

Running Head: CITIZEN EMERGENCY PREPAREDNESS IN HAMPDEN TOWNSHIP

Citizen Emergency Preparedness in

Hampden Township, Pennsylvania

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Certification Statement

I hereby certify that this paper constitutes my own product, that where the language of others is set forth, quotation marks so indicate, and that appropriate credit is given where I have used the language, ideas, expressions, or writings of others.

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## Abstract

The problem is that Hampden Township has not assessed the effectiveness of the Family Preparedness Guide. The author attempted to assess if the residents in the Fairwinds development have a basic knowledge of emergency preparedness by using descriptive research to answer the following questions: do the residents know how to get information during a disaster, do the residents have an emergency kit with at least 2 days of food and water, what is the expected fire company response time during a disaster, is there a difference in readiness of the Hampden Township citizens compared to citizens in other communities, and what is the best information dissemination method during a disaster? The author conducted interviews, used a survey data collection tool and reviewed current literature. The majority of residents who participated in the survey will get information from the radio and television. Most do not have an emergency kit; they expect the fire company to be on the scene in five minutes or less. This survey indicated that the sample of citizens in Hampden Township are more prepared than those in other communities, and the best method to provide information is by the television and radio. Emergency management organizations must use multiple methods of information dissemination. Recommendations include additional research, development of online training, development of pre-scripted messages, and the implementation of citizen training programs.

Table of Contents

Abstract.....3

Table of Contents.....4

Introduction.....5

Background and Significance.....6

Literature Review.....9

Procedures.....15

Limitations.....17

Results.....17

Discussion.....22

Recommendations.....25

References.....27

Appendices

Appendix A: Survey. ....29

## Introduction

The importance of community emergency preparedness and citizen readiness has been dramatically illustrated as a result of Hurricane Katrina and the Terrorist Attacks of September 11, 2001. Elected officials and public safety leaders are tasked with making sure communities are ready when a disaster occurs. It is also essential that citizens proactively prepare to help themselves when community resources are stretched to the limit. In March of 2005 Hampden Township Government published a Family Preparedness Guide with the purpose of increasing citizen awareness and readiness for emergencies (M. Gossert, personal communications, September 22, 2008). The guide was developed using the Washington D.C. Family Preparedness Guide as a model. The guide instructs citizens what to do before during and after an emergency, how to create a family emergency plan, and how to prepare an emergency go kit. The guide also lists local emergency contact numbers. The problem is that Hampden Township has not assessed the effectiveness of the Family Preparedness Guide that was distributed by mail to all households. The purpose of this research is to assess if the residents in the Fairwinds development have a basic knowledge of preparedness required during a human caused or natural disaster.

Descriptive research will be used to identify the current status of resident knowledge. The author will conduct interviews, develop and distribute a survey, review current reference material and conduct a World Wide Web data search. The outcome of this research will be used to identify knowledge gaps and develop potential solutions to those gaps. This paper will address the following research questions:

1. Do the residents know how to get information during a community wide disaster?
2. Do the residents have an emergency kit that includes at least 2 days of food and water?
3. If the resident calls the fire company for help during a community disaster what is the expected response?
4. Is there a difference in readiness of the Hampden Township citizens compared to citizens in other communities across the United States?
5. What is the best information dissemination method used during human caused or national disasters?

### Background and Significance

The National Center for Disaster Preparedness (NCDP) at Columbia University conducts an annual survey that identifies public attitudes about emergencies and personal preparedness for a disaster. The document, *The American Preparedness Project: Where the US Public Stands in 2007 on Terrorism, Security, and Disaster Preparedness (2006)* revealed some interesting trends regarding public preparedness. One third or 31% of the respondents believe their community has an adequate response plan in place in the event of a terrorist attack. Only 51% were prepared in the case of natural disaster or emergency weather event. The survey results also indicated only a small percentage of the American public is personally prepared for a disaster. Less than one-third of the respondents have a basic family emergency plan and supplies and more surprisingly, 66% of the respondents feel totally unprepared. The key point of the NCDP survey is that after more than five years after September 11 and one year after Hurricane Katrina, the American public is still not prepared for a terrorist attack or other disaster. There is a significance perception of the

lack of community preparedness for disasters. During a disaster traditional response agencies are quickly overwhelmed with requests for service. Communities, neighborhoods and citizens in general must make due as necessary. Harrisburg Pennsylvania and the surrounding suburban area are not immune from natural and human caused disasters and it is the responsibility of the local first responders to be proactive in planning for potential issues.

