

Running head: RISK REDUCTION FACTORS OF THE MOBILITY IMPAIRED

Risk Reduction Factors of the Mobility Impaired Residents of Sweetwater County Fire District 1

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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 another.

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James K. Wamsley

Abstract

The problem was that Sweetwater County Fire District #1 (Fire District #1) had insufficient data to address the primary and secondary risk reduction needs of the mobility impaired residents of the community. The purpose of this research was to identify the primary and secondary risk reduction needs of those with mobility impairments.

Fire District #1 had no knowledge of the locations of the mobility impaired residents of the community, nor of the methods and barriers to accessing them. The primary and secondary risk reduction issues affecting these individuals were also unknown. No data was available concerning the activities of other fire departments in this subject area. The research questions were answered using the descriptive research method.

The locations of the mobility impaired residents of Fire District #1 were narrowed to a general area through the U.S. Census Bureau web site using the American Fact Finder. The literature review identified the barriers and methods to accessing the mobility impaired segment of the community. Through literature review the primary and secondary risk reduction needs of the mobility impaired were also identified. This information was then referenced to develop a questionnaire for other fire departments.

Partnerships with entities having potential contact with the mobility impaired were the best avenue for access to the mobility impaired. The restrictions of the Health Insurance Portability and Accountability Act (HIPAA) presented the greatest barrier. The primary and secondary risk reduction issues were similar to those of the mainstream population; however the restrictions imposed by the mobility impairment placed greater emphasis on the need for fire department involvement.

Recommendations were that Fire District #1 identify and develop partnerships to contact the mobility impaired residents of the community. Other recommendations included development of public education and fire prevention programs specific to the needs of the mobility impaired.

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Introduction

The primary mission of the fire service in the United States has traditionally been that of a reactive force which deals with the suppression of fires and response to other incidents as requested. Recent philosophies have shifted the focus of the fire service from reactive to proactive through public education and primary mitigation efforts to avoid fires and other disasters entirely. These efforts have largely addressed the risk reduction needs of mainstream America through home safety messages and campaigns designed to make individuals aware of actions which can prevent an incident, or should an incident occur limit the injury and damage of such catastrophes. This has become an accepted practice in the modern fire service and many, if not most agencies offer public safety education as part of their risk reduction efforts.

The problem is that Fire District #1 has no program to address the risk reduction needs of the mobility impaired residents of the community. The purpose of this research is to identify the primary and secondary risk reduction needs of the mobility impaired residents of Fire District #1. A descriptive research methodology will be utilized to answer the following questions: What are the locations of the mobility impaired residents within the community served by Fire District #1? What methods and barriers exist concerning access to the mobility impaired segment of the population of Fire District #1? What are the primary risk reduction issues affecting the mobility impaired residents of Fire District #1? What are the secondary risk reduction issues affecting the mobility impaired residents of Fire District #1? What are other fire departments doing to address the risk reduction needs of their mobility impaired residents?

Background and Significance

The Fire District #1 fire department is an all hazards organization located in southwest Wyoming. Fire District #1 is served by four career and 32 volunteer firefighters which operate from a single fire station strategically placed at 3010 College Drive within the city limits of Rock Springs, WY. This location provides the best access to calls within Fire District #1 as most incident responses require primary access to US Interstate 80 (I-80). Response times for incidents within Fire District #1 vary according to weather, time of day and location.

The area served by Fire District #1 comprises approximately 2000 square miles including 75 miles of Interstate 80 and hundreds of miles of secondary highways, state, and county roads. South of the boundaries of Fire District #1 no formal fire and rescue service is provided other than wildland suppression. Fire and crash response is handled in these areas by Fire District #1 as a courtesy to those living and working in that area. Additionally the northwestern part of Colorado has no fire and rescue service nearer than Craig, CO. Craig Fire & Rescue employs Fire District #1 as a mutual aid agency for initial response. These areas increase the coverage requirements of Fire District #1 significantly.

The resident population according to the 2000 census is approximately 3,300 people. This population is primarily distributed within a seven-mile radius of the municipality of Rock Springs, WY. The major population areas are as follows: Mountaineer/North of Town Subdivision; Purple Sage Addition; Arrowhead Springs Subdivision; Clearview Acres; and Point of Rocks. The two most remote areas are Point of Rocks and Arrowhead Springs. These two areas account for a fraction of the total population at 71 people.

