 students K-12. Some of those school districts share a superintendent. In districts which share an administrator, the superintendent was asked to complete the survey for each school district that he or she administers. In North Dakota there are several smaller school districts that share a superintendent. North Dakota school districts share superintendent for a number of reasons including, but not limited to, the size of the school districts, a state requirement to have at least a half-time superintendent, and cost savings for each school district.

Survey Instrument

The researcher developed the survey questions by reviewing current literature, peer review, and in consultation with Dr. Marv Erhardt, Director of the ND LEAD Center. The survey was piloted by sending it to five superintendents in Minnesota Public Schools. Minnesota superintendents were chosen to review the survey for two reasons:
(1) The researcher was familiar with several school administrators in that state; and (2) Minnesota has a school safety division in their state department of education (Minnesota Department of Education, 2006). Those five superintendents were in the Dilworth-Glyndon-Felton, Climax, Kittson Central, Bemidji, and Moorhead public school districts. Their responses were used to refine some of the questions. The survey contained 38 questions (Appendix C). The survey was broken down into seven areas: (1) Demographics; (2) Emergency incidents; (3) Emergency response plan; (4) Emergency response practices; (5) Overall rating of the respective school’s emergency response plan using a Likert scale; (6) Written responses regarding the strength of their plan and areas in which they would improve their plan; and (7) An opinion question asking the participant to rate the importance of having an emergency response plan, again using a Likert scale.

Administration of the Survey

The Emergency Response Survey questions were submitted to the UND Institutional Review Board and the IRB granted approval (#IRB – 200704-320) of the research. Anonymity was assured by use of a cover letter sent to each participant (Appendix B).

To begin the survey process, Dr. Marv Erhardt, executive director of the North Dakota LEAD center informed the superintendents in attendance at the North Dakota Association of School Administrators on January 30th, 2007, that a survey would be distributed to them regarding their school safety policies and their school district’s Emergency Operations Plan. The superintendent of each of these school districts was sent a letter from the researcher on September 5, 2007 inviting them to participate in the
Emergency Response Survey (Appendix B). The invitation letter described the purpose of the Emergency Response Survey (ERS) and the details on how the ERS would be administered. Each school administrator received an email from Dr. Marv Ehardt in October, 2007, again asking them to participate in the ERS and how to access the ERS on Survey Monkey. Survey Monkey is a web based tool used for the creation of online surveys (Westin, 2005). The ERS included information for superintendents informing them their participation was strictly voluntary, that they could discontinue the survey at any time, and that by completing the survey they were providing their consent to participate in the research project.

Methodology

The data were gathered using an emergency response preparedness survey which was distributed to all K-12 (159 school districts) public school superintendents in the North Dakota. There were 120 completed surveys or 75% returned. The data collected were quantified for analysis. Two short answer questions of the survey: (1) What are the strengths of your school district’s emergency response plans; and (2) What areas of your emergency response plan are most in need of improvement, required written responses? The responses to these two questions are found in Appendix D.

The data collected from the ERS were analyzed through descriptive analysis and by using the Statistical Package for the Social Sciences (SPSS). The collected data from the ERS is stored on the personal computer of the researcher and at the offices of the LEAD Center.

An analysis of variance (ANOVA) was used to determine if there were differences in the variables of size and location of school districts regarding their level of
preparedness for emergencies. A school district’s level of emergency preparedness was determined by utilizing the United States Government Accountability Office’s (GAO) nine recommended practices that school districts need to take to prepare for emergencies. This study used six of these recommended practices (United States Government Accountability Office, 2007, May). The following six practices were chosen because they coincided with questions in the ERS.

A. The district has an emergency response plan.
B. The emergency plan is updated and reviewed on a regular basis.
C. The school district conducts regular emergency drills.
D. The school district includes community partners, such as local governments and public health agencies, in planning.
E. The school district practices its emergency preparedness plan with first responders and community partners on a regular basis.
F. The school district performs an assessment of vulnerabilities or hazard risk analysis on their emergency preparedness plan.

Each school district’s level of emergency preparedness was rated on a scale of 0 to 6 dependent upon the number of the GAO recommended practices that each superintendent indicated, in the survey, that their respective emergency response plans included.

• School districts who indicated that their emergency plans include only one of the practices were given a rating of 1.
• School districts who reported that their emergency plans included three of the practices were rated a 3.
School districts who reported that their emergency plans included six of the practices were rated a 6.

School district sizes were condensed into three groups: small school districts (0-499 students); medium school districts (500 – 1499 students); and large school districts (1500 or greater students).

The state was divided into six areas to determine if there was a variance in the level of preparedness for emergencies for school districts based on their location.

The six areas of the state: northwest, north central, northeast, southwest, south central, and southeast.

An ANOVA was used to determine if there were significant differences in the variable of the size of school districts as it relates to the comprehensiveness of their emergency response plans. The emergency response preparedness survey defined a comprehensive plan as one which includes policies and procedures for responding to any type of disaster both during and after an emergency incident and lists responsibilities for all school personnel during each phase of incident. Three survey questions, from the emergency response plan section #1, #5, and #7, were asked of school districts to determine if their emergency response plans were comprehensive:

A. Does your plan include responses to both natural hazards (e.g. winter storms, tornadoes, fires, floods, etc.) and man-made hazards (e.g. acts of violence or terrorism, hazardous materials spills, etc.)?

B. Does your plan include steps for recovery from disasters?

C. Does your plan include an Incident Command System (ICS)?
The comprehensiveness of each school district’s emergency response was rated on a scale of 0 to 3 dependent upon the yes or no responses that each superintendent provided to the above questions. For example if the superintendent answered yes to all four of the questions, the comprehensiveness of that school district’s plan was rated a 3. If the superintendent answered yes to only one of the questions, the comprehensiveness of that school district’s plan was rated a 1. The size of the school districts was grouped in the same manner as the previous question, small, medium, and large.

Chapter IV contains the analysis of the data from the ERS and research questions.
CHAPTER IV

RESULTS

Introduction

The purposes for this study were to determine: (1) If school districts in North Dakota have an emergency response plan; (2) How comprehensive that plan is; (3) How well prepared are North Dakota school districts for any type of disaster; (4) The extent to which North Dakota LEAD Center school emergency response training and resources have impacted school emergency preparedness in North Dakota; (5) If the level of North Dakota school district preparedness for emergencies is dependent on the size and location of the district; (6) If the comprehensiveness of emergency response plans for North Dakota school districts are associated with the size of the school district; and (7) If school administrators in North Dakota believe that school emergency response plans are important.

Research conducted as a part of this study included gathering data from public school administrators from across the State of North Dakota. Participation was sought from all 159 public school districts in North Dakota with a 38 question survey of which 120 school districts responded.

Analysis of Data

An analysis of the entire ERS results and data was conducted to determine if any significant information resulted from the survey. The results of each survey question
were reported in tabular form and narrative format. The researcher provides the frequencies and percentages of responses for each survey question.

ERS question, demographic information #1: What is the enrollment of your school district? The school districts were separated into three enrollment sizes: small, those with enrollments of 0 to 499 students; medium, those with enrollments of 500 to 1499 students and large, those with enrollments of 1500 students or greater. Table 1 indicates the frequencies and percentages of three sizes of school districts in North Dakota.

Table 1. Frequencies and Percentages of the Number of Small, Medium and Large School Districts in the State of North Dakota (N = 120).

<table>
<thead>
<tr>
<th>School District Size</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small (1-499)</td>
<td>85</td>
<td>70.8</td>
</tr>
<tr>
<td>Medium (500-1499)</td>
<td>23</td>
<td>19.2</td>
</tr>
<tr>
<td>Large (&gt;1500)</td>
<td>12</td>
<td>10.0</td>
</tr>
</tbody>
</table>

Of the 120 respondents, 85 or 70.8% of the school districts were in the small category, 23 or 19.2% of the school districts were of medium size, and 12 school districts or 10% were considered large.

ERS question, demographic information #2. The state was divided into six areas: northwest – NW, north central – NC, northeast – NE, southwest – SW, south central – SC, and southeast – SE. Table 2 indicates the frequencies and percentages of the location of school administrators who responded to the survey.
Table 2. Frequencies and Percentages of the Location of School Districts in the State of North Dakota (N=120).

<table>
<thead>
<tr>
<th>School District Locations</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>NW</td>
<td>15</td>
<td>12.5</td>
</tr>
<tr>
<td>NC</td>
<td>24</td>
<td>20.0</td>
</tr>
<tr>
<td>NE</td>
<td>25</td>
<td>20.8</td>
</tr>
<tr>
<td>SW</td>
<td>10</td>
<td>8.3</td>
</tr>
<tr>
<td>SC</td>
<td>16</td>
<td>13.3</td>
</tr>
<tr>
<td>SE</td>
<td>30</td>
<td>25.0</td>
</tr>
<tr>
<td>Total</td>
<td>120</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Of the 120 school superintendents who responded, the largest number of school districts, 30 or 25% were found in the southeast section of the state. The southwest portion of the state had the lowest number of respondents with 10 or 8.3% school superintendents responding.

ERS question, emergency incidents #1, Have any of the following incidents occurred in your school district during the past five years? Seventy-seven school superintendents indicated they had experienced one or more of the listed emergency incidents in their district over the past five years. There were 43 superintendents who did not list any emergencies. Table 3 provides the frequency and percentages of the emergency situations that have taken place in responding schools districts in North Dakota over the past five years.
Table 3. Frequencies and Percentages of the Number and Types of Emergency Incidents That Have Occurred in School District Over the Past Five Years (N = 77).

<table>
<thead>
<tr>
<th>Emergency Incidents</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abduction or missing student</td>
<td>6</td>
<td>7.8</td>
</tr>
<tr>
<td>Bomb threat</td>
<td>20</td>
<td>26.0</td>
</tr>
<tr>
<td>Bus Accident</td>
<td>17</td>
<td>22.1</td>
</tr>
<tr>
<td>Explosion</td>
<td>2</td>
<td>2.6</td>
</tr>
<tr>
<td>Fire in a building while students were inside</td>
<td>6</td>
<td>6.5</td>
</tr>
<tr>
<td>Food poisoning</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>Hazardous materials</td>
<td>5</td>
<td>6.5</td>
</tr>
<tr>
<td>Suicide or death</td>
<td>46</td>
<td>59.7</td>
</tr>
<tr>
<td>Tornado</td>
<td>3</td>
<td>3.9</td>
</tr>
<tr>
<td>Violence or threat of violence with weapon</td>
<td>27</td>
<td>35.1</td>
</tr>
<tr>
<td>Weapons brought to school</td>
<td>39</td>
<td>50.7</td>
</tr>
</tbody>
</table>

There were 43 of the 120 school superintendents or 37% who did not respond to this question. Of the 77 school superintendents that responded 46 or 59.7% indicated they had experienced a suicide in the last five years. Thirty nine school superintendents or 50.7% indicated that had a weapon brought to school. There were 27 or 35.1% of the responding school superintendents reported they had a violent episode with a weapon or the threat of violence with a weapon. There were twenty school superintendents or 26% reported a bomb threat.
ERS question, emergency incidents #2: If you had more than one of any incident during the past five years, please indicate how many. The survey measured the total number and average number of emergency incidents that occurred in a school district more than once over the past five years. Table 4 indicates the average response count, the response total, and the number of respondents. For example, the emergency incident, “abduction or missing student,” indicates three school superintendents reported one incident of an abducted or missing student.

Table 4. Average and Total Number of Emergency Incidents That Occurred More Than Once Over the Past Five Years (N = 48).

<table>
<thead>
<tr>
<th>Emergency Incident</th>
<th>Response Average</th>
<th>Response Total</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abduction or missing student</td>
<td>1</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Bomb threat</td>
<td>2.33</td>
<td>28</td>
<td>12</td>
</tr>
<tr>
<td>Bus Accident</td>
<td>1.57</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td>Explosion</td>
<td>0.00</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Fire in a building while students were inside</td>
<td>0.50</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Food poisoning</td>
<td>0.00</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Hazardous materials</td>
<td>0.50</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Suicide or death</td>
<td>2.04</td>
<td>55</td>
<td>27</td>
</tr>
<tr>
<td>Tornado</td>
<td>0.00</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Violence or threat of violence with weapon</td>
<td>2.27</td>
<td>34</td>
<td>15</td>
</tr>
<tr>
<td>Threat of violence but no weapon</td>
<td>5.6</td>
<td>84</td>
<td>15</td>
</tr>
<tr>
<td>Weapons brought to school</td>
<td>2.46</td>
<td>69</td>
<td>28</td>
</tr>
</tbody>
</table>
Of the school superintendent responses, twenty seven school superintendents reported an average of 2.04 suicides or the deaths over a five year period. Twelve school superintendents indicated they had an average of 2.33 bomb threats over a five year period. There were fifteen school superintendents who reported a total of 84 incidents of threats of violence but no weapon, for an average of 5.6 incidents per school district over five years. Twenty eight school superintendents indicated that they had an average of 2.46 incidents of students bringing weapons to school. There were 72 or 60% of the school superintendents who did not respond to this question.