The Hampden Township Volunteer Fire Company (HTVFC) is an all hazard response agency that provides fire, rescue and first response medical services to Hampden Township and automatic aid to eight bordering municipalities. Hampden Township is considered a suburb of the Harrisburg, the Pennsylvania state capital. Our risk assessment has shown that Hampden Township is a diverse community with a resident population of 26,298 with 9,990 households in 17.7 square miles. The key community demographic information includes the following: the population 65 and older is 13.4 %, disability status 14.7%, speak a language other than English at home 6.3%, families below the poverty level 1.5% and individuals below the poverty level 2.8% (U.S. Census data, 2007). The largest employer is the Naval Support Activity with 5,500 employees and is one of the largest Department of Defense logistics facilities on the east coast. Other large employers in the Township include IBM, The Patriot News printing facility, and Nestle Purina Pet Care manufacturing plant. The township contains 95 miles of township-owned roads and 27 miles of state- owned roads. The HTVFC provides emergency response to Interstate 81 and 581. The capital beltway is a major east coast transportation hub that averages 116,220 vehicles per day and provides direct access to Baltimore, Philadelphia and the Washington D.C. area. Since the early 1960's the community has experienced steady growth with farms turning into residential developments and commercial establishments rapidly multiplying. HTVFC actively participates in the South Central Task Force as a mass

decontamination engine company and state urban search and rescue element. HTVFC has 25 active firefighters, five active fire police officers and five junior firefighters. 15 of the active firefighters are nationally certified to the Firefighter 1 level. The township police department has 22 full time officers and the emergency medical services staff one basic life support ambulance 24 hours per day and one for eight hours Monday thru Friday.

The Township Emergency Management Coordinator is responsible for development and revision of the emergency operations plan (EOP). In Pennsylvania, each municipality is required to have a written EOP that outlines emergency preparedness activities and actions. The plan is coordinated with bordering municipalities and the Cumberland County EOP that is managed by the county Department of Public Safety. If necessary and additional resources are needed in disaster situations the county will coordinate request resources from the Pennsylvania Emergency Management Agency. (Hampden Township Emergency Operations Plan, 2008)

The most frequent natural event in Hampden Township is a snow storm or severe wind storm weather emergency and the most frequent human caused event are motor vehicle crashes. The research will be helpful to our department because citizen preparedness and or the perception of preparedness will improve our ability to forecast what will happen during a disaster. Our Township and automatic aid townships have a large number of people who depend on the fire company in time of need. Learning the specific levels of preparedness will allow us to better preplan our initial and ongoing actions. The fire company and the emergency management agency can use data from this research to improve community outreach and communications. This research will also assist the HTVFC in planning for community risk reduction and meet the United States Fire Administration five year operational objective to help communities develop an

all hazard risk reduction plan. The research also addresses the concepts learned in the course Strategies for Community Risk Reduction.

### Literature Review

Harmon (2007) stated that disasters are not going away and in fact they have tripled since the 1940's. The economic losses associated with disasters will continue to rise. When a human caused or natural disaster occurs citizens can be either part of the problem or part of the solution. Community and individual emergency preparedness are essential when a disaster happens. The emergency preparedness efforts initiated by the federal, state, and local governments along with numerous non profit and business community members also play an essential role survival and sustainment.

Bloom (2007) stated that citizen preparedness is vital to the success and fulfillment of the United States Homeland Security Strategies. She noted surveys and focus groups indicate that citizens are concerned about all hazard threats, natural and human caused. They desire to learn more about what they do in the event of a disaster. Citizens are also concerned about disasters that will most likely occur in their specific region of the country. For example: those living in California are more concerned with earthquakes, while those in New York City are concerned about terrorism or a blackout.