The response times to incidents by Fire District #1 vary greatly depending on weather and traffic. Weather is a very significant factor. Southwest Wyoming is prone to long, cold winters with temperatures averaging in the low teens to as low as -40 F° for days on end. The snow and wind often combine to make many roads difficult to navigate. Incidents occurring during severe weather may require response times of over one hour, such as a call for a structure fire at Point of Rocks (30 miles), or a patient experiencing chest pains in Arrowhead Springs (15 miles). Highway responses with a 40-mile drive are not uncommon.

Fire District #1 has an active public safety education program; however the curriculum and delivery are primarily geared towards the pre-school and elementary school ages. There are currently no formal partnerships with other entities concerning the risk reduction needs of any other segment of the population. Prior efforts centered on a “special needs” identification program. This program consisted of an address highlighted in pink on the response maps with the words “special needs.” This indicated a difficult access, and/or mobility impairment at that particular address. These identifications were coordinated with Sweetwater County Emergency Management as information became available for a particular address.

Fire District #1 currently has no program to address the primary and secondary risk reduction factors of the mobility impaired residents within its service area. This issue became painfully obvious this past year as Fire District #1 responded to two incidents involving mobility impaired persons.

The most recent was an incident involving a wheel-chair bound elderly lady who had fallen while attempting to get ready for the day. The woman had suffered an open fracture of her right ankle. A faint voice and no alternate means of communication or alarm caused a delay of

treatment for well over an hour by her estimation. Although this case was not directly related to home fire safety, Fire District #1 was still unaware of the location of this resident and her mobility impairment.

The second instance involved the first fire fatality in the history of Fire District #1. A 70-year old male amputee perished in a house fire after his bedding caught fire. Rescue crews found the man slumped off the edge of the bed in an unsuccessful attempt to get into his wheelchair and escape the fire. Although a rescue was attempted within one minute of the alarm, the man suffered 2nd and 3rd degree burns over 98% of his body. Resuscitation attempts at the scene and later at the hospital were unsuccessful. The cause of ignition was never found; however, the man was known to smoke in his bed while using his oxygen. The presence of a person with mobility impairments was known at this residence; however no prior efforts on the part of Fire District #1 had been made with regards to home fire safety for this individual.

Risk reduction, or prevention can be divided into three levels, primary, secondary and tertiary (U.S. Department of Homeland Security, 2008). Primary risk reduction activities are those which eliminate or reduce the likelihood of a fire or other emergency from occurring; secondary risk reduction measures are those which reduce or eliminate the results of an emergency event; and tertiary risk reduction concerns recovery from the effects of an emergency. This research is concerned with the first two types of risk reduction – primary and secondary.

The best, most efficient public education program in the world cannot save someone from their own carelessness. Basic primary and secondary risk reduction education can be provided to mitigate the risk factors unique to the mobility impaired segment of Fire District #1. This research correlates directly to the content of the Executive Analysis of Community Risk

Reduction course, which is “to empower the Executive Fire Officer (EFO) with the ability to lead community risk reduction in a strategic manner” (U.S. Department of Homeland Security, 2008). The identification of the primary and secondary risk reduction factors of the mobility impaired residents of Fire District #1 further promotes one of the five U.S. Fire Administration Operational Objectives which is “to promote within communities a comprehensive, multi-hazard risk-reduction plan led by the fire service organization” (U.S. Department of Homeland Security, 2008).

Literature Review

The first step in reducing risk to any particular portion of a community is to identify and locate that group. This step is closely followed by the act of accessing the target population. The most obvious venue to locate a segment of the demographic of Fire District #1 is through the American Fact Finder from the U.S Census Bureau Homepage (U.S. Census Bureau, 2000a).

The American Fact Finder can be used to define the various demographic facets of the residents of a given area (U.S. Census Bureau, 2000a). According to the American Fact Finder the year 2000 census identified 310 persons with disabilities out of a measured population of 3,336 residents. This figure represents almost 10% of the population; however it does not identify the specific disability. One caveat to this figure would be the listing of 20 persons with disabilities in a population of three in the town of Point of Rocks. Point of Rocks is the furthest major population center from the fire station of Fire District #1. It should be noted that figures for the 2006 interim census were not available for the areas represented in this evaluation.