ERS question, emergency incidents #3: What are the security measures that you have in place in each of your school buildings? Please check all that apply. Table 5 lists the frequency and percentage of the types of security measures used in each of the responding school districts.

Of the 115 school superintendents who responded 109 or 94.8% of them indicated all visitors must check into the main office before they are allowed to travel in the building. Ninety or 78.3% of the school superintendents reported all but one entrance door is locked during school hours. Forty four or 38.3% of the school superintendents reported they utilize surveillance cameras in all their buildings. There were five school superintendents who did not respond to this question.

ERS question, emergency response plan #1: What is the current status of emergency preparedness in your district. Table 6 indicates the frequencies and percentages of the status of their respective emergency preparedness plan.
Table 5. Frequencies and Percentages of the Number and Types of Security Measured Used in Each of the School Districts (N = 115).

<table>
<thead>
<tr>
<th>Security Measures</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>All but one entrance door is locked during hours</td>
<td>90</td>
<td>78.3</td>
</tr>
<tr>
<td>Surveillance cameras are used in all buildings</td>
<td>44</td>
<td>38.3</td>
</tr>
<tr>
<td>Surveillance cameras are used in just the high school(s)</td>
<td>3</td>
<td>2.6</td>
</tr>
<tr>
<td>Surveillance cameras are used in the Middle school(s) and high school(s)</td>
<td>10</td>
<td>8.7</td>
</tr>
<tr>
<td>All visitors must check into the main office before they are allowed to travel in buildings.</td>
<td>109</td>
<td>94.8</td>
</tr>
<tr>
<td>Visitors must wear badges during regular hours to be in the building.</td>
<td>37</td>
<td>32.2</td>
</tr>
</tbody>
</table>

Of the superintendent responses, 48 school districts or 43.6% indicated they have a comprehensive emergency response plan. Thirty four school superintendents or 30.9% reported they have a quick reference guide as their emergency preparedness plan. There were 25 school districts or 22.7% indicated that a comprehensive emergency plan is in development. Three school superintendents or 2.7% reported they have no plan. There were 10 school superintendents who did not respond to this question.

ERS question, emergency response plan #2: What resources did you draw from in preparing your Emergency Response Plan? Table 7 illustrates the frequencies and
percentages of school districts that developed their emergency response plans based on one or more of the listed resources.

Table 6. Frequencies and Percentages of the Status of Emergency Preparedness (N = 110).

<table>
<thead>
<tr>
<th>Emergency Preparedness Plan</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>The district has a comprehensive Emergency Response Plan this is reviewed and updated annually</td>
<td>48</td>
<td>43.6</td>
</tr>
<tr>
<td>A comprehensive emergency plan is in development</td>
<td>25</td>
<td>22.7</td>
</tr>
<tr>
<td>The district has a “quick reference” guide (flip page document) but no comprehensive plan.</td>
<td>34</td>
<td>30.9</td>
</tr>
<tr>
<td>The district has no plan</td>
<td>3</td>
<td>2.7</td>
</tr>
</tbody>
</table>

Of the 106 responding school superintendents 38 of them or 35.9% reported they had taken part in the ND LEAD emergency response training. There were 71 school superintendents or 67% who reported they had an emergency response plan, but they were unsure of the original source. And 44 school superintendents or 41.5% indicated their plan was developed using resources provided by county or tribal emergency agencies. Several of the responding school superintendents indicated that their district utilized more than one of the listed resources to develop their plan. There were 14 school superintendents who did not respond to this question.
ERS question, emergency response plan #3: Did you do a hazard risk analysis during planning? Table 8 is the frequencies and percentages of school superintendents that completed or did not complete a hazard risk analysis during planning.

Table 7. Frequencies and Percentages of the Resources Used to Prepare Emergency Response Plan (N = 106).

<table>
<thead>
<tr>
<th>Resources</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Took part in ND LEAD Center Emergency Response training and adapted LEAD sample plans</td>
<td>38</td>
<td>35.9</td>
</tr>
<tr>
<td>Did not take part in the ND LEAD Training, but used sample (s) from other school (s) or district (s) that had taken part in LEAD training</td>
<td>18</td>
<td>17.0</td>
</tr>
<tr>
<td>Did not take part in ND LEAD training, But used sample (s) from other school (s) district (s), not sure of original source of the original source.</td>
<td>71</td>
<td>67.0</td>
</tr>
<tr>
<td>Developed the plan using resources provided by county or tribal emergency manager</td>
<td>44</td>
<td>41.5</td>
</tr>
<tr>
<td>Developed the plan on their own without any outside resources</td>
<td>3</td>
<td>2.8</td>
</tr>
</tbody>
</table>

Of the 109 school superintendents responded, 58 or 53.2% of them indicated they had completed a hazard risk analysis during the development phase for their emergency response plan. There were 11 school superintendents who did not respond to this question.
Table 8. Frequencies and Percentages of the Number of Schools That Completed a Risk Analysis During Planning (N = 109).

<table>
<thead>
<tr>
<th>Completed a Risk Analysis</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>58</td>
<td>53.2</td>
</tr>
<tr>
<td>No</td>
<td>51</td>
<td>46.8</td>
</tr>
</tbody>
</table>

ERS question, emergency response plan #4: Does your plan include responses to both natural hazards and man made hazards? Those school superintendents who answered yes have plans for both natural and man made hazards. Those who answered no do not have emergency plans that respond to natural and man made hazards. Table 9 indicated the frequencies and percentages of the number of school districts that have emergency plans for both natural and man made hazards.

Table 9. Frequencies and Percentages of the Number of Schools who Have Emergency Plan Responses to Both Natural and Man-made Hazards (N = 108).

<table>
<thead>
<tr>
<th>Respond to Natural &amp; Man-made Hazards</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>104</td>
<td>96.3</td>
</tr>
<tr>
<td>No</td>
<td>4</td>
<td>3.7</td>
</tr>
</tbody>
</table>

Of the 108 respondents, 104 or 96.3% of the school districts have emergency response plans which include responses to both natural and man-made hazards. Four school superintendents indicated they do not have a plan that includes a response to both type of hazards. There were 12 school districts who did not respond to this question.
ERS question, emergency response plan #5: Does your plan include steps for recovery from disasters? Table 10 shows the frequencies and percentages of the number of school districts that have emergency response plans that include steps for recovery after a disaster.

Table 10. Frequencies and Percentages of the Number of Schools Whose Plans Include Steps for Recovery From Disasters (N = 107).

<table>
<thead>
<tr>
<th>Recovery From Disasters</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>41</td>
<td>38.3</td>
</tr>
<tr>
<td>No</td>
<td>66</td>
<td>61.7</td>
</tr>
</tbody>
</table>

Of the responding school superintendents 41 or 38.3% of them indicated their emergency response plans do include recovery plan from disasters. Sixty six or 61.7% of the school districts demonstrated they do not include a recovery plan from disasters.

There were 13 school superintendents who did not respond to this question.

ERS question, emergency response plan #6: Was your plan developed in cooperation with local emergency responders? Table 11 illustrates the number of school districts who worked with or did not work with their local emergency responders to develop their emergency response plans.

Of the 109 school superintendents who responded to this question 82 or 75.2% of them indicated they did develop their emergency response plans with the help of local emergency responders. There were 11 school superintendents who did not respond to this question.
Table 11. Frequencies and Percentages of the Number of Schools That Developed Their Plan in Cooperation With Local Emergency Responders (N = 109).

<table>
<thead>
<tr>
<th>Developed plan with Local Emergency Responders</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>82</td>
<td>75.2</td>
</tr>
<tr>
<td>No</td>
<td>27</td>
<td>24.8</td>
</tr>
</tbody>
</table>

ERS question, emergency response plan #7: Does your plan include an Incident Command System (ICS)? Table 12 indicates the frequencies and percentages of the school district that include or do not include an ICS in their emergency response plans.

Table 12. Frequencies and Percentages of the Number of Schools That Include an ICS in Their Plan (N = 109).

<table>
<thead>
<tr>
<th>Include ICS in Their Plan</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>66</td>
<td>60.6</td>
</tr>
<tr>
<td>No</td>
<td>43</td>
<td>39.5</td>
</tr>
</tbody>
</table>

Of the 109 respondents, 66 or 60.6% of the school superintendents indicated they do include an ICS in their emergency response plan. Forty-three or 39.5% demonstrated they do no include an ICS in their emergency response plans. There were 11 school superintendents who did not respond to this question.

ERS question, emergency response plan #8: Does your plan include a system of accountability for all students and adults in the building? Table 13 illustrates the
frequencies and percentage of the school districts that include or do not include a system of accountability for all students and adults in their plans.

Table 13. Frequencies and Percentages of the Number of Schools That Include a System of Accountability for Students and Adults in Their Plans (N = 109).

<table>
<thead>
<tr>
<th>Student and Adult Accountability Included</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>95</td>
<td>87.2</td>
</tr>
<tr>
<td>No</td>
<td>14</td>
<td>12.8</td>
</tr>
</tbody>
</table>

The results indicated that 95 or 87.2% of the responding school districts do include a student and adult accountability system in their emergency response plans, while 14 or 12.8% of the school districts do not include a system of accountability for all students and adults. There were 11 school superintendents who did not respond to this question.

ERS question, emergency response plan #9: Does your plan include a policy and system for releasing children to their parents during or after an emergency incident?

Table 14 illustrates the frequencies and percentages of school districts that do or do not include a policy and a system to release children to their parents during or after an emergency incident.

Of the responding school superintendents 87 or 82.1% of them have policies and a system to release children to their parents during or after an emergency incident.

Nineteen or 17.9% of the school superintendents do not include a release system for children. There were 14 school superintendents who did not respond to this question.
Table 14. Frequencies and Percentages of the Number of Schools That Include a Policy and System of Releasing Children to Parents in Their Plan (N = 106).

<table>
<thead>
<tr>
<th>Policy and System to Release Children to Parents</th>
<th>( f )</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>87</td>
<td>82.1</td>
</tr>
<tr>
<td>No</td>
<td>19</td>
<td>17.9</td>
</tr>
</tbody>
</table>

ERS question, emergency response plan #10: Does your plan include both primary and secondary evacuation routes. Table 15 illustrates the frequencies and percentages of the number of schools that include both primary and secondary evacuation routes in their emergency response plans.

Table 15. Frequencies and Percentages of the Number of Schools That Include Both Primary and Secondary Evacuation Routes in Their Plan (N = 109).

<table>
<thead>
<tr>
<th>Include Both Primary and Secondary Evacuation routes</th>
<th>( f )</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>77</td>
<td>70.6</td>
</tr>
<tr>
<td>No</td>
<td>32</td>
<td>29.4</td>
</tr>
</tbody>
</table>

Of the 109 respondents 77 school superintendents or 70.6% indicated that they include both primary and secondary evacuation routes in their emergency response plan. There were 32 or 29.4% of the school superintendents responding to this question who indicated that they do not include both primary and secondary evacuation routes in their plan. Eleven school superintendents did not respond to this question.
ERS question, emergency response plan #11: Does your plan include designated assembly areas? Table 15 demonstrates frequencies and percentages of the school districts that include designated assembly areas in their emergency response plan.

Table 16. Frequencies and Percentages of the Number of Schools That Have Designated Assembly Areas in Their Plan (N = 109).

<table>
<thead>
<tr>
<th>Designated Assembly Areas</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>98</td>
<td>89.9</td>
</tr>
<tr>
<td>No</td>
<td>11</td>
<td>10.1</td>
</tr>
</tbody>
</table>

Of the 109 school superintendents responses 98 or 89.9% indicated that they do have designated assembly areas in their emergency response plan. Eleven school superintendents indicated that they do not have designated assembly areas. There were 11 school superintendents who did not answer this question.

ERS question, emergency response plan #12: Does your plan include designated off-campus evacuation sites? Table 17 measures the frequencies and percentages of those responding school districts that include designated off-campus evacuation sites in their plans.

Table 17. Frequencies and Percentages of the Number of Schools That Include Designated Off-Campus Evacuation Sites in Their Plan (N = 107).

<table>
<thead>
<tr>
<th>Completed a Risk Analysis</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>88</td>
<td>82.2</td>
</tr>
<tr>
<td>No</td>
<td>19</td>
<td>17.8</td>
</tr>
</tbody>
</table>
Of the 107 responding school superintendents, 88 or 82.2% reported they do include designated off-campus evacuation sites in their emergency response plans. There were 19 school superintendents who indicated they do not have off-campus evacuation sites designated. Thirteen school superintendents did not answer the question.