In 2004 the American Red Cross, George Washington University Homeland Security Policy Institute, and the U.S Department of Homeland Security hosted a symposium with the title of Public Preparedness: A National Imperative. The purpose of the symposium was to (a) define public preparedness, (b) identify barriers to engaging the public, and (c) develop recommendations and identify best practices. Discussions at the conference surrounded around

information from American Red Cross research that was conducted on the level of awareness that Americans have about preparing for disasters. The research concluded that (a) 18% of those surveyed are aware of their state's emergency plans, (b) 19% are aware of their local emergency plan, (c) 50% are familiar with disaster plans at their workplace, (d) 50% of parents know the disaster plan for their children's school or daycare, (e) 34% sought information about what to do in the event of a disaster or developed a plan for communicating with their families. Additional information noted that (a) 30% had taken training in emergency preparedness, first aid, or CPR, (b) 10% have family emergency plans and disaster kits in addition to training in first aid, and (c) 20% feel very prepared for a catastrophic event. But strangely the survey revealed that Americans are aware it is important to plan and prepare for disasters but do not regularly practice or prepare.

The U.S. Department of Homeland Security's publication the Quarterly Review of Citizen Preparedness noted the New York City Office of Emergency Management collected data and offered other figures on citizen preparedness. More than half of the respondents indicated that they felt informed or very informed about what to do in an emergency. Only 14% indicated that they had an emergency plan that included two meeting places for family members with multiple exit routes and have copies of the plan. In regards to having an emergency kit only 36% of respondents said that they have all required items. Fifty-two percent reported having only some supplies, but only 16% indicated that had "to go" bags packed with important documents and information on medications ready in case of an evacuation.

Harmon (2007) stated citizen preparedness is affected by the level of involvement citizens have in planning, training, and exercising. Depending on your community's hazards developed by a hazard assessment, there may be specific performance standards that need to be

set. An example of a performance standard might be establishing evacuation times for certain at risk neighborhoods. Citizens should be active participants in emergency preparedness drills.

Bloom (2007) also suggests that a coordinated information campaign that is integrated at the local, state, and federal level can make a difference in increasing the level of citizen preparedness. The examples cited are the successful Safety Belt Education and Drunk Driving information campaigns provided that proactive information campaigns are an effective and a viable instrument to be used in increasing citizen preparedness.

The 2004 *Are You Ready? An In-depth Guide to Citizen Preparedness* book published by the Federal Emergency Management Agency clearly promotes citizen preparedness and identifies the benefits of being prepared. "Being prepared can reduce fear and anxiety and in theory create a reduced demand for emergency services during a disaster". According to FEMA, disasters disrupt hundreds of thousands of lives every year. The book also stated "communities that experience a disaster must recognize that professional emergency response may not be immediate". FEMA recommends and encourages citizens to be self sufficient for at least three days, providing their own shelter, first aid, food, water, and sanitation. The ready.gov and the ready.pa.gov websites are excellent online resources that have been developed by government agencies designed to enhance citizen knowledge.

Redlener (2007) stated in the July 2007 Annual Survey of the American Preparedness Project noted from his research that nearly half of the adults in the nation expect that they will experience a major disaster such as a terror attack or a weather catastrophe during the next several years. His research found that most Americans are relying on "just in time" preparedness. Citizens wait until they receive warning of a looming disaster before finishing preparations to evacuate or shelter in place. Forth three percent of Americans said they are not planning to

prepare for a disaster and over half or 54% believe their community has an adequate response plan for a major disaster with an adequate warning system for events such as a hurricane, flood, or wildfire. Redlener also noted that low income fosters a “preparedness gap” with households resulting in the people with the lowest incomes being least prepared for a disaster. The ability of government to provide accurate and reliable information during a disaster is questionable. The study indicated the most trusted source of disaster information was the local police chief or sheriff, followed by a local mayor, and then the state and federal government. Additionally over one-third of Americans believe that in the event of a catastrophic disaster, help would arrive to assist them within the hour.

Reynolds (2006) recommended that those responsible for emergency planning should be in touch with their citizens. It is vital to determine and understand the diverse culture of a community. The value of community engagement in disaster planning is necessary in order to identify and remove barriers to citizens’ compliance with protective action recommendations during a disaster.