Although the presence of individuals with mobility impairments can be readily validated through the U.S. Census Bureau, the actual number of mobility impaired persons in a given area

is subject to interpretation by the reader. The 2000 census American Fact Finder glossary allows a fairly broad interpretation for “disability” (U.S. Census Bureau, 2000b). The demographic may include persons with mental, physical, or sensory disabilities, or a combination of all three. The definition also included a qualifier that the condition of disability is semi-permanent, or of long-term duration.

The problems of locating, educating and training the mobility impaired persons in the principles of risk reduction are graphically illustrated in the Nobody Left Behind Report (Fox, White, H., Rooney, & Rowland, 2007). Nobody Left Behind acknowledges the elephant in the room with emergency response, stating in stark terms that the majority of emergency systems are geared towards the mobile portion of the population who are readily able to employ walking or running as a primary means of escape and evacuation. Nobody Left Behind found that most emergency managers had no data concerning the number or locations of mobility impaired persons within their jurisdiction.

The reliability of surveillance tools to locate the mobility impaired population was also highlighted, and the recommendation made that specific training curricula be designed to encourage those with mobility impairments to self-identify (Fox, White, H., Rooney, & Rowland, 2007). Several of the recommendations from Nobody Left Behind encourage those with mobility impairments to self-identify and become proactive with emergency services as well as taking an increased role in disaster planning and education.

The major obstacle for obtaining useful data concerning the locations of the mobility impaired residents of Fire District #1 is HIPAA. HIPAA was enacted in 1996 and establishes guidelines for the protection of an individual’s personal medical history, known as protected

health information (PHI). PHI is any data “individually identifiable which is transmitted or maintained in any form or medium” (Center for Disease Control, 2003). HIPAA prohibits the dissemination of PHI without express consent from the individual. The effect of this regulation as it relates to this research is to create a barrier to the access of locations of the mobility impaired residents of Fire District #1 through healthcare providers and vendors of healthcare supplies and services. HIPAA also prevents Fire District #1 and any other covered entity from identifying the location of mobility impaired individuals with regards to advance planning for emergency response to that particular occupancy without prior authorization from the individual.

Methods of accessing the mobility impaired residents include partnerships with businesses and public agencies which provide care and services to the mobility impaired. This was advice given as early as 1999 in Solutions 2000 with the advice that more of the fire service and partnerships be used to target high-risk groups such as those with mobility impairments (North American Coalition For Fire and Life Safety Education, 1999).

The Johns Hopkins report on fire and life safety education in the United States recognizes the importance of partnering to improve fire and life safety education (Gielen, McDonald, & Piver, 2007). The results of this survey include common partners generic to fire and life safety education efforts and specialized groups and organizations. Common partners would include entities such as public schools and youth groups, while specialized groups and organizations include hospitals, burn and rehabilitation units and employers and public housing managers.

Several sources cite the need for persons with mobility impairments to be proactive in working with local fire departments. The United Spinal Association recommends that those with mobility impairments contact and become familiar with those entities which provide fire and

emergency services to their home (United Spinal Association, N.D.). Their recommendations also advise that an emergency evacuation plan be developed in conjunction with local emergency service coordinators and managers. Nobody Left Behind also has in its list of recommendations the suggestion that persons with mobility impairments be taught how to be proactive with emergency services. The U.S. Department of Homeland Security echo these sentiments through their several reports (U.S. Fire Administration, N.D.a; U.S. Fire Administration, 1999; U.S. Fire Administration, N.D.b)

Able Tech and Fire Protection Publications, Oklahoma State University (FPP) have teamed up to provide a guide for implementation of a home fire safety and smoke alarm installation program by fire departments for the mobility impaired (Fire Safety Solutions for People with Disabilities, 2007). One point made in this reference was the fact that there are no specific messages to address the mobility impaired population, and the information which was available was not necessarily accurate. The Home Safety Council comments that there is not enough information about home safety practices of the mobility impaired (Home Safety Council, 2009).

When considering the primary risk reduction issues of the mobility impaired residents of Fire District #1, central to the topic is the formation of partnerships. Solutions 2000 (North American Coalition For Fire and Life Safety Education, 1999) suggests that the access to this high-risk population can be increased through partnering with business groups and special interest groups which interact with these persons. FPP also agrees, listing as its first step the confirmation of partnerships with regards to fire safety and disability (Fire Safety Solutions for People with Disabilities, 2007).