ERS question, emergency response plan #13: Does your plan include plans for cold weather evacuation? Table 18 illustrates the frequencies and percentages of school districts that have a cold weather evacuation procedure in their plan.

Table 18. Frequencies and Percentages of the Number of Schools That Include Cold Weather Evacuation Plans in Their Plan (N = 108).

<table>
<thead>
<tr>
<th>Include Cold Weather Evacuation</th>
<th>$f$</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>73</td>
<td>67.6</td>
</tr>
<tr>
<td>No</td>
<td>35</td>
<td>32.4</td>
</tr>
</tbody>
</table>

Of the 108 responding school superintendents, 73 or 67.6% indicated their plans do include cold weather evacuation procedures in their emergency response plans. There were 35 school superintendents who indicated that they do not include cold weather evacuation procedures in their plans. Twelve school superintendents did not answer the question.

ERS question, emergency response plan #14: Does each building in your school district have a school emergency team? Table 19 demonstrates the frequencies and percentages of the number of the responding school districts that have a school building emergency team included in their emergency response plan.
Table 19. Frequencies and Percentages of the Number of Schools That Have a School Building Emergency Team \( (N = 108) \).

<table>
<thead>
<tr>
<th>School Building Emergency Team</th>
<th>( f )</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>84</td>
<td>77.8</td>
</tr>
<tr>
<td>No</td>
<td>24</td>
<td>22.2</td>
</tr>
</tbody>
</table>

Of the 108 school superintendents who responded to the survey 84 or 77.8% of them indicated they do have a school emergency team in their school buildings. Twenty four of the respondents reported they do not have a school emergency team in their buildings. There were 12 school superintendents did not respond.

ERS question, emergency response plan #15: If you answered yes to the previous question, check with school employees are members of the school emergency team. If you answered no to the previous question, skip this question. Only 84 school superintendents who answered “yes” the previous question were to indicate which employees are members of the school building emergency team. Table 20 illustrates the frequencies and percentages of which school building employees are members of the school emergency team.

Of the 84 school superintendents responded, 84 or 100% of them reported they have the principal on their building emergency team. There were 68 or 81% of the school districts that they have a teacher on their building emergency team. Fifty nine school superintendents or 70.2% reported they have the head custodian on their team. Of the 84 responses, 53 school superintendents or 63.1% of them indicated they have the head secretary of the building on the school emergency team. Thirty eight school
superintendents or 45.2% of them reported they have some other position that was not listed as option, as a member of their emergency team. There were 36 school superintendents who responded “no” to the previous question and did not answer this question.

Table 20. Frequencies and Percentages Regarding Which School Building Employees are Members of the School Emergency Team (N = 84).

<table>
<thead>
<tr>
<th>Members of the School Emergency Team</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal</td>
<td>84</td>
<td>100</td>
</tr>
<tr>
<td>Asst. Principal</td>
<td>10</td>
<td>11.9</td>
</tr>
<tr>
<td>Head Secretary</td>
<td>53</td>
<td>63.1</td>
</tr>
<tr>
<td>Head Custodian</td>
<td>59</td>
<td>70.2</td>
</tr>
<tr>
<td>Teacher (s)</td>
<td>68</td>
<td>81.0</td>
</tr>
<tr>
<td>School Nurse, if available</td>
<td>13</td>
<td>15.5</td>
</tr>
<tr>
<td>School Resource Officer, if available</td>
<td>15</td>
<td>17.9</td>
</tr>
<tr>
<td>Other position not listed</td>
<td>38</td>
<td>45.2</td>
</tr>
</tbody>
</table>

ERS question, emergency response plan # Does each classroom in your district have an emergency kit? Table 21 illustrates the percentage and frequencies of the number of school districts who provide an emergency kit in each classroom in district.
Table 21. Frequencies and Percentages of the Number of Schools That Have Emergency Kits in Each Classroom (N = 105).

<table>
<thead>
<tr>
<th>Emergency Kits in the Classroom</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>42</td>
<td>40.0</td>
</tr>
<tr>
<td>No</td>
<td>63</td>
<td>60.0</td>
</tr>
</tbody>
</table>

Of the 105 responding school superintendents, 42 districts or 40% of them reported they do have emergency kits in each classroom. Sixty three of the school districts, or 60% indicated that they do not have emergency kits in each classroom. There were 15 school superintendents who did not answer this question.

ERS question, emergency response plan #17: Does each building have a school emergency kit? Table 22 indicates the frequencies and percentages of the school districts that have a school emergency kit for each building.

Table 22. Frequencies and Percentages of the Number of School Districts That Have a School Emergency Kit in Each Building (N = 107).

<table>
<thead>
<tr>
<th>Building Emergency Kits</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>57</td>
<td>53.3</td>
</tr>
<tr>
<td>No</td>
<td>50</td>
<td>46.7</td>
</tr>
</tbody>
</table>

Of the 107 respondents, 57 school superintendents or 53.3% reported they do provide building emergency kits to each building in the district. Fifty school districts or 46.7% of them indicated that they do not supply building emergency kits to each building in their district. There were 13 school superintendents who did not answer the question.
ERS question, emergency response plan #18: Is your plan reviewed and updated at least annually? Table 23 illustrates the frequencies and percentages of the school districts that do or do not review and update their emergency response plans annually.

Table 23. Frequencies and Percentages of the Number of Schools That Update Their Plans Annually (N = 108).

<table>
<thead>
<tr>
<th>Update Plans Annually</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>73</td>
<td>67.6</td>
</tr>
<tr>
<td>No</td>
<td>35</td>
<td>32.4</td>
</tr>
</tbody>
</table>

Of the 108 respondents, 73 school superintendents or 67.6% indicated they do review and update their emergency response plan annually. There were 35 school districts or 32.4% who reported they do not review or update their plans at least annually. Twelve school superintendents did not answer the question.

ERS question, emergency response plan #19: Has your plan been reviewed by your local emergency manager? Table 24 illustrates the number of school districts that had their emergency response plans reviewed by their local emergency managers.

Table 24. Frequencies and Percentages of the Number of Schools That Have had Their Emergency Plan Reviewed by the Local Emergency Manager (N = 107).

<table>
<thead>
<tr>
<th>Plan Reviewed by Local Emergency Mgr.</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>56</td>
<td>52.3</td>
</tr>
<tr>
<td>No</td>
<td>51</td>
<td>47.7</td>
</tr>
</tbody>
</table>
Of the 107 respondents, 56 school superintendents or 52.3% reported they do have their emergency response plan reviewed by their local emergency manager. Fifty one or 47.7% of the school superintendents indicated they do not have their plans reviewed. There were 13 school superintendents who did not answer the question.

ERS question, emergency response practice #1: Which of the following strategies have been used to practice you plan? Table 25 illustrates the frequencies and percentages of the types of strategies that are used by school districts to practice their emergency plan. School districts can have more than one strategy.

Of the 102 responding school superintendents, 87 districts or 85.3% reported they use an orientation session, which includes a review of the policies, plans, roles, and the

Table 25. Frequencies and Percentages of the Types of Strategies That are Used by Schools to Practice Their Emergency Plan (N = 102).

<table>
<thead>
<tr>
<th>Strategies used to Practice Their Plan</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orientation session – Review policies, plans, roles and responsibilities</td>
<td>87</td>
<td>85.3</td>
</tr>
<tr>
<td>Drill – practicing a single emergency response</td>
<td>82</td>
<td>80.4</td>
</tr>
<tr>
<td>Tabletop exercise – discussion and review of plans, policies and procedures based on a hypothetical incident</td>
<td>41</td>
<td>40.2</td>
</tr>
<tr>
<td>Functional exercise – simulation of a school emergency incident under high-stress conditions; one or more emergency responders may participate</td>
<td>20</td>
<td>19.6</td>
</tr>
<tr>
<td>Full-scale exercise – school (s) participates in a simulation of a community emergency incident under high-stress conditions.</td>
<td>17</td>
<td>16.7</td>
</tr>
</tbody>
</table>
responsibilities of personnel in their emergency response plan to practice their plan. Eighty two percent of the school superintendents indicated they use a single emergency response drill (e.g. fire, evacuation, or lock down) to practice their drill. Forty-one percent of the school superintendents indicated they use a tabletop exercise to practice their plan. There were 17 school districts or 16.7% that use a full scale exercise, which includes the school district’s involvement in a simulation of a community emergency incident under high-stress conditions. Eighteen school superintendents did not answer this question.

ERS question, emergency response practice #2: Is at least one orientation session conducted each year for all school personnel. Table 26 reports the frequencies and percentages of the number of school districts that have at least one orientation session for all staff once a year.

<table>
<thead>
<tr>
<th>One Orientation Session for all Employees</th>
<th>$f$</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>70</td>
<td>68.0</td>
</tr>
<tr>
<td>No</td>
<td>33</td>
<td>32.0</td>
</tr>
</tbody>
</table>

Of the school superintendents responses, 70 districts or 68% indicated they do conduct at least one emergency response plan orientation session for all employees at least once a year. Thirty three school superintendents or 32% reported they do not hold orientation sessions for their employees. There were seventeen school superintendents who did not answer this question.
ERS question, emergency response practice #3: Is a special orientation session conducted for all new school personnel? Table 27 illustrates the number of school districts who provide a special orientation session for all new school personnel.

Table 27. Frequencies and Percentages of the Number of Schools That Hold a Special Orientation Session for New Employees (N = 102).

<table>
<thead>
<tr>
<th>Special Orientation for New Employees</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>39</td>
<td>38.2</td>
</tr>
<tr>
<td>No</td>
<td>63</td>
<td>61.8</td>
</tr>
</tbody>
</table>

Of the school superintendent responses, 39 or 38.2% indicated they do hold a special orientation session for new employees regarding their emergency response plans. Sixty three school superintendents or 61.8% reported they do not hold orientation sessions for new employees. There were 18 school superintendents who did not answer the question.

ERS question, emergency response practice #4: How many drills are conducted each year in each of the following categories? Table 28 illustrates the frequencies of school districts who conducted each of the drills, the frequencies of drills that are conducted in each category, and the average number of drills in each.

Of the 99 responses, 91 school superintendents reported they hold an average of 4.47 evacuation drills per school district, per year. Ninety four school superintendents indicated they practice tornado sheltering an average of 1.65 drills per year. Eighty three schools reported they practice lockdown drills an average of 1.57 times per year. Of the 99 school superintendent responses, 70 school districts indicated they practice shelter-in-
place an average of .86 times per year. There were 21 school superintendents who did not answer the question.

Table 28. Frequencies and Averages of the Number of Drills That are Conducted Each Year for: Evacuation, Tornado Sheltering, Lockdown, and Shelter-in-Place (N = 99).

<table>
<thead>
<tr>
<th>Number of drills for Each Category</th>
<th>Response Average</th>
<th>Frequency of Responses</th>
<th>Frequency of School Districts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evacuation</td>
<td>4.47</td>
<td>407</td>
<td>91</td>
</tr>
<tr>
<td>Tornado sheltering</td>
<td>1.65</td>
<td>155</td>
<td>64</td>
</tr>
<tr>
<td>Lockdown</td>
<td>1.57</td>
<td>130</td>
<td>83</td>
</tr>
<tr>
<td>Shelter-in-place</td>
<td>0.86</td>
<td>60</td>
<td>70</td>
</tr>
</tbody>
</table>

ERS question, emergency response practice #5: During evacuation drills, is the accountability system regularly tested? An effective accountability system requires that teachers take their Classroom Emergency Kit with them when evacuating, teachers take roll at the designated assembly area, and someone from the School Emergency Team takes the School Emergency Kit with them. Someone from the school emergency team verifies everyone is accounted for. Table 29 illustrates the frequencies and percentages of school districts that test their accountability system during drills.

Of the 100 responding school superintendents, 55 or 55% indicated they do test their student accountability system during evacuation drills. Forty five or 45% of the school superintendents reported they do not test their student accountability system during evacuation drills. There were 20 school superintendents who did not respond to this question.
Table 29. Frequencies and Percentages of the Number of Schools That Test Their Accountability System During Drills (N = 100).

<table>
<thead>
<tr>
<th>Accountability System</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>55</td>
<td>55.0</td>
</tr>
<tr>
<td>No</td>
<td>45</td>
<td>45.0</td>
</tr>
</tbody>
</table>

ERS question, emergency response practice #6: During evacuation drills, do teachers practice evacuating with a partner teacher? Table 30 illustrates the frequencies and percentages of school districts that use partner teachers when practicing evacuation drills.

Table 30. Frequencies and Percentages of the Number of Schools That Use Partner Teachers When Practicing Evacuation Drills (N = 100).