The National Response Framework (2008) includes a Target Capabilities List that outlines community preparedness and participation. The capability list identifies definitions, outcomes, and preparedness task and measurement metrics that can be used to assess community readiness. The capability definition for community participation states that everyone in America is fully aware, trained, and practiced on how to prevent, protect/mitigate, prepare for, and respond to all threats and hazards. There is a required role for citizens in personal preparedness, exercises, ongoing volunteer programs, and surge capacity response. The capability outcome requires an ongoing collaboration between government and nongovernmental resources at all levels. There are four mission areas of preparedness: (a) citizens participate in volunteer

programs, (b) provide surge capacity support, (c) nongovernmental resources are managed effectively in disasters and (d) there is a process to evaluate progress. The planning assumptions utilized in the Community Preparedness Capability provide an excellent foundation and reason for citizen involvement during emergency preparedness activities. The necessary capabilities include planning assumptions that identify people with disabilities, the very young and the very old, people with language barriers, and low income populations will be adversely affected in all incidents. The medical community will be functioning close to peak capacity at time of an incident will need surge capacity from trained volunteers. There will be little warning before incidents occur so it is important to understand that alerts/warnings and emergency public information will need to be provided in multiple languages, multiple formats, and thru multiple venues. Utilizing technology will be essential in community preparedness and disaster warning. Understanding the behavior of humans during disasters can help emergency planners develop realistic goals and objectives.

McEntire (2007) stated that most people get their views about human disaster behavior from films and the media. He notes that news reports, from television coverage, radio broadcasts, or newspaper articles portray human behavior in a dismal fashion. This has created many disaster myths that emergency planning officials must overcome. McEntire also stated one of the most widely held disaster myths is that people act irrationally then panic and are unable to think clearly. Other myths that have been proven false include looting, price gouging, victims will be in shock and be unable to take care of themselves, role or post abandonment by public safety officials, and the establishment of martial law. In reality, people act rationally and altruistically during disasters. Workers do not neglect their duties and victims can do much to take care of themselves.

Bass (2005) researched communication methods used in disasters in the wake of Hurricane Katrina. The impact of poor communications on the public during a disaster can create chaos, distress, and alarm. In a study of 1,500 Pennsylvanians Bass found that people will rely on television and radio for information during an emergency. However half of the respondents would go to non- traditional communicators such as clergy. She also noted that most people felt they were prepared for emergencies but actually were not – finding only 31% of respondents had a family communications plan. Government agencies responsible for communications during a disaster should create timely and accurate methods to disseminate information using a trusted public face as spokesperson.

The Emergency Management Accreditation Program Manual (2006) outlines and highlights why public information is important during disasters. Former Florida Governor Jeb Bush said “providing clear and consistent direction to citizens before, during, and following disasters is key to emergency preparedness and emergency response”. The manual recognized that emergency managers have a major challenge when educating the public. Many have limited resources and focus only on response and recovery diminishing the attention needed for public information. There is also a lack of outcome measurement to demonstrate the effectiveness of the education. It is very difficult to overcome complacency and focus on the important news related to a disaster. The definition of public education is the process of making the public aware of its risks and preparing citizens for hazards in advance of a disaster and a long-term strategic effort.

The Emergency Management Accreditation Program published a document titled *Assessing Your Disaster Public Awareness Program* in October 2006. The publication reviewed several methods that are used to disseminate information during a disaster. The need for clear,

consistent, and actionable information about potential and pending disasters is vital in protecting the public safety and welfare. The document also discussed data from a survey conducted by the Kaiser Family Foundation and Harvard University which studied the need for better outreach and communications during a disaster. A survey of 680 adults evacuated from the Gulf Coast to Houston during Hurricane Katrina revealed that 73% heard the evacuation order before the hurricane hit, 66% stated there were clear orders during the evacuation, yet 61% did not evacuate. Of those who did not evacuate, 64% stated they felt the storm would not be that bad, 55% stated they did not have a way to leave, 22% stated they were physically unable to leave, 42% stated they waited too long, and 37% just did not want to leave. It seems reasonable to believe that the outcomes of hurricanes Katrina and Rita would serve as a wake up call thus increasing the number of people who prepare for disasters. The Accreditation manual noted that a study by the Council for Excellent in Government and the American Red Cross suggested otherwise, people are not increasing their preparedness.

### Procedures

Research for this paper was conducted at the National Fire Academy Learning Resource Center to identify specific emergency preparedness readiness factors. The author also used the collection of reference material at the Harrisburg Area Community College Public Safety Training Center. An internet search revealed several federal documents and examples of similar community readiness surveys.