The two sources providing primary risk prevention information were the U.S. Fire Administration and FPP. The primary risk reduction factors mentioned included cooking safety, electrical safety, smoking, space heaters, heating systems, fireplaces, home safety inspections, and candles (U.S. Fire Administration, 1999; Fire Safety Solutions for Oklahomans with Disabilities, N.D.).

The U.S. Fire Administration lists cooking safety, electrical safety, smoking, space heaters and heating systems safety, and fireplace safety as primary home safety measures (U.S. Fire Administration, 1999). Each item is accompanied by information generic to all populations which may be presented through conventional public education presentations in existing programs. Additional information regarding mobility-impairment specific primary risk reduction measures was contained in the section regarding smoking. The information warns against smoking in the presence of or while using oxygen, adding that signs should be placed in the area to warn visitors of the hazard as well.

The set of primary risk reduction factors provided by FPP are similar to those listed above, with the addition of candle safety (Fire Safety Solutions for Oklahomans with Disabilities, N.D.). FPP treats these individual subjects with a great measure of detail as this brochure is intended as a reference for the mobility impaired resident to use at home.

The secondary risk reduction factors pertaining to actions which reduce the effects of a calamitous event were represented in much greater volume in all references. Home smoke alarms took the forefront in the FPP publication Home Fire Safety for People with Mobility Impairments. FPP advised for proper placement and quantity as well as explaining the advantages of smoke alarms developed specifically for people with mobility impairments. This

type of smoke alarm comes with a remote control which can be used to test the alarm each month. FPP cautions the mobility impaired to “know your smoke alarm” (Fire Safety Solutions for Oklahomans with Disabilities, N.D.) as it makes a specific sound when smoke is present which they should be able to recognize. This special smoke alarm has a 10 year battery. At the end of the lifespan of the battery, the alarm should be replaced and the old one discarded (see also: U.S. Fire Administration, 1999; FireSafety.Gov, N.D.; U.S. Fire Administration, N.D.b; U.S. Fire Administration, N.D.a; United Spinal Association, N.D).

Significantly FPP is the only source which directly recommends that mobility impaired persons should install a home fire sprinkler system (Fire Safety Solutions for Oklahomans with Disabilities, N.D.) Information is given regarding the efficiency of home fire sprinkler systems in extinguishing fire before they can grow and put off the toxic byproducts of combustion which they also highlight as the number one cause of death for persons involved in a house fire.

Other measures suggested included the development and periodic practice of exit drills in the home (Fire Safety Solutions for Oklahomans with Disabilities, N.D.). The process of developing the basic home escape plan describes a basic access/egress survey of each room with colored arrows indicating primary and secondary egress. This information is supplemented with advice regarding clutter in an escape route, house number visibility, sleeping location and frequency of practice of the exit drill. FPP admonishes the mobility impaired individual that they are the expert in their capabilities and limitations and should plan accordingly by altering emergency procedures as requirements change. Contact with the fire department is also encouraged in order that information regarding the presence and location of mobility impaired persons may be known in advance of an emergency.

The suggestion that emergency exit routes and home safety plans be developed with fire department involvement echoes throughout several sources (Fire Safety Solutions for Oklahomans with Disabilities, N.D.; U.S. Fire Administration, 1999; FireSafety.Gov, N.D.; U.S. Fire Administration, N.D.b; U.S. Fire Administration, N.D.a; United Spinal Association, N.D.). The involvement of the fire department offers the opportunity to have a home safety inspection conducted at the same time. The act of involving the fire department also establishes rapport with the individual, allowing other primary and secondary risk reduction measures to be addressed. Suggestions concerning emergency escape procedures and accessories such as extra ramps for wheelchair users, and address signs which are clearly visible from the street are recommended during these interactions.

The presence of a fire extinguisher and the knowledge of its use are recommended by the American Spinal Association and the U.S. Fire Administration (U.S. Fire Administration, 1999; United Spinal Association, N.D.). Both advise that the extinguisher should be within reach of the intended user. The U.S. Fire Administration mentions mounting the extinguisher to the person's wheelchair so that in case of a fire if the occupant can't "stop, drop, and roll" during a fire" they can "pull, aim, squeeze, and sweep" (U.S. Fire Administration, 1999).