<table>
<thead>
<tr>
<th>Partner Teachers for Evacuation Drills</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>25</td>
<td>25.0</td>
</tr>
<tr>
<td>No</td>
<td>75</td>
<td>75.0</td>
</tr>
</tbody>
</table>

Of the 100 responding school superintendents, 25 or 25% reported they do use partner teachers when practicing evacuation drills. Seventy-five school superintendents or 75% indicated they do not use partner teachers when practicing evacuation drills. There were twenty school superintendents did not answer the question.

ERS question, emergency response practice #7: During evacuation drills, are exits sometimes blocked to test secondary evacuation route plans and the partner teacher system? Table 31 shows the frequencies and percentages of school districts that during
evacuation drills, exits are sometimes blocked to test secondary evacuation route plans and the partner teacher system.

Table 31. Frequencies and Percentages of the Number of Schools That Block Exits During Evacuation Drills to Test Secondary Routes and Partner Teacher System (N = 100).

<table>
<thead>
<tr>
<th>Exits Blocked to Test Evac. Drills</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>45</td>
<td>45.0</td>
</tr>
<tr>
<td>No</td>
<td>55</td>
<td>55.0</td>
</tr>
</tbody>
</table>

Of the 100 responses, 45 or 45% of the superintendents indicated their school district does sometimes block exits to test secondary evacuation routes and the partner teacher system during evacuation drills. Fifty five or 55% of the responding superintendents reported their school district does not block exits to test secondary evacuation routes and the partner teacher system during evacuation drills. Twenty school superintendents did not answer the question.

ERS question, emergency response practice #8: Are cold weather evacuation drills conducted? Table 32 illustrates the frequencies and percentages of school districts that conduct cold weather evacuation drills.

Of the 102 responding school superintendents, 44 or 43.1% reported their school districts do conduct cold weather evacuation drills. There were 58 school superintendents or 56.9% who indicated their school district does not conduct cold weather evacuation drills. Eighteen school superintendents did not answer the question.
Table 32. Frequencies and Percentages of the Number of Schools That Include Cold Weather Evacuation Plans in Their Plan (N = 102).

<table>
<thead>
<tr>
<th>Cold Weather Evacuation Drills Conducted</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>44</td>
<td>43.1</td>
</tr>
<tr>
<td>No</td>
<td>58</td>
<td>56.9</td>
</tr>
</tbody>
</table>

ERS question, emergency response practice #9: How many of the following exercises are conducted during a typical year? Table 33 illustrates the number of schools that participate in one or more of the listed drills, the total number of drills are conducted in one or more of the listed exercise, and the average number of drills conducted for each of the listed exercise.

Table 33. Average Number of Exercises, Frequencies of Exercises, and Total Number of Exercises (N = 95).

<table>
<thead>
<tr>
<th>Types of Exercises Conducted/Year</th>
<th>School Dist. Responding</th>
<th>Total Responses</th>
<th>Average Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tabletop – discussion based on a hypothetical incident</td>
<td>84</td>
<td>83</td>
<td>0.99</td>
</tr>
<tr>
<td>Functional – simulation of a school emergency incident</td>
<td>87</td>
<td>115</td>
<td>1.32</td>
</tr>
<tr>
<td>Full-scale – participate in a simulation of a community emergency incident</td>
<td>75</td>
<td>24</td>
<td>0.32</td>
</tr>
</tbody>
</table>

Of the 95 respondents, 84 or 88% indicated they practice a tabletop exercise and average of 0.99 times per year. There were 87 or 91.5% responders who reported they
practice a functional drill an average of 1.32 times per year. Seventy five or 79% responders indicated they practice a full scale simulation of a community incident and average of 0.32 times per year. There were 25 responders who did not answer this question.

ERS question, emergency response practice #10: How often are emergency responders involved in drills? Table 34 illustrates the frequencies and the percentages of school districts that never involve emergency responders in their emergency drills, involve their emergency responders once per year, or involve them more than once per year.

Table 34. Frequencies and Percentage of how Many School Districts Involve Emergency Responders in Drills (N = 101).

<table>
<thead>
<tr>
<th>Involve Emergency Responders</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>41</td>
<td>40.6</td>
</tr>
<tr>
<td>Once per year</td>
<td>50</td>
<td>49.5</td>
</tr>
<tr>
<td>More than once per year</td>
<td>10</td>
<td>9.9</td>
</tr>
</tbody>
</table>

Of the 101 responders, 41 school superintendents or 40.6% reported they never involve emergency responders in their emergency drills. Fifty school superintendents or 49.5% indicated they involve emergency responders once per year in their drills. There were 10 school superintendents or 9.9% that reported that they involve emergency responders more than once per year. Nineteen school superintendents did not answer the question.
ERS question, overall #1: Please provide an overall rating for the quality and comprehensiveness of your emergency response plan document and your policies and procedures for practicing the plan as well as regularly reviewing and updating it. Table 35 categorizes how the school administrators rated the quality and comprehensiveness of their respective emergency response plans.

Of the 102 administrator responses, 23 or 22.6% identified their plans as fair, 38 or 37.3% rated their plans as moderate, and 29 or 28.4% considered their plans to be good. There were 18 school administrators who did not answer the question.

Table 35. Rating of Emergency Response Plan by Respective School Administrators (N = 102).

<table>
<thead>
<tr>
<th>Rating of Emergency Plan</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inferior</td>
<td>10</td>
<td>9.8</td>
</tr>
<tr>
<td>Fair</td>
<td>23</td>
<td>22.6</td>
</tr>
<tr>
<td>Moderate</td>
<td>38</td>
<td>37.3</td>
</tr>
<tr>
<td>Good</td>
<td>29</td>
<td>28.4</td>
</tr>
<tr>
<td>Superior</td>
<td>2</td>
<td>2.0</td>
</tr>
</tbody>
</table>

The researcher examined the responses to the open-ended questions which were provided in the school administrator survey. The two questions were, “What do you believe are the strengths of your plan” and “What areas of your plan do you believe are most in need of improvement.” Regarding the strengths of their emergency response plan the top four categories of responses were: (1) Of the 78 school administrators who responded to this question, 31 of the them indicated their school district has an
emergency response plan gave personnel some direction during an emergency or a crisis; (2) The 78 school administrators who responded to the strength question, 8 of them stated their emergency response plan includes other community agencies; (3) Seven of the responses from the school administrators, indicated one of their strengths of their plan was practicing emergency drills; and (4) Of the 78 school administrators who answered the question regarding the strength of their emergency response plan, five indicated their plan had no strengths at all. Regarding the areas of their emergency response plans, the school administrators believed are most in need of improvement, the top three response categories were: (1) Of the 75 school administrators who answered this question, 23 stated their school district does not hold enough practice drills; (2) Five of the 75 school administrators who answered this question indicated they do not hold cold weather drills; and (3) Of the 75 school administrators who answered this question, four wrote they do not have emergency kits for their personnel or classrooms.

ERS question, overall #4: On a scale of one to five, with one being not important and five being very important, how important do you believe school emergency response plans are for North Dakota School Districts? Table 36 illustrates the opinions of the responding school administrators regarding the importance of school emergency response plans for North Dakota school districts.

Of the 99 school administrators who responded to this question, 33 or 33.3% reported they believe that emergency response plans are extremely important. Forty or 40.4% of the responding school administrators believe school emergency plans are very important. There were 24 school administrators or 24.2% who indicated they believe
Table 36. Frequency and Percentages of the Opinions of School Administrators Regarding the Importance of Emergency Response Plans (N = 99).

<table>
<thead>
<tr>
<th>Importance Level</th>
<th>N</th>
<th>%</th>
<th>N</th>
<th>%</th>
<th>N</th>
<th>%</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Important</td>
<td>0</td>
<td>0.0</td>
<td>2</td>
<td>2.0</td>
<td>24</td>
<td>24.2</td>
<td>40</td>
<td>40.4</td>
</tr>
</tbody>
</table>

School emergency response plans are moderately important. Two or 2% of the responding school administrators reported they believe school emergency response plans are fairly important. There were 21 school district administrators who did not answer the question. The researcher assigned numerical values to each of the categories of importance to determine the average of the responses (The assigned values were: Not important = 1, fairly important = 2, moderately important = 3, very important = 4, and extremely important = 5).

Table 37 illustrates the analysis of variance regarding the level of preparedness for emergencies based on the size of the school districts in North Dakota. Each school district's level of preparedness was rated 0 to 6. The rating scale was based on the number of the emergency practices that each school district indicated, via the survey, that they include in their emergency response plan. A further explanation of the rating scale is found in Chapter III.

Of the 120 responding school districts 85 were small districts. Their mean score for their level of preparedness was 3.4 out of a possible 6 (M = 3.4, SD = 1.86). There were 23 medium responding school districts who reported a mean score of 4.2 out of a possible score of 6 for their level of preparedness (M = 4.2, SD = 1.82). Twelve large
school districts reported a mean score of 4.4 out of a possible score of 6 for their level of preparedness ($M = 4.4$, $SD = 1.98$).

Table 37. Analysis of Variance (F) Regarding the Level of Preparedness for Emergencies Based on the Size of School Districts in North Dakota (N = 120).

<table>
<thead>
<tr>
<th>District Size</th>
<th>n</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small</td>
<td>85</td>
<td>3.38</td>
<td>1.86</td>
</tr>
<tr>
<td>Medium</td>
<td>23</td>
<td>4.17</td>
<td>1.83</td>
</tr>
<tr>
<td>Large</td>
<td>12</td>
<td>4.42</td>
<td>1.98</td>
</tr>
<tr>
<td>Total</td>
<td>120</td>
<td>3.63</td>
<td>1.89</td>
</tr>
</tbody>
</table>

Table 38 illustrates the ANOVA summary for the interaction and main effects regarding the level of preparedness for emergencies for large, medium, and large school district.

Table 38. ANOVA Summary Table for Interaction and Main Effects Regarding the Level of Preparedness for Emergencies for Large, Medium and Large School Districts.

<table>
<thead>
<tr>
<th>Sum of Squares</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>19.69</td>
<td>2</td>
<td>9.85</td>
<td>2.83</td>
</tr>
<tr>
<td>Within groups</td>
<td>406.17</td>
<td>117</td>
<td>3.47</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>425.87</td>
<td>119</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 38 indicates there is no statistical difference at the 5% level between the size of the school districts and level of preparedness $F(2, 117) = 2.84, p = .063$. 

91
As indicated in Table 38 the ANOVA did not reach statistical significance

\[ F(2, 117) = 2.84, p = .063. \] However, because there was a difference between the means of small, medium, and large school districts, there was some possible effect. Because of this possible effect, the researcher reran the analysis of the data regarding the emergency preparedness of small, medium, and large school districts to determine effect size and power. Table 39 illustrates the results of that analysis.

Table 39. ANOVA Summary Table for Dependent Variable Emergency Preparedness and Independent Variable School Size (N=120).

<table>
<thead>
<tr>
<th>Source</th>
<th>Degrees of Freedom</th>
<th>( F )</th>
<th>( P )</th>
<th>Effect Size</th>
<th>Observed Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>School Size</td>
<td>2</td>
<td>2.84</td>
<td>.063</td>
<td>.046</td>
<td>.547</td>
</tr>
<tr>
<td>Within treatments</td>
<td>117</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 39 illustrates the effect size (partial eta squared) for this test was .046, which falls in the range of small to typical values for the behavioral sciences, which demonstrates that there is some relationship of the size of schools and their emergency preparedness. The range of values for partial eta square is zero (no relationship at all) to 1.00 (the strongest possible relationship). The most common rule of thumb based on what are usually found for effect sizes in behavioral research was developed by Jacob Cohen. For partial eta squared he suggested using values up to about .02 as “smaller than typical,” values up to about .13 as typical,” values up to about .26 as “larger than
typical," and values equal to or greater than .49 as "much larger than typical" (Cohen, 1988). The power result was .547. Power values have a range of zero to 1.00. It is desirable for a test to have high power or above .80 (Agresti & Finlay, 1997). Because this value is less than .80, the effect size is not meaningful. The size of effect, .046, is generally considered small to typical within the behavioral sciences and education.

Table 40 illustrates the analysis of variance regarding the level of preparedness for emergencies based on the location of the school districts in North Dakota. Each school district's level of preparedness was rated 0 to 6. The rating scale was based on the number of the emergency practices each school district indicated, via the survey, they include in their emergency response plan. A further explanation of the rating scale is found in Chapter III.

Table 40. Analysis of Variance (F) Regarding the Level of Preparedness for Emergencies Based on the Location of School Districts in North Dakota (N = 120).