After the literature review was conducted a community preparedness survey was developed by the author utilizing an example from the City of West Bend, Wisconsin. The purpose of the survey was to identify if a sample of residents of Hampden Township are

prepared for a natural or human caused disaster. The questions in the survey were developed to gather specific information for the research paper. The first question was used to identify the street and housing development the respondent resides. There are 5 different streets in the Fairwinds development. Question two asked if the respondent received or has knowledge of the Hampden Township Family Preparedness Guide. The guide is the only means by which the local government educates citizens on the requirements of preparedness. The next series of questions were directly related to the research questions. They asked how citizens would get information during a disaster and how concerned they are about specific types of disasters, how prepared is the household for a 48 hour emergency (including the emergency kit), and when they expect help from the fire company. The survey also included extra questions not related to the research paper but would be helpful for future decision making. The questions specifically asked about how the respondent would prefer to receive information to make their home safer and types of concerns related to disasters.

The Survey Monkey data collection tool and a written interview question format was developed on a word document and used to obtain the required data from an interview of the sample population. The sample respondent goal was at least 40% of the 102 homes in the Fairwinds development. The author felt the sample number was a reasonable size of homes in the development even if the sample would not meet the recommended confidence level number. The information regarding the number of residents in the sample development was obtained thru the Hampden Township geographical information systems department and the HTVFC annual fund drive database. The author chose to interview residents of the Fairwinds Development by using a door to door canvas on November 22 and 23, 2008 and by using an email list provided by the

homeowners association. The email was sent requested the survey be completed by November 30, 2008.

The response rate in the Fairwinds development was 32% with 33 of the 102 single family homes responding to the survey either by email or by the door to door survey. The electronic survey tool was open for a two week period for data collection from the internet. The door to door survey data was entered by the author after the door to door canvas was completed. The author did not ask any follow up questions during the interview phase.

### Limitations

It is important to note that the sample survey population is only a small percent of the total township residents. The 100 homes in the Fairwinds development were built from 2003 to 2006 and the majority of residents are new to the Township. There are a total of 9,900 residential properties in the township. The results of the survey could have been different if an older development with longer term residents were questioned.

### Results

Results of the research were broken down into information from the survey and information gained by the literature review.

Research question 1: Do the residents know how to get information during a community wide disaster? The survey was used to assist in answering this question. Clearly it is only a sample of the total population so the confidence level of the results can be questioned. The results are listed below in table 1.

Table 1

Do you know how to get important emergency information during a community wide disaster?

Answer	Response Percent	Response Count
Yes	78.8%	26
No	21.2%	7

The clear majority know how to get important information during a disaster. If the respondent answered yes, they were prompted to identify the preferred method on how to receive the emergency information. The preferred method of receiving information was by radio following television. A total of 15 respondents identified radio only, seven identified both television and radio, three listed television only, and one each listed text messaging and the telephone.

Research question 2: Do the residents have an emergency kit that includes at least two days of food and water? Again the survey tool was to identify if the residents had some type of kit.

Table 2

Does your family have an emergency supply kit set aside for immediate use that could sustain all members of the family for 48 hours?

Answer	Percent Response	Response Count
Yes	37.5%	12
No	62.5%	20

One person skipped this question with only 32 or the 33 respondents indicating if they have some type of emergency supply kit. It is assumed that all respondents define the emergency supply kit as including food and water. The majority of the respondents do not have an emergency supply kit.

Research question 3: If the resident calls the fire company for help during a community disaster what is the expected response? The survey question mirrored the research question.

Table 3

If you call the fire company for help during a community disaster what is the expected response time?

Answer	Percent Response	Response Count
Under 5 minutes	75.8%	25
5 to 10 minutes	15.2%	5
10 to 15 minutes	6.1%	2
Over 15 minutes	3%	1

The clear majority of respondents expected the fire company to be on the scene fast under five minutes.

Research question 4: Is there a difference in readiness of the Hampden Township citizens compared to citizens in other communities across the United States? This question seeks opinion and will be compared with some national statistics.

Table 4

How well prepared do you feel your household is to handle an emergency that could have an impact of 48 hours?