The advice regarding emergency procedures is prefaced in several sources with a statement advising that persons with mobility impairments live or at least sleep on the ground floor near an exit (Fire Safety Solutions for Oklahomans with Disabilities, N.D.; U.S. Fire Administration, 1999; U.S. Fire Administration, N.D.b; U.S. Fire Administration, N.D.a; United Spinal Association, N.D.). This is followed up with basic emergency procedures also generic to all groups. Getting out of the building and remaining outside for emergency services, or if this is not possible keeping doors closed between themselves and the fire; having a cell phone nearby to

inform the fire department and neighbors of their exact location during the fire; and testing the doors before opening them are all safe practices taught in regular public education venues.

The habit of practicing the unlocking of doors and windows before an emergency as well as ensuring that security bars can be unlocked by the mobility impaired occupant from the inside are risk reduction factors which the various U.S. Fire Administration sources and Firesafety.gov address in conjunction with home escape plans and emergency procedures (U.S. Fire Administration, 1999; FireSafety.Gov, N.D.; U.S. Fire Administration, N.D.b; U.S. Fire Administration, N.D.a). These sources point out the fact that time is of the essence in any emergency situation, and advance preparation in this manner will speed up the escape process.

The efforts of other fire departments in the arena of risk reduction for the mobility impaired are conspicuous by their absence. No direct reference could be found among Applied Research Papers (APR) in the U.S. Fire Administration's online Learning Resource Center catalogue. The Center for Injury Research & Policy found that only 1% of the 7,408 fire departments surveyed provided fire and life safety education to those with disabilities or special needs (Gielen, McDonald, & Piver, 2007).

The problem seems to be with the response community in general. Nobody Left Behind observed that just 21% of emergency managers were developing materials to assist those with mobility impairments in the event of a disaster. The report further noted that the development and implementation of better surveillance methods would assist emergency managers with access and fire and life safety education efforts among the mobility impaired segment of society (Fox, White, H., Rooney, & Rowland, 2007).

The literature review brought to light the fact that the majority of the risk reduction factors for the mobility impaired residents of Fire District #1 are the same as those of the general population, namely home smoke alarms; established emergency procedures and the adoption of escape routes; the practice of exit drills; the several admonitions about smoking; cooking; and electrical safety. The common thread through the various sources is the absence of information regarding the specific locations of and access to the mobility impaired residents in a given geographical area.

The mobility impaired population seems to be off of the radar where fire and life safety is concerned. The barriers to pre-identification of mobility impaired residents in a given response area, coupled with the lack of consistent interaction with fire department officials combine to exclude these people from even incidental contact. The literature review has exposed the need for a consistent, organized effort to access, educate and assist the mobility impaired with their own risk reduction.

The original intent of this research was to discover the primary and secondary risk reduction factors of the mobility impaired residents of Fire District #1. The research would examine as a contingent part of the procedures, how other fire departments of similar size and characteristics to Fire District #1 were addressing the fire and life safety needs specific to the mobility impaired residents of their response areas. The literature review has revealed that the lack of information and established programs appears to be prevalent throughout the fire service.

With this information in hand, the enquiries regarding the efforts of other fire departments on behalf of the mobility impaired residents will be expanded to include agencies of

all sizes. The change in scope will allow access to a much larger quantity of information in what appears to be a rather shallow pool.

Procedures

The first part of this research began with the literature review at the National Fire Academy's Learning Resource Center in January of 2008. The effort included a search for pertinent past EFO research papers as well as a card catalogue search for relevant sources and information.

A search for the locations of the mobility impaired residents of Fire District #1 began by using the American Fact Finder search engine found on the U.S. Census Bureau web site. The response area of Fire District #1 lies outside of a defined city boundary. This required that the author conduct several different searches which defined specific population areas of Fire District #1. The areas referenced were determined by identifying the major concentrations of residents of the Fire District #1 response area. These areas were identified as follows: Clearview Acres, Purple Sage, Mountaineer/North of Town, Arrowhead Springs, and Point of Rocks. The results for each population area were evaluated for the characteristics of total population and total number of disabled residents in each area. These data were entered into a spreadsheet and totaled.

Local emergency management officials were consulted to determine if any program existed at the local level to identify the locations of the mobility impaired residents of Sweetwater County. A program had existed in the past called a "special needs" program which identified persons with personal limitations such as morbid obesity, mobility impairments, severe health issues, and other factors requiring additional or special considerations during incident

response; however as the database was collected outside of the parameters allowed by HIPAA it has been discontinued.