<table>
<thead>
<tr>
<th>Location</th>
<th>n</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>NW</td>
<td>15</td>
<td>4.07</td>
<td>1.79</td>
</tr>
<tr>
<td>NC</td>
<td>24</td>
<td>3.83</td>
<td>1.66</td>
</tr>
<tr>
<td>NE</td>
<td>25</td>
<td>3.16</td>
<td>2.14</td>
</tr>
<tr>
<td>SW</td>
<td>10</td>
<td>3.70</td>
<td>2.14</td>
</tr>
<tr>
<td>SC</td>
<td>16</td>
<td>3.38</td>
<td>1.86</td>
</tr>
<tr>
<td>SE</td>
<td>30</td>
<td>3.77</td>
<td>1.87</td>
</tr>
<tr>
<td>Total</td>
<td>120</td>
<td>3.63</td>
<td>1.89</td>
</tr>
</tbody>
</table>
Of the 120 responding school districts 15 or 12.5% are located in the northwest portion of the state (M = 4.1, SD = 1.79). There were 24 school districts or 20% which are located in the north central (M = 3.8, SD = 1.66). Twenty five school districts or 20.8% are located in the northeast portion of the state (M = 3.2, SD = 2.14). There were 10 school districts or 8.3% which are located in the southwest portion of the state (M = 3.7, SD = 2.14). Sixteen school districts or 13.3% are located in the south central portion of the state (M = 3.4, SD = 1.86). There are 30 school districts or 25% which are located in the southeast portion of the state (M = 3.6, SD = 1.89).

Table 41 illustrates the ANOVA summary for the interaction and main effects regarding the level of preparedness for emergencies for large, medium, and large school districts.

Table 41. ANOVA Summary Table for Interaction and Main Effects Regarding the Level of Preparedness for Emergencies Based on the Location of School Districts in North Dakota.

<table>
<thead>
<tr>
<th>Sum of Squares</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>11.02</td>
<td>5</td>
<td>2.20</td>
<td>.61</td>
</tr>
<tr>
<td>Within groups</td>
<td>414.84</td>
<td>114</td>
<td>3.64</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>425.87</td>
<td>119</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 41 indicates there is no statistical difference at the 5% level between the size of the school districts and level of preparedness. There was no difference between the size of school districts and the level of preparedness. F(5, 114) = .70, p = .696. The
school districts from the six areas of North Dakota did not differ significantly in their level of preparedness for emergencies.

Table 42 illustrates the results of a one way analysis of variance to determine if there is a statistical difference between large, medium, and small school districts in terms of the comprehensiveness of their emergency preparedness plans. The comprehensiveness of a school district’s emergency response plan was rated 0 to 3 based on whether or not their plan included the following criteria: (1) The plan includes policies and procedures for any type of disaster; (2) The plan includes a recovery plan; and (3) The plan lists the responsibilities for all school personnel during each phase of an incident. If the district indicated their plan included responses to both man made and natural disasters, steps for recovery from a disaster, and an incident command center, the district received a rating of 3. If their plan did not include any of these components the plan was rated a 0 in regards to comprehensiveness. A further explanation of the rating scale is found in Chapter III.

Table 42. Analysis of Variance (F) Regarding the Comprehensiveness of Emergency Response Plans Based on the Size of School Districts in North Dakota (N = 120).

<table>
<thead>
<tr>
<th>School size</th>
<th>n</th>
<th>Mean</th>
<th>Descriptives</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small</td>
<td>85</td>
<td>1.71</td>
<td></td>
<td>.99</td>
</tr>
<tr>
<td>Medium</td>
<td>23</td>
<td>1.96</td>
<td></td>
<td>1.02</td>
</tr>
<tr>
<td>Large</td>
<td>12</td>
<td>1.76</td>
<td></td>
<td>.87</td>
</tr>
<tr>
<td>Total</td>
<td>120</td>
<td>1.76</td>
<td></td>
<td>.98</td>
</tr>
</tbody>
</table>
Of the 112 responding school districts 85 or 70% are small school districts 
\((M = 1.7, SD = 0.99)\), 23 medium school districts or 19% \((M = 2.0, SD = 1.0)\) and 12 or 
10% were large school districts \((M = 1.8, SD = 0.87)\).

Table 43 illustrates the ANOVA summary for the interaction and main effects
regarding the comprehensiveness of emergency response plans for large, medium and
large school districts.

Table 43. ANOVA Summary Table for Interaction and Main Effects Regarding the
Comprehensiveness of Emergency Response Plans Based on the Size of School Districts
in North Dakota.

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>1.14</td>
<td>2</td>
<td>.57</td>
<td>.59</td>
<td>.56</td>
</tr>
<tr>
<td>Within groups</td>
<td>112.85</td>
<td>117</td>
<td>.96</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>113.99</td>
<td>119</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 43 indicates there is no statistical significance between the size of the
school districts and comprehensiveness of their emergency response plans. There was no
difference between the size of school districts and the comprehensiveness of their
emergency response plan \(F(2, 117) = .59, p = .56\).

The summary, conclusions, and recommendations for further study are presented
in the next chapter.
CHAPTER V
SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Chapter V contains the summary of findings and conclusions, recommendations for immediate action by schools and administrators, and recommendations for further study.

Summary of the Study

Student safety and security in our nation’s public schools has become a major priority in the 21st century, in the wake of the Columbine High School tragedy in 1997, and the terrorist attacks on New York City and Washington DC on September 11, 2001. Public schools in North Dakota have either reacted to these events by taking temporary security and safety measures, or have taken a proactive position and have implemented, with the assistance of others, comprehensive emergency response plans and exercises. While substantial strides have been made in school security across the nation, glaring gaps still remain (Trump, 2009, April). Some school districts have only provided token security plans in the State of North Dakota, while other school districts like Fargo Public Schools have spent a great deal of time, money and energy on developing emergency plans, practicing those plans, and sharing that information with other school districts (Fargo Public Schools, 2007).

The purpose for this study was to determine: (1) If public school districts in North Dakota have an emergency response plan; (2) How comprehensive are their emergency
response plans; (3) How well prepared are North Dakota public school districts for any type of disaster; and (4) If the North Dakota LEAD Center school emergency response training and resources have impacted school emergency preparedness in North Dakota.

To ascertain these issues, a survey was written by the researcher in cooperation with the North Dakota LEAD center and was distributed to all 159 public school districts in the State of North Dakota. There were 120 of the 159 or 75% school districts that responded. The following research questions were addressed in this study:

1. How many public school districts in North Dakota have an emergency response plan, and if they have an emergency response plan, how comprehensive is that plan?

2. How well prepared are public school districts in North Dakota for any type of disaster?

3. What is the impact that the North Dakota LEAD Center school emergency training and resources has had on public schools in North Dakota?

4. Does the level of preparedness for emergencies vary in North Dakota based on size and location?

5. Does the comprehensiveness of emergency response plans vary by the size of the school district in North Dakota?

6. What is the level of importance placed on school emergency response plans by public school administrators in North Dakota?
Summary of Findings and Conclusions

This section attempts to provide a summarization of the descriptive and statistical analysis of the data in Chapter IV. Findings and conclusions are reported in sequential order as presented by the six research questions in the study.

*Question 1. Findings and Conclusions*

Question 1. How many public school districts in North Dakota have an emergency response plan, and if they have an emergency response plan, how comprehensive is that plan?

Survey data illustrated 43% of 120 the school districts responding indicated that they have a comprehensive emergency response plan. Of those the responding school districts 31% indicated they used a quick reference guide for their emergency response plan and 22.7% indicated they are still in the process of completing an emergency response plan. There were 10.7% of the school districts did not answer the question, and 2.7% of the school districts responding indicated that they have no plan at all. Therefore, 74.5% of the school districts in North Dakota indicated they have some type of emergency response plan. While it is difficult to determine if these results are the same nation wide, they are consistent with the opinion of Kenneth Trump, president of National School Safety and Security Services (2009, spring), that most schools in the United States now have some type of school emergency plan. Forty-three percent of the 75% responding school districts in North Dakota, who have an emergency response plan, considered their plan to be comprehensive. A comprehensive emergency plan is defined as having at least six components including: (1) The district has a emergency response plan; (2) The plan is updated and reviewed on a regular basis; (3) the school district
conducits regular drills; (4) The school district includes community partners, such as local governments and public health agencies, in planning; (5) The school district practices its emergency management plan with first responders and community partners on a regular basis; and (6) The district conducts an assessment of vulnerabilities or hazard risk analysis of its plans on a yearly basis.

However, when school districts were asked to rate their emergency response plans, 9.8% of 102/120 school districts who responded considered their plans to be inferior, 22.6% considered their plans to be fair, 37.3% considered their plans to be moderate or average, 28.4% considered their plans to be good, and only 2.0% considered their emergency plans to be superior. Again, this is consistent with the findings of Trump, as he states:

“Most schools have crisis plans. But our school emergency planning evaluations have revealed that school crisis plans often have questionable content and staff members have not received training on their school crisis plans. School crisis plans have not been tested and exercised through tabletop and other exercises to see if what is on paper might actually work in a real emergency” (2007, April, p. 26).

This study indicated that a majority, 56%, of the responding school superintendents do have their emergency response plans reviewed by their local emergency manager as found in Chapter IV, table 24. There were 84/120 school superintendents who reported they do practice their emergency response plans with a table top exercise (see Table 33). Kenneth Trump found that schools in the United States are better prepared for emergency situation in 2009 than they were in 2001 (2009, April).
Trump found that school districts have emergency planning strategies that include:

1. Crisis teams and plans;
2. Drills and exercise to practice lockdowns and evacuation;
3. Threat assessment training and protocol;
4. Training for professional development;
and
5. Relationships with local police, and emergency responders to assist them in the development of the emergency response plans and procedures (2009, April). When considering the findings of this study:

1. Seventy-four percent of the school districts in North Dakota have some type of emergency preparedness plan;
2. Eighty-four or 70% of the responding school districts had their emergency response plans reviewed by their local emergency manager; and
3. Schools districts utilize table top exercises to practice their plans, North Dakota school districts have emergency response plans and procedures that are as comprehensive as emergency plans found in other states. It is the opinion of the researcher ND public school emergency plans are as complete as other states’ emergency plans is because of the importance that ND public school administrators place on their emergency preparedness. The data collected indicated 88 of the 120 or 73% of the school superintendents surveyed, believed emergency response plans are very important to extremely important (see Table 35).

**Question 2. Findings and Conclusions**

Question 2. How well prepared are public school districts in North Dakota for any type of disaster?

Ninety-six percent of the 104/108 North Dakota responding superintendents, as indicated in Chapter IV, table 9, indicated they were well prepared for any type of disaster including both natural hazards (e.g., winter storms, tornadoes, fires, floods, etc.) and man-made hazards (e.g., acts of violence, hazardous material spills, etc.). However,
only 41 or 38.3% of the 108 superintendents indicated their plan included steps for recovery from disasters (see Table 10). Therefore, 58% or 63 of the 108 responding school administrators indicated that their school district does no have a recovery plan if a disaster were to occur. This difference is significant. This is considerably different from a national study that was conducted in 2006 by The Center for Disease Control and Prevention found 61.1% of school districts in the nation have plans to resume normal activities after buildings or facilities have been damaged (Jones, Fisher, Greene, Hertz & Pritzl, 2007).

North Dakota schools have not emphasized disaster recovery in their emergency plans as much as the rest of the nation. Schools not only need to be prepared for a disaster, but also need policies and procedures for what happens after a disaster. The reason there is such a difference between being prepared for hazards and the recovery from disasters might be the few times North Dakota schools have experienced some type of disaster. The Northwood tornado was one of a small number of disaster incidents that have taken place over the past twenty-five plus years in North Dakota.

**Question 3. Findings and Conclusions**

Question 3. What is the impact that the North Dakota LEAD Center school emergency training and resources has had on public schools in North Dakota?

The North Dakota LEAD Center has been conducting workshops and training for school personnel for school emergency planning since 2003. Since that time 38 of the 108 or 35.9% of the school districts responding to the survey indicated they had taken part in the LEAD Center Emergency Response training (see Table 7). Eighteen school districts or 17% of the 108 responding schools indicated they had used samples from
school districts who had participated in the ND LEAD Center Emergency Response training. Therefore, ND LEAD Center has either directly or indirectly influenced approximately 53% or 57 of the responding school districts in the development of their emergency response plans and procedures. It is disappointing to learn only 38 of the 108 or 35% of the responding school districts took part in the ND LEAD emergency response training over a four year time span. The ND LEAD emergency response training program is a comprehensive education process that covers everything from school emergency teams, emergency response procedures, to emergency response kits. While the LEAD training program is very thorough, it does take time to complete the training. This is often an issue for North Dakota schools who are handcuffed by certified master contracts and a limited school calendar. Master contracts for certified staff dictate the number of days teachers work. For that reason it is extremely difficult for North Dakota school boards to add days for important events like emergency planning and training without major changes to the master contract and huge increases in school budgets to provide compensation to teachers for the extra days.