Answer	Percent Response	Response Count
Very prepared	9.1%	3
Somewhat prepared	72.7%	24
Not very prepared	15.2%	12
Not prepared at all	3%	1

The population of Hampden Township that was surveyed is somewhat more prepared for community disaster when the National Center for Disaster Preparedness (NDCP) survey is used as benchmark comparison. NCDP noted that 66% of the people surveyed feel totally unprepared for a disaster, in Hampden Township 15% of the population surveyed felt that they were not very

prepared and 3% percent were not prepared at all for a disaster that lasted greater than 48 hours. That 18% is much lower than those surveyed by the NCDP.

Research question 5: What is the best information dissemination method used during human caused or natural disasters?

Facts from the literature review were used as the basis for answering the question. Bass noted that most people will turn to the television and radio during an emergency. The accreditation manual recognized the challenges involved in providing public information and noted the components of an effective public information program. The components include having procedures to disseminate and respond to questions specifically having the ability to provide timely effective facts. Other components include: a) having a central contact facility for the media, b) a disaster / emergency information handling system, c) pre-scripted information bulletins, d) a method to coordinate and clear information for release, e) have the capability of communicating with special needs populations, and f) finally having recommended guidelines for shelter-in-place or evacuation. The final recommendation includes the incorporation of the Emergency Support Function 15 External Affairs section of the National Response Framework into the local emergency operations plan.

The author also took the opportunity to test if members of the community had received the published Hampden Township Citizen Preparedness Guide. 18% or six indicated yes, 42.4% or 14 indicated no, and 39.4% or 13 answered unsure. The purpose of this question was to establish a benchmark trying to establish if the guide does anything to improve disaster preparedness. The majority indicated no or unsure suggesting the guide does little to increase awareness. The author also took the opportunity to attempt to identify type of disaster concerns

in the sample population. This was done using a rating scale indicating level of concern ranging from not, somewhat, moderately, and very. The disasters listed included the following: floods, high wind / tornado, mass health or disease alert, snow storm, telecommunications failure, radiological incident, terrorism, utilities interruption, and finally fire. The results were the following for each type of disaster: a) 63% or 21 were somewhat concerned about a flood, b) 57% or 19 somewhat concerned about high winds, c) 48% or 16 were not concerned about a health alert / mass disease, d) 48% or 16 were somewhat concerned about a snowstorm, e) 45% or 15 were somewhat concerned of a telecommunications failure, f) 72% or 24 were not concerned about terrorism, g) 57% were somewhat concerned about a utility interruption and h) 57% or 19 were moderately concerned about a fire. With moderate being the highest indicator it seems most respondents are more concerned with fire than any other disaster followed by 63% indicating flooding in the somewhat concerned category. This information will be used for future research and training program development.

### Discussion

The attempt to improve citizen emergency preparedness is nothing new in the United States. In the 1950's the Federal Civil Defense Administration was created in response to the Soviet Union's testing of an atomic bomb in the summer of 1949. In 1978 the Federal Emergency Management Agency was created in because of fragmentation in federal disaster response. After the terrorist attacks on September 11, 2001 there was a refocused effort to coordinate disaster response at the local, state, and federal level. Millions of dollars have been spent on public awareness campaigns and programs like Citizen Corps which is a community based volunteer groups who assist in preparing for disasters. The mission of Citizen Corps is to

harness the power of every individual through education, training, and volunteer service to make communities safer, stronger, and better prepared to respond to the threats of terrorism, crime, public health issues, and disasters of all kinds. It is not clear if the efforts initiated by local, state, and federal agencies that are responsible for disasters have improved citizen preparedness. In reality many citizens are not prepared for community disasters. Some of the citizens may be proactive but the results of the survey indicate questions remain. The answer to research question one would be that citizens in Hampden Township would get emergency information from the radio or television. The information from research question five clearly indicates that it is essential that local emergency management provide clear and consistent information for public actions during an emergency. One of the keys to improving the information flow and develop a series of pre-scripted media releases that provide specific instructions on what to do in disaster situations. It is clear that emergency managers must use multiple methods of information dissemination and mass notification during a disaster. Those methods should include the traditional television and radio method and the new electronic means of notification such as rapid email and text messaging services.