- This research was conducted to answer the following research question: What are the locations of the mobility impaired residents within the community served by Fire District #1?

The literature search was continued via the internet with multiple research sessions between February 2009 and August 2009. The research was conducted utilizing the Google search engine with search terms such as: mobility impaired fire safety, wheelchair fire safety, mobility impaired locations, and mobility impaired emergency procedures.

The purpose of this research was to answer the following research questions:

- What methods and barriers exist concerning access to the mobility impaired segment of the population of Fire District #1?
- What are the primary risk reduction issues affecting the mobility impaired residents of Fire District #1?
- What are the secondary risk reduction issues affecting the mobility impaired residents of Fire District #1?

The second part of the research involved developing a questionnaire based on the material acquired through the literature review. The questionnaire posed a set of questions to the recipient aimed at determining if the recipient's agency had a program which specifically addressed the primary and secondary risk reduction issues of the mobility impaired residents of their community.

The questionnaire was developed in a word processing program and then created online through the SurveyMonkey.com survey tool. The survey was distributed by enclosing a link to the survey in an email message from the internet social group “NFAED2004”. This is an internet blog which was originally started by the Executive Development class of 2004 may be subscribed to via the link “NFAED-subscribe@yahoogroups.com.” At the time the questionnaire was posted the group had 321 EFO members and candidates.

The purpose of this part of the research was to answer the following question:

- What are other fire departments doing to address the risk reduction needs of their mobility impaired residents?

The limitations regarding the locations of the mobility impaired residents of Fire District #1 included a discrepancy between the total number of residents in Point of Rocks and the number of residents with a disability. The total population of Point of Rocks was listed at three, while the number of persons with disabilities was listed at 20. Additional limitations included the age of the census. The census was conducted in the year 2000 No updated information was available for the year 2006 interim census for the response area of Fire District #1. Another limitation of the American Fact Finder search engine was the inability to isolate two smaller population centers for the acquisition of pertinent data. The areas omitted were mobile home parks which may include up to an additional 250 residents.

Other limitations of the research include the absence of information regarding any fire service programs specific to the risk reduction factors of the mobility impaired residents of any agencies. At the beginning of the research, a target audience of fire departments of similar size and response area to that of Fire District #1 was anticipated. However, after considering the multiple statements found during the literature review regarding the absence of programs and

information throughout the fire and emergency services, the decision was made to expand the distribution of the questionnaire to agencies of all sizes.

Limitations of the questionnaire include the limited access to fire service and emergency organizations regarding existing programs. The two available formats for distribution of the questionnaire which are readily accessible are the internet group NFAED2004, or the email lists which may be copied from the various survey requests sent out through the current EFO email list from the National Fire Academy. The latter venue is not easily obtained and accessed except through participation in the EFO program. The NFAED2004 distribution method was chosen to provide better opportunities for repeatability of the results.

The most consistent limitation among the references consulted in the literature review was the tendency of the various fire service related sources to rely on information only from within the fire service discipline. The majority of references consulted from fire service sources referenced each other. Few sources were found to have originated with the mobility impaired community.

Results

Through the efforts of this research the author was able to answer all of the questions posed relative to the topic of the primary and secondary risk reduction factors of the mobility impaired residents of Fire District #1, with the exception of the specific locations of those same individuals. In addition a roster of generic potential partners was identified for access to these same residents, as well as a basic outline of knowledge regarding primary and secondary risk reduction measures specific to the risk reduction needs of mobility impaired residents of Fire District #1.

Research question one: What are the locations of the mobility impaired residents within the community served by Fire District #1?

Current knowledge of the locations of the mobility impaired residents of Fire District #1 is limited to that acquired during incident response, and personal knowledge of the responding crew. Previous efforts regarding this segment of the population of Fire District #1 have been abandoned due to HIPAA issues. This has had the net effect of antiquating the old data in most cases and preventing the effective gathering of new intelligence concerning the locations of the mobility impaired residents of Fire District #1.

One manner of defining the mobility impaired population of a given area would be the data contained in the U.S. Census Bureau Disability Briefing which indicates that 8.2% of the general population age five and over suffers from a condition which limits mobility (Waldrop, 2003). This would allow a rough estimate of 274 residents of Fire District #1 with mobility impairment. A summary of the population centers and the quantity of mobility impaired residents of Fire District #1 is presented in Table 1. The figures are rounded to the nearest whole number.