**Question 4. Findings and Conclusions**

Question 4. Does the level of preparedness for emergencies vary in North Dakota public schools based on size and location?

The level of preparedness for emergencies for schools in North Dakota does not vary according to school size. The data failed to find a significant relationship between the size of school districts and emergency preparedness (see Table 38). The ANOVA did discover some differences between the means of the school districts, so there was some effect, so a test for effect and observed power was computed (see Table 39). The partial
eta squared was found to be .046 and the observed power of the test was .547. This size of effect is generally considered small to typical with the behavioral sciences and education. Because the effect size is small to typical and the observed power is below .80 it is the opinion of the researcher that there is very little relationship between the size of school districts and their emergency preparedness. The results of the analysis of variance regarding school district size and their level of emergency preparedness were surprising. It was assumed by the researcher at the beginning of this study large schools would have a greater level of preparedness for emergency in the state for the following reasons:

(1) The ability for larger school districts to dedicate funds, time and personnel to better prepare for emergencies; (2) Large school districts have longer employment contracts with certified and classified staff (e.g. Fargo Public Schools, enrollment 10,524, has a master contract of 190 days, while Devils Lake, enrollment 1700, has a master contract of 183 days). These extra days allow for more practice for emergencies with staff in those school districts; and (3) Larger school districts have easier access to law enforcement, emergency planners, and state agencies to assist with the development of emergency planning and practice emergency procedures such as table top exercises and school emergency drills.

School location had no bearing on the level of emergency preparedness in the State of North Dakota. In examining six areas of the state, northwest, north central, northeast, southwest, south central and southeast, there was no significant difference in the level of emergency preparedness between school districts (see Table 41). This result is similar to data collected by the GAO estimated that 95% of all school districts have written emergency management plans with no statistical difference between urban and
rural school districts (United States Government Accountability Office, 2007, May). There was no assumption there would be a difference between school districts based on their location in the state. North Dakota is a state with a small number of school districts (159) and those school districts are fairly distributed throughout the state.

**Question 5. Findings and Conclusions**

Question 5. Does the comprehensiveness of emergency response plans vary by the size of the school district in North Dakota?

There was no statistical significance difference between large, medium, school districts and small districts regarding the comprehensiveness of their emergency response plans (see Table 42). Again, these findings are similar to the data collected by the GAO, (2007, May). However, that same GAO report, “Status of School Districts’ Planning and Preparedness” did find some differences in urban and rural school districts’ multi-hazard emergency management plans (2007, May). The GAO found urban and rural school districts differed in the manner in which they addressed specific types of incidents, these types of incident follow: intruder/hostage; bombs or bomb threats; natural disasters; terrorism; radiological; anthrax; and pandemic influenza. The report demonstrated urban school districts multi-hazard emergency management plans were more comprehensive than rural school districts regarding incidents of: terrorism, radiological, anthrax, and pandemic influenza (United States Government Accountability Office, 2007, May). The researcher believes the potential reasons for these differences are as follows: (1) time and resources available in larger or urban school districts; (2) the proximity of law enforcement and emergency management agencies; and (3) the ability of larger or urban school districts to recruit experts in the field of emergency management.
Question 6. Findings and Conclusions

Question 6. What is the level of importance placed on school emergency response plans by public school administrators in North Dakota?

Of the 99 of the 120 responding school district administrators, 73, or 74%, placed high level of importance on school emergency response plans (N =99). On a scale of one to five, with 1 indicating not at all important and 5 indicating extremely important, 40.4% of the responding school administrators indicated emergency response plans were very important and 33.3% of the responding school administrators indicated emergency response plans are extremely important. School administrators understand school emergency response plans are important to the safety and security procedures of a school system. This high level of importance placed on school emergency planning can be associated with the number of school districts in the nation having adopted a policy requiring schools to have a comprehensive place to address emergency preparedness (Jones, Fisher, Greene, Hertz, & Pritzl, 2007). When you consider that emergency response plans are not required by the state or any other political entity, school administrators deserve credit for having such a high opinion of the need for having emergency response plans.

Other Findings and Conclusions

The survey data revealed several other issues regarding school emergency response plans not addressed in the six research questions. The findings and conclusions of several of those issues follow:

1. An interesting and alarming statistic collected by the survey instrument was the number of suicides reported over a five-year period. When school superintendents
were asked to list emergency incidents having occurred in your school district over the past five years (Table 3), suicide was the highest tally with 46 or 60% of the 77 responding school districts indicated this tragedy had taken place at least once in the past five years and 27/48 or 56% of the responding school superintendents indicated at least two suicides have taken place over that same time span. According to the Center for Disease Control, North Dakota has an attempted suicide rate of 8.8% for students in 9th grade to 12th grade compared to the national average of 6.9% (Centers for Disease Control, 2007). There are several possible reasons why North Dakota has a higher suicide rate than the national average, the sparsity of the state, the lack of qualified counselors, and mental health support personnel. Obviously, when you consider almost 10 students die in North Dakota from suicide, it has to be addressed. School districts need to consider workshops for administrators, teachers, and staff on how to recognize the warning signs of suicide, consider depression screening sessions for students in school as long as they have parent permission, and add counseling staff for mental health and career counseling, to help students who are or maybe considering suicide. North Dakota, during the 2007-08 school year, had a counselor ratio of one full-time credentialed school counselor for every 450 students (North Dakota Commission on Education Improvement, 2008). The American School Counselor Association (2005) recommends one counselor for every 250 secondary students.

2. Surveillance cameras are used in all of the district buildings in 44 or 38% of the 115 responding school districts (see Table 5). This number was much lower than what the researcher had anticipated. Many school districts across the nation are now installing security cameras (Rapp, 2009). The reasons for this low number of security
camera use in North Dakota may be the conservative nature of the state, which may consider cameras an invasion of privacy; the cost of the equipment, cameras, recording equipment and installation can be a very expensive process; and the size and enrollment of so many school districts in North Dakota. Administrators of small districts may believe there is no need for cameras when they can see down the entire hallway of the school district when they step out of their offices. Surveillance cameras, in the researcher’s opinion are necessary equipment when considering the security and safety of students. Not only can school administrators see places in the building they normally cannot see, it also provides them with a recording of any past incident.

3. There were 90 of the 115 responding school superintendents or 78.3% (see Table 5) indicated all but one entrance door is secured during the school day in order to increase the security of students and staff. This is a very high percentage and, if true, it demonstrates school administrators in the state are very cognizant of the need to increase the security of their buildings. However, the researcher believes while school district administrators indicate their buildings are secure, there are often other doors in the building that are left open. It has been the researcher’s experience to often see school districts leave kitchen doors open to cool the kitchen down, receiving doors are sometimes left open for deliveries, and back doors are unlocked for student convenience as they travel from campus to campus. If the security and safety of students are to be a priority, it is necessary to limit the access of the general public to school buildings.

4. Another positive revelation reported in the survey data were the number of school district who had implemented school building emergency teams. Eighty four or 77.8% of the responding superintendents indicated that they have emergency teams (see
Table 19). Emergency response teams are essential components of any school district’s emergency plan. The ability to designate personnel for specific tasks or duties during a drill or actual emergency incident can provide a timely and coordinated response which may reduce harm and prevent loss of life. This was, again, a surprising discovery. The researcher had assumed few school districts had organized building emergency response teams.

5. The survey data illustrated that less than 50% or 45 of the 100 responding school superintendents in the state, block emergency exits in their school buildings to test evacuation drills (Table 31). While this may not be a huge issue, it is a statistic school administrators need to be attention to. School personnel, staff and administration, while practicing evacuation drills, can become complacent. If a real emergency were to take place, such as a fire or an explosion in the building, normal evacuation routes could become blocked or impassable, school administrators need to schedule practice drills so teachers or those in charge know what to do if their primary evacuation route is blocked. Therefore, more school districts must practice evacuation drills in which primary routes are blocked.

Recommendations for Immediate Action for Schools and Administrators

This study of school emergency preparedness in North Dakota public school districts has yielded both valuable and interesting insights. The data in this study has illustrated a vast majority of responding school districts (74.5% or 82/110) have an emergency response plan that addresses most types of disasters (see Table 6). However, only 43.6% or 48/110 of the responding school administrators in North Dakota believed
their district’s plan was comprehensive. This indicates over half of the school districts in North Dakota need to improve their plans to increase the safety of students in their own school districts. This study demonstrated there is no statistical difference between the emergency response plans of larger schools, those having enrollments of 1500 or greater students; medium schools, those have enrollments of 500 to 1499 students; and small school districts, those having enrollments of 0 to 499 students (see Table 38). Even though it appears larger school districts have better access to resources to assist them in developing their emergency response plans. Those perceived resources include: access to local emergency response agencies, the ability to dedicate funds to hire personnel to develop and implement emergency plans, and employment contracts which have more days than smaller school districts to set aside more time develop and practice their emergency response plans. There was no significant difference in the comprehensiveness of the emergency response plans of small, medium and large school districts (see Table 42).

The data collected indicated that 36% or 38 of the 106 responding school superintendents in North Dakota took part in the ND LEAD Center emergency response training, and another 17% or 18 of the 110 responding school superintendents did not take part in the ND LEAD Center training, but did use their documents to fashion their own emergency response plan. This low number of school districts who actually took part in the training is unfortunate. For school districts to have this type of opportunity to take part in such training, and yet failed to do so, possibly demonstrates a lack of funds, a lack of leadership, or a lack of time to accomplish such training. According to the ND LEAD Center, only one additional school district participated in the LEAD emergency

Recommendations for the State of North Dakota

Based on data collected for this study, several recommendations for the future of emergency preparedness planning for North Dakota public schools follow:

1. More emphasis for comprehensive emergency response plans need to be made by the North Dakota State Legislature and the North Department of Public Instruction. Currently, there are no requirements by the state or the Department of Public Instruction for school districts to have emergency response plans. In 2007, there were only 32 states requiring school districts to have emergency response plans (United States Government Accountability Office, 2007). The ND Department of Public Instruction has demonstrated limited leadership in the area of emergency response training. The ND Department of Public Instruction has not emphasized the need for schools to possess a comprehensive emergency response plan. Nor has the ND Department of Public Instruction made sure all school districts in North Dakota are prepared for an emergency or disaster. States like Minnesota have an entire department dedicated to emergency response training and procedures within their department of education. North Dakota does not. The legislature of North Dakota needs to do the following to increase the safety of students in North Dakota:

   • Require the North Dakota Department of Public Instruction to implement a division dedicated to school district emergency response planning and
training. That division would be responsible for ongoing training for local school districts and determining if local school districts possess an effective emergency response plan. Because it is not necessary to reinvent the wheel, DPI could work with ND LEAD Center to provide this training to ND schools. The NDLEAD Center has already developed a very effective model for emergency response planning and training.

- Dedicate additional state funding to assist school districts in the development of their emergency response plans and training.

2. Additional funds need to be appropriated by the United States Department of Homeland Security to public schools across the nation to assist those school districts with the development and implementation of their emergency response plans and procedures.

3. School calendars, which in North Dakota require 173 student contact days, need to be increased so school districts have the time to not only write, develop and implement their school emergency response plan, but practice their plans as well. The No Child Left Behind Act has refocused school districts to spend more time on core subject education, leaving very limited time for other important issues like practicing for a disaster.

4. This study demonstrated school districts do not practice cold weather evacuation drills in this state. Only 43% or 44 of the 102 responding superintendents indicated they practice cold weather drills for evacuation. This was listed several times by school administrators with responses to “What areas of your plan do you believe are most in need of improvement.”
Cold weather drills in North Dakota are difficult to practice due to the harsh winter conditions in the state. With the long winters of North Dakota and the lack of cold weather drills, many students and staff may be caught off guard if a real emergency were to take place. School leaders/administrators need to practice drills throughout the school year, not just the warm weather months. School administrators indicated that this was a problem in North Dakota as answered in the open ended questions in the emergency response survey.

5. Lastly, North Dakota school districts have done an admirable job in developing and implementing an emergency response plan. The data indicated ND school districts could be better prepared for emergencies and have more comprehensive emergency response plans. However, school administrators in ND have to receive some credit for taking the initiative for making sure that their school district had some type of emergency response plan. Additionally, the ND LEAD Center deserves recognition for what they have done for school emergency response training. The data collected in this study demonstrated those school districts who participated in the ND LEAD Center training, were better prepared for emergencies and their emergency response plans were more comprehensive.

Recommendations for Further Study

Because the data was collected in 2007, it would be advantageous to collect current data to determine if the school districts that indicated that they were working on a more comprehensive plan, actually have done so.
It has been suggested many school districts have placed their school emergency response plans on the shelf due to the low number of school shootings over the past three years and the absence of terrorism attacks in this country since 9/11 (Trump, 2009). Therefore, it would be interesting to collect data to determine if school districts are actively reviewing and updating their emergency response plans, practicing drills, and continuing with emergency response staff development programs for all staff. While there is limited dollars provided by federal and state governments for safety and emergency planning for schools, this study could be enhanced by collecting data regarding the amount of funds that are allocated or budgeted at the district level for emergency planning and preparedness.