The community's expectation of the fire company response identified an unrealistic emergency response time of 5 minutes or less. The answer to research question three was pretty interesting because the author felt citizens would understand a response time lag during a disaster. It is clear that the community may experience significant delays if multiple events occur at once or effect different developments. The lack of any recent disasters could have altered the realistic response to the question. The HTVFC responds to over 800 calls per year with an average response time of 7.8 minutes. The company is on the scene within 11 minutes 90 percent of the time. The average staffing is 7.2 firefighters. When a disaster would strike the company

has regular automatic aid preplanned into the response. For a weather emergency or tornado a large amount of fire service resources organized into task forces and strike teams can be dispatched and deployed within about 10 to 15 minutes. Citizens who are involved in a disaster must have realistic expectations. Those expectations may be managed by improving outreach educational programs.

As noted by Harmon citizens who are affected by a disaster can be part of the solution or part of the problem. The actions or no actions by citizens can help emergency management. It is important to note that the concept of community resilience – the perceived ability to successfully recover from a disaster is based upon the efforts of local citizens accepting responsibility for preparing. In addition, the concept of social preparedness further illustrates that communities cannot depend on government resources to rescue and recover from a disaster. Of the community members who participated in this survey only 18% or six had seen or were aware of the Hampden Township Citizen Emergency Preparedness Guide. This may be a factor in preparedness knowledge because a citizen just did not know it was important they document is and disposed of it upon like other junk mail. Another factor may be the time involved in reading and actually acting on the recommendations. Additionally there is a general apathetic feeling that a disaster will not occur. That apathy could be the reason why research question two resulted in lower than expected preparedness. There is no doubt that having basic provisions is very important. The concept and importance of having an emergency kit cannot be overstated. The survey results from the New York City Office of Emergency Management study showed only 36% of respondents reported having an emergency kit. In Hampden Township 37.5% of the respondents admitting to having a fully stocked emergency kit with a supply of food and water. Although Hampden Township is a suburban area with many local grocery and mini mart type

stores a disaster may disrupt any or all utilities required to keep food and water safe. Although only a fraction of the total population of Hampden Township participated in this survey it is interesting the reported preparedness levels are similar to those of New York City. In the wake of the September 11, 2001 terrorist attack one would expect the New York City percentage to be higher. In Hampden Township where disasters occur infrequently the author can realize why so many people do not have an emergency preparedness kit. They have not experienced a disaster so they don't need to prepare for one. The FEMA Are You Ready Document and the many associated public information campaigns that are aimed at improving preparedness awareness should have had some type of impact on preparedness. It is unclear from this small survey population of Hampden Township if the Emergency Preparedness Manual has had any effect on citizens being ready for a disaster. It is also unclear if any national or state-wide public information campaigns have made an impact improving emergency preparedness.

### Recommendations

It is important to remember that if communities are not regularly effected by disasters citizens will be less likely prepared. Recommendations from this research that can be used for improving emergency preparedness include: a) the development of a web based orientation to disaster preparedness course that is simple and can be used by citizens to increase knowledge. The course can be marketed in township publications and utility bills. b) Development of a series of pre-scripted messages that can be used by the media to provide information during a disaster. c) Implement a series of training programs for the community that can be offered in a simple time sensitive format. d) conduct further research through interviews at public township events like the Creekview Family Fun Night. The interview questions should expand on what was

discussed in the paper and focus on a more realistic measure of preparedness with a larger population sample size. Finally the Hampden Township Emergency Management staff and the HTVFC should actively engage the public and promote emergency preparedness through public meetings, development events, and township recreation functions with the goal of making citizens self sufficient for the first 48 hours of a disaster.

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## Appendix A – The Survey

1. What is the name of your street and development?
2. Have you received the Hampden Township Family Preparedness Guide?
  - a. (Picture of Guide)
3. Do you know how to get important emergency information during a community disaster?
  - a. Yes or No
4. How concerned are you about the following disasters affecting the community?
  - a. Concern ratings (Not, Somewhat, Moderately, Very)
  - b. Types (Floods, High winds/tornado, Mass disease, Snow Storm, Communications failure, Radiological incident, Terrorism, Utilities interruption, and Fire)
5. How well prepared do you feel your household is to handle an emergency that could have an impact of 48 hours?
  - a. Preparedness rating (Very, Somewhat, Not very, Not prepared at all)
6. Does your family have an emergency supply kit set aside for immediate use that could sustain all members of the household for 48 hours?
  - a. Yes or No
7. If you call the fire company for help during a community disaster what is the expected response time?
  - a. Minutes (Under 5, 5 to 10, 10 to 15, over 15)