A future study of this nature should include a measurement of the number of school districts now using instant alert systems. Instant alert systems are web based programs that allow schools to send up to 100,000 messages in 15 minutes. Schools can use instant alert for both routine and emergency notifications. Examples of routine notifications include: activity schedules, teacher conference reminders, and truancy reporting. Emergency notifications need to include: school lockdowns, weather related and mechanical breakdown closings, amber alerts, and bus delays (Honeywell.com, 2009). Additionally, this research could be further improved by determining how many school districts have implemented school wide discipline programs; anti-bullying and school climate curriculums; and other violence prevention plans over the past five years.

Limitations of the Study

This study took place during October of 2007, at that time school districts considered emergency response planning and preparedness a top priority. It is possible
that school districts in North Dakota, because of the low number of emergency incidents that have taken place in the country, no longer emphasize the need to review and upgrade their emergency response plans. Therefore, the age of the study maybe considered a limitation. A second limitation of the study was the size of the large school districts and medium school groups. There are only a few school districts in North Dakota with enrollments of more 1500 students. For this study there were only 12 large school districts that responded to the survey. Additionally, there are very few medium size school districts in the state (500 to 1499 students). There were only 23 medium size school districts who responded to this survey. The emergency response survey did not ask school superintendents for the number of surveillance cameras that are located in elementary buildings in their respective districts. This was an oversight.
APPENDICES
Appendix A
School Administrators Validation Letter

May 14, 2007

Mr. Bernie Lipp, Supt.
DGF Schools
108 N. Main St.
Dilworth, MN 56529

Dear Bernie,

My name is Steve Swiontek and I am a doctoral student at the University of North Dakota in the department of Educational Leadership. As part of my doctoral studies, I am conducting field research to be reported in my dissertation.

Enclosed you will find a survey, Emergency Preparedness in North Dakota School Districts. The purposes of this research are to determine: 1) If school districts in North Dakota have an emergency response plan, 2) how comprehensive is that plan, 3) how well prepared are school districts for any type of disaster, and 4) the extent to which North Dakota LEAD Center school emergency response training and resources have impacted school preparedness in North Dakota. As I explained on the phone, I am asking you to take this survey and provide me with some feedback regarding the survey before I submit it to my survey population. Enclosed in the package you will find an envelope for you to send this survey back to me.

Your participation is strictly voluntary, and you may discontinue the survey at any time by closing your browser. By completing the survey, you are providing your consent to participate in this research project.

Data and information you provide will be kept strictly confidential. The information collected cannot in any way be traced to respondents because the software program used to build this instrument will not track or tie information to individual respondents.

If you have any questions, please contact me at 701-662-7640 or my advisor, Dr. Larry Klundt at 701-258-3022. Specific procedural questions, comments, or concerns should be directed to the University of North Dakota Research, Development and Compliance Office at 701-777-4279. The University of North Dakota Institutional Review Board
(IRB) has reviewed the survey and granted approval of this study. Project approval number is IRB-200704-320. All IRB guidelines for this research will be followed.

I recognize that this is a hectic time for you, but I hope that you will be able to take approximately 15 minutes of your day to complete this survey. Thank you very much for your time and consideration.

Sincerely,

Steve Swiontek, Superintendent
Devils Lake Public Schools
1601 College Drive North
Devil’s Lake, ND 58301
Steve.swiontek@sendit.nodak.edu
Appendix B
School Administrators Survey Letter

September 5, 2007

«Title» «First_Name» «Last_Name»
«School»
«Address»
«City», «State» «Zip_Code»

«GreetingLine»

My name is Steve Swiontek and I am a doctoral student at the University of North Dakota in the department of Educational Leadership. As part of my doctoral studies, I am conducting field research to be reported in my dissertation.

In the next week or so you will receive an email from Dr. Marv Erhardt, Director, North Dakota LEAD, whom is assisting me with this project. That email will ask you to access Survey Monkey in order to complete a survey on Emergency Preparedness in North Dakota Public School Districts. The purposes of this research are to determine: 1) If school districts in North have an emergency response plan, 2) how comprehensive is that plan, 3) how well prepared are school districts for any type of disaster, and 4) the extent to which North Dakota LEAD Center school emergency response training and resources have impacted school preparedness in North Dakota.

Your participation is strictly voluntary, and you may discontinue the survey at any time by closing your browser. By completing the survey, you are providing your consent to participate in this research project.

Data and information you provide will be kept strictly confidential. The information collected cannot in any way be traced to respondents because the software program used to build this instrument will not track or tie information to individual respondents.

If you have any questions, please contact me at 701-662-7640 or my advisor, Dr. Larry Klundt at 701-258-3022. Specific procedural questions, comments, or concerns should be directed to the University of North Dakota Research, Development and Compliance Office at 701-777-4279. The University of North Dakota Institutional Review Board (IRB) has reviewed the survey and granted approval of this study. Project approval number is IRB-200704-320. All IRB guidelines for this research will be followed.

I recognize that this is a hectic time for you, but I hope that you will be able to take approximately 15 minutes of your day to complete this survey. Thank you very much for your time and consideration.

Sincerely,
Steve Swiontek, Superintendent
Devils Lake Public Schools
Appendix C
Emergency Response Survey

Emergency Preparedness in North Dakota Public School Districts
Survey

The instrument you are about to complete is designed to study emergency preparedness in North Dakota Public Schools.

The purposes of this study are to determine: 1) If your school district has an emergency response plan, 2) how comprehensive is that plan, 3) how well prepared is your school district for any type of disaster, and 4) the extent to which North Dakota LEAD Center school emergency response training and resources have impacted school preparedness in North Dakota.

Your participation is strictly voluntary, and you may discontinue the survey at any time by closing your browser. By completing the survey, you are providing your consent to participate in this research project.

Data and any information you provide will be kept strictly confidential. The information collected cannot in any way be traced to respondents because the software program used to build this instrument will not track or tie information to individual respondents.

If you have any question please contact Steve Swiontek at 701-662-7540 or Dr. Larry Klundt at 701-258-3022. Specific procedural questions, comments, or concerns should be directed to the University of North Dakota Research, Development and Compliance Office at 701-777-4279.

In advance, I want to thank you for your time and willingness to participate in this research.
DEMOGRAPHIC INFORMATION

1. What is the enrollment of your school district?
   - 0-99
   - 100-499
   - 500-999
   - 1000-1499
   - 1500-2499
   - 2500 or greater

2. What is the location of your school district?
   - Northeast North Dakota
   - Southeast North Dakota
   - North Central North Dakota
   - South Central North Dakota
   - Northwest North Dakota
   - Southwest North Dakota

EMERGENCY INCIDENTS

1. Have any of the following incidents occurred in your school district during the past five years? Please check all that apply.
   - Abduction or Missing Student
   - Bomb Threat
   - Bus Accident
   - Explosion
   - Fire in a building while students were inside
   - Food Poisoning
   - Hazardous Materials
   - Suicide or Death
   - Tornado
   - Violence of threat of violence with a weapons (e.g., firearm, knife)
   - Weapons brought to school grounds with no threat of violence

2. If you had more than one of any incident during the past five years, please indicate how many.
   - Abduction or Missing Student
   - Bomb Threat
   - Bus Accident
   - Explosion
   - Fire in a building while students were inside
   - Food Poisoning
   - Hazardous Materials
Suicide or Death
Tornado
Violence or threat of violence with weapon (e.g., firearm, knife)
Threat of violence but no weapon
Weapons brought to school grounds with no threat of violence

3. What are the security measures that you have in place in each of your school buildings? Please check all that apply.
- All but one entrance door is locked during school hours.
- Surveillance cameras are used in all buildings.
- Surveillance cameras are used in just the high school(s).
- Surveillance cameras are used in the middle school(s) and high school(s).
- All visitors must check into the main office before they are allowed to travel in the buildings.
- Visitors must wear badges during regular school hours to be in the building.

EMERGENCY RESPONSE PLAN

1. What is the current status of emergency preparedness in your district? Check the statement that best applies to you. If you check “The district has no plan,” please skip to the end of the survey and you will not be required to respond to any more of the questions.

NOTE: An Emergency Response Plan is defined as a comprehensive document that includes policies and procedures for responding to any type of disaster both during and after an emergency incident and lists responsibilities for all school personnel during each phase of an incident. Posting Fire Exits is not considered a comprehensive plan.

- The district has a comprehensive Emergency Response Plan that is reviewed and updated annually.
- A comprehensive Emergency Response Plan is in development.
- The district has a “quick reference” guide (flip page document) but no comprehensive plan.
- The district has no plan.

2. What resources did you draw from in preparing your Emergency Response Plan? Please check all that apply.

- Took part in ND LEAD Center Emergency Response Training and adapted LEAD sample plans.
- Did not take part in the ND LEAD training, but used sample(s) from other school(s) or district(s) that had taken part in LEAD training.
- Used sample(s) from other school(s) or district(s), not sure of the “original source.”

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1. Developed the plan using resources provided by county or tribal emergency manager.
2. Developed the plan on our own without any outside resources.

3. Did you do a hazard risk analysis during planning?

NOTE: A hazard risk analysis is defined as assess the potential hazards a school might encounter inside the building, on the school grounds, and in the neighborhood. Often outside individuals are involved to provide a fresh perspective.

- Yes
- No

4. Does your plan include responses to both natural hazards (e.g., winter storms, tornadoes, fires, floods, etc) and man-made hazards (e.g., acts of violence or terrorism, hazardous material spills, etc)?

- Yes
- No

5. Does your plan include steps for recovery from disasters?

- Yes
- No

6. Was your plan developed in cooperation with local emergency responders (i.e., fire law enforcement, emergency medical, and emergency manager)?

- Yes
- No

7. Does your plan include an Incident Command System (ICS)?

NOTE: ICS is defined as a system of command where responsibilities for all school personnel during each stage of an incident are clearly outlined and there is a back-up system where everyone has at least one other person that can cover for them.

- Yes
- No
8. Does your plan include a system of accountability for all students and adults in the building?

NOTE: An accountability system is defined as maintaining updated rosters and implementing system to account for every person in the building during an incident (e.g., after an evacuation).
  o Yes
  o No

9. Does your plan include a policy and system for releasing children to their parents during or after an emergency incident?
  o Yes
  o No

10. Does your plan include both primary and secondary evacuation routes?
  o Yes
  o No

11. Does your plan include designated assembly areas?

NOTE: Assembly areas are defined as designated sites occupants of school buildings evacuate to and await further instructions.
  o Yes
  o No

12. Does your plan include designated off-campus evacuation sites?

NOTE: Off-campus evacuation sites are defined as designated sites off school property occupants of school building are transported to for safety.
  o Yes
  o No

13. Does your plan include plans for cold weather evacuation?

NOTE: Cold weather evacuation plans might include evacuating to a nearby off-campus site or safe zone within the building.
  o Yes
  o No
14. Does each building in your school district have a school emergency team?

NOTE: A school emergency team is defined as a team of school personnel with specific command responsibilities during an emergency incident. Typically, the team also is responsible for organizing training and drills and reviewing and updating the emergency response plan.

- Yes
- No

15. If you answered Yes to the previous question, check with school employees are members of the school emergency team. If you answered No to the previous question, skip this question.

- Principal
- Asst. Principal
- Head Secretary
- Head Custodian
- Teacher(s)
- School Nurse, if available
- School Resource Officer (SRO), if available
- Other position not listed

16. Does each classroom in your district have an Emergency Kit?

NOTE: An emergency kit is defined as some type of storage device containing critical information and supplies teachers take with them during an evacuation or drill.

- Yes
- No

17. Does each building have a School Emergency Kit?

NOTE: A school emergency kit is defined as some type of storage device containing critical information, supplies, and tools a designated emergency team member takes with him/her during an evacuation or drill.

- Yes
- No

18. Is your plan reviewed and updated at least annually?

- Yes
- No
19. Has your plan been reviewed by your local emergency manager?

- Yes
- No

**EMERGENCY RESPONSE PRACTICE**

1. Which of the following strategies have been used to practice your plan? Please check all that apply.

- Orientation session – Review policies, plans, roles and responsibilities.
- Drill – Practicing a single emergency response (e.g., fire evacuation, lockdown).
- Tabletop exercise – Discussion of plans, policies, and procedures based on hypothetical incident.
- Functional exercise – Simulation of a school emergency incident under high-stress conditions; one or more emergency responders may participate.
- Full-scale exercise – School(s) participates in a simulation of a community emergency incident under high-stress conditions.

2. Is at least one orientation session conducted each year for all school personnel?

- Yes
- No

3. Is a special orientation session conducted for all new school personnel?

- Yes
- No

4. How many drills are conducted each year in each of the following categories?

- Evacuation
- Tornado Sheltering
- Lockdown
- Shelter-in-Place

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5. During evacuation drills, is the accountability system regularly tested?

NOTE: An effective accountability system requires that teachers take the classroom emergency kit with them when evacuating, teachers take roll at the designated assembly area, someone from the School Emergency Team take the school emergency kit, someone from the School Emergency Team verifies everyone is accounted for.

- Yes
- No

6. During evacuation drills, do teachers practice evacuating with a partner teacher?

- Yes
- No

7. During evacuation drills, are exits sometimes blocked to test secondary evacuation route plans and the partner teacher system?

- Yes
- No

8. Are cold weather evacuation drills conducted?

- Yes
- No

9. How many of the following exercises are conducted during a typical year?

- Tabletop – Discussion based on a hypothetical incident.
- Functional – Simulation of a school emergency incident.
- Full-Scale – Participate in a simulation of a community emergency incident.

10. How often are emergency responders involved in drills?

- Never
- Once per year
- More than once per year
OVERALL

1. Please provide an overall rating for the quality and comprehensiveness of your emergency response plan document and your policies and procedures for practicing the plan as well as regularly reviewing and updating it.

- Inferior
- Fair
- Moderate
- Good
- Superior

2. What do you believe are the strengths of your plan? Please write your response in the space provided.


3. What areas of your plan do you believe are most in need of improvement? Include any gaps you think might exist. Please write your response in the space provided.


4. On a scale of one to five, with one being not important and five being very important, how important do you believe school emergency response plans are for North Dakota School Districts? Circle your response.

   1 --------  2 --------  3 --------  4 --------  5
   Not Important  Very Important
Appendix D
Responses to Open-ended Questions

36. What do you believe are the strengths of your plan?

- Staff knows their roles in the procedures
- We have a plan that provides us with some guidance.
- I am new to the system. We are in the process of updating our emergency plan.
- We have one
- Input from a variety of personnel
- Awareness of procedures - confidence in plan -
- City and county involvement.
- County wide unified plan.
- Functional
- Step-by-step procedures to take during an emergency and quick reference flip chart.
- We always work on accountability by "kidnapping" students prior to a drill. I require immediate feedback as to who is left behind during the evacuation.
- We are still in the development stage, much needs to be done.
- Brief and to the point Manageable Understandable
- More realistic drills
- Consistent administration was all involved in preparing plan
- We do have a plan and awareness.
- None
- Simple to follow directions in a nine page document.
- Flip chart instructions are fairly easy to follow. We have evacuation facilities close to the school. Local responders from the community are eager to be involved. Medical and hospital services are available. Our building is one level and can be evacuated quickly.
- Ease of use by students and staff
- As it is still in the developmental stages, I see no perceived strengths.
- Emergency responders are active participants in our exercises.
- The strengths of our plan are that it is comprehensive.
- Our plan is frequently practiced and reviewed by emergency personnel.
- Covers basics
- It includes all area agencies.
- The plan was developed with the input of emergency responders. The plan was presented at an in-service of team members from each school. The plan emphasizes communication. The plan is practiced regularly and the outcome of the simulation is discussed with district administrators.
- It is consistent with other school districts in the region
- Working with local agencies.
- Since each school recently completed their emergency plan and conducted simulations, the staff should be familiar with the plan.
- Specific emergencies or threats have a well defined plan.
- This area is a high priority for our district and community... the school has cooperated with the local hospital and emergency services personnel in area exercises... The building
principals review the basics of the plan with the staff before school starts and a monthly drill is completed and logged (fire or tornado or some other natural disaster or emergency incident...
- Comprehensive Training & practice
- Well organized, several drills conducted with various scenarios, frequent reviews with staff.
- Staff has some background and we have practiced an evacuation.
- We have the outline of the plan
- Review of plan with all staff involved, Off-site evacuation plan
- The present plan is not comprehensive. The developing comprehensive plan should cover most deficiencies.
- Plan is located in every room in the school.
- simple, easy to follow, designates responsibilities, coordinated with city and county resources
- Fairly complete for inclusion and is covered with all employees on an annual basis.
- We do practice our drills, this is essential to knowing what to do if the real thing happens. We debrief after the drill. We have our plans in place and we use them.
- It is a start but we have a long ways to go. Our present system is a flip chart style that we borrowed from other schools.
- It is comprehensive and a quick, flip-chart system has been developed for quick referencing. There is also a commonality throughout the plan that allows staff to relate the actions for one emergency with the actions for another.
- We are a small school and it makes for ease in providing communication to everyone.
- It has been completed utilizing many community resources, and was built from within with all staff input.
- Cass County Emergency Response Plan All schools in the county are working together to have common plans.
- emergency management handbook; need to develop a emergency manual
- The cooperation of the local fire department and first responders in the community. The development of this plan has brought everyone to the table and bridges have been made for all parties to work together for the betterment of the community and the school.
- Where we evacuate to. The release system and the grouping of the students.
- The plan is well thought out and written. It involved state, county, and local officials.
- Addresses suicide, death, grief and resources.
- Involvement in the overall plan by community emergency responders
- Small school everyone knows their roll. Easy to communicate throughout your staff.
- It is in writing
- All Staff members have responsibilities.
- It is based on NDLEAD and requirements from the Bureau of Indian Affairs for their school systems.
- Careful development and thoroughness
- The plan has been developed and reviewed by local PD, Ambulance Service, Medical, County Law Enforcement, County Emergency Manager, school officials, Fire
Department under the watch eye of ND LEAD and a consultant "nick of time" paid for by Homeland Security Funds.
- Evacuation and accountability is quick and accurate.
- We have tried to cover as many details as we can. I believe that it is comprehensive.
- We are in our first year of the crisis management plan. I answered the questions as we are planning for this year not as if we have done these plans. We have everything in place and are beginning to implement the plan for the 2007-08 year.
- simplicity, excellent intruder, fire and tornado plans.
- I'm not sure were at the level that we have any strengths.
- We have written procedures for just about all emergencies.
- Everyone ahs the plan on hand in case of emergency. Even though we have small classes we do emphasize to all the accountability measures they need to know.
- Plan is in conjunction with the Cass & Clay County Emergency Preparedness Team
- Staff and student familiarity
- Principals review plan with all staff twice each year.
- Good start!
- Overviews and practice. Evacuation procedure.
- According to feedback we have received from Emergency responders and state people, they like the organization and simplicity of it.
- Understandable, accessible.
- Gives a basic idea of what do to in various situations.
- Since we are in a remote location our plans are designed to buy time until emergency response can arrive.
- We have met as an emergency team monthly for the past three years. this has afforded a great amount of time for discussion, reviewing procedures, and refining our plan. I also believe our quick guide and emergency response kits are well made and easy to use.
- Emergency Team is in place. Everyone has the plan in their room/area and it has been reviewed already this school year. We have communicated with the local Fire Dept. and the churches ( evacuation sites)
- Having EMT's on our staff. Involved local fire and emergency squads.

37. What areas of your plan do you believe are most in need of improvement? Include any gaps you think might exist.

- need plan of action for after a real emergency. Should go over at least twice a year with staff
- It is not a comprehensive plan. Additionally we have not practiced any type of crisis drill.
- Updating personnel and their responsibilities. Reviewing the plan with new staff and old staff.
- no incident command
- Actual practice with community service providers
- Coordination of all aspects - instant response to the presented emergency -
- We try to keep the gaps covered. At this point, I don't see any gaps.
- Time to Practice Involvement of outside personnel
- Simulating and practicing more of the emergency situations.
- More community involvement needed.
- Lack comprehension in all areas of disaster Does not account for simulations and interaction with local law enforcement and the county emergency manager.
- Building security
- Getting kits to the staff for student accountability
- Prepare emergency response kits. Develop building teams. Exercise the response plan.
- We will be looking at the plan from my previous district.
- It is difficult to come up with a plan for all possible scenarios.
- If buses are needed they are housed to far from the school. Cold weather issues. We probably don't practice enough. We have concerns about handling parents and the reactions they would have in a crisis. Communications between parents and kids via cell phones could cause parents to panic.
- How to deal with divorced parents, dealing with terrorists
- It is still in the developmental stages.
- Evacuation to a secondary/alternate site.
- The biggest weakness of our plan would be lack of involvement from community emergency responders
- A flip chart for staff to follow and alternative sites for students in the event that an actual event occurs.
- A city wide or even a region wide drill would be appropriate every three to four years.
- Security itself.
- We have a large school district so it will be several years before each building has the opportunity for a simulation.
- There needs to be a cold weather procedure and perhaps a more in-depth simulation more frequently
- Continually updating
- We have worked with local agencies in preparing our emergency plan. However, we have never conducted a full scale exercise that required the involvement of all emergency response teams to see how well everyone responded to their appropriate role.
- Getting the info out to staff in a clearly understandable method... some parts of the plan are too wordy and consequently difficult to understand and comprehend for the staff to feel comfortable and confident...
- Documentation of decisions made Reunification of parents & students
- Unsure of emergency kit, need to check
- More practice and more updating.
- Update, review and drills
- Practice, practice, practice!!!
- Review of plan with employees.
- Upgrades, doing mock simulations of a disaster, getting more people from community involved and has the county emergency coordinator help to review the plan.
- Review and practice
- More specific information which would clearly delineate each employee's responsibilities. Clearer statements on procedures for release of students with parents during or after an emergency. Participate in tabletop discussions on an alternating month basis. Focus on drills in cooperation with agencies.
- We need to make sure all staff, especially new staff know the procedures. We need to know that staff follow the plan.
- We have gaps all over.
- Practice and simulations
- Providing for safe places for students once they would need to be removed from the school.
- We are seeking sources to fund our emergency classroom kits, as the cost is approaching $20,000 for the district.
- We need to do more drill and practice.
- Emergency planning is a on-going and must be updated throughout the year.
- Our plan is still in development and the biggest drawback is the time factor in trying to bring the parties together. With the community being small and everyone involved with different jobs finding the time to put the finishing touches on the plan is difficult.
- A good lock down system. An evaluation plan if there is an airborne problem. Our school is old and not air tight.
- Updating the plan annually and holding meetings and practicing evacuations. Training is very important and the entire staff needs to know what they are responsible for.
- Chemicals, natural disaster,
- Practicing---we never know when we might need to use a plan and how we might actually respond
- Natural disaster - follow up plans. Have another person being your partner incase someone is not at their assigned post.
- It is comprehensive but is dated and quite cumbersome. It needs to be updated to address the new threats we face and to make it more easily implemented.
- Lack of incident response plan
- No Plan is fool proof...Until fully tested in an actual situation, one doesn't fully comprehend the gaps.
- We will be formally adopting it at the end of September. Training will take place the last week. It will take another 3 months to have the kits prepared. Getting staff to understand the plan and practice it when drills are held will be a struggle. Many of our teachers do not have the same sense of urgency regarding the need for a plan.
- Practice drills
- Cold weather, new staff orientation, practice
  - 1. What to do after emergency. 2. No simulations other than fire and tornado. 3. No regular annual training or updates.
  - I don't believe that we practice enough at all of our schools under a variety of conditions.
  - We will know at the end of this year.
- How to plan for the unexpected. Limitations in location versus time of day. All students in the lunch room are at risk as the main unlocked door is near.
- All areas could use improvement.
- The only drill we have done repeatedly is the fire drill. We need to have a plan each month for some type of drill to be aware of the many emergency situations that we may face.
- Making sure everyone knows procedures and are on the same page with what is happening!
- The whole plan needs a lot of work.
- Secondary evacuation routes. Cold weather practice.
- Moving to the next step!
- Communication gaps. Relying on staff to remember to grab a 2-way radio. Emergency personnel available in our community.
- Cold weather drills
- Not very comprehensive; probably hasn't changed much over the years.
- Detailed descriptions of what to do.
- Our plans even if they were carried out to the letter would leave us vulnerable because of our remote location.
- Full scale drills including more stake holders would be beneficial. I also believe more must be conveyed to parents.
- No classroom emergency kits. However, we are a small school with enrollment of 275 in K-12, so teachers really know their students.
- Updating all teachers of the importance of these drills and their required responses. We have a lot of chemicals moving through our area during spring and fall and accidents do happen.
REFERENCES


*Education Week, 25*(2), 19-20.


*Education Week, 25*(3), 1, 26.


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Public gatherings including schools are ordered closed to prevent influenza spread. (1918, October 9). *Grand Forks Herald*. 37(297), 8.


Schools to re-open on Monday. (1918, November 14). *Devils Lake Journal*, p. 5.