Table 1

Number of residents with mobility impairment according to population center

Population Center	Total Population	Total with Disabilities	Mobility Impairment @ 8.2% of total Population
Purple Sage	413	69	34
Point of Rocks	3	20	0
Arrowhead Springs	96	6	8
Clearview Acres	850	81	70
North of Rock Springs	1,974	134	162

(U.S. Census Bureau, 2000a)

The first column identifies the population center. These are the areas in Fire District #1 where the densest populations exist. The several single family dwellings on the various ranches throughout the 2000 square miles of the response area are not represented in this table. The second column represents the total number of residents above five years of age in the given population center. The third column is the number of persons with disabilities according to the 2000 census (U.S. Census Bureau, 2000a). The fourth column is derived from Waldron and Sterns' figure of 8.2% of the population having a "condition which limits basic physical activities, such as walking, climbing stairs, reaching, lifting, or carrying" (Waldrop, 2003).

Research question two: What methods and barriers exist concerning access to the mobility impaired segment of the population of Fire District #1?

No other source was found other than the American Fact Finder that would enable Fire District #1 to accurately identify the specific locations of the mobility impaired residents living in the response area. The generic nature and anonymity of the data leaves much to be desired concerning usable information with which to access the mobility impaired residents of Fire District #1. This lack of individual data presents a significant barrier to accessing the mobility impaired residents of Fire District #1.

Another significant obstacle presented is the requirement against individual identification imposed by HIPAA (Center for Disease Control, 2003). The requirements of HIPAA prohibit advance identification of residents with mobility impairments without prior permission from the individual. This restriction has the net effect of stifling independent efforts on the part of Fire District #1 with regards to advance identification of the locations of the mobility impaired residents living in the community.

Methods of accessing the mobility impaired population of Fire district #1 include identifying and forming partnerships with outside entities in the community which interface with these residents. A list of potential partners is located in the Johns Hopkins assessment of Fire and Life Safety education in the United States (Gielen, McDonald, & Piver, 2007).

Additionally two other sources were presented in the questionnaire distributed concerning the efforts of other fire departments with regards to their efforts in the arena of risk reduction for the mobility impaired residents of their communities. The two partners mentioned were the Texas state sponsored 2-1-1 help line for their special needs population and the enhanced 911 system in one jurisdiction. Although specific to the state of Texas, the 2-1-1 help line may warrant further study for possible implementation in the state of Wyoming. The use of the enhanced 911 system would be very convenient from a secondary risk reduction perspective.

One venue for access to the mobility impaired population which was identified during the research was the practice of self-identification (Fox, White, H., Rooney, & Rowland, 2007). This action involves the active participation of the mobility impaired resident to voluntarily contact the fire department. Although this concept requires that those with mobility impairments take this action of their own accord, the act of identifying partners who have access to this segment of the population will present a method for accessing and educating them concerning primary and secondary risk reduction issues.

The glaring fault with the philosophy of self-identification is the lack of effective surveillance methods to locate, educate, and train those with mobility impairments concerning primary and secondary risk reduction issues (Fox, White, H., Rooney, & Rowland, 2007).

Although many sources recommended that persons with mobility impairments be proactive with

emergency services, no easily definable venue was presented regarding a proven, consistent surveillance mechanism to locate and access this population.

Research question three: What are the primary risk reduction issues affecting the mobility impaired residents of Fire District #1?

Primary risk reduction issues are those which prevent the need for incident response (U.S. Department of Homeland Security, 2008). The issues pertaining to the risk reduction needs of the mobility impaired are, for the most part the same as those relative to the general population. The greater difference is the lack of access to this often overlooked segment of the community and the greater significance of risk reduction to those residents with mobility impairments. Solutions 2000 stresses the need for a national coalition to raise awareness of risk reduction issues to educate the mobility impaired about these issues, and also to make the fire service conscious of the needs of this segment of society (North American Coalition For Fire and Life Safety Education, 1999).

The most prevalent suggestion was the need for those residents with mobility impairments to work with the fire department and other emergency services to inform these entities of their conditions and limitations. This suggestion reverberates through every reference consulted in this research effort. This would seem to be the premier primary risk reduction issue of the mobility impaired population of Fire District #1.

The balance of the primary risk reduction issues for the mobility impaired residents of Fire District #1 are similar to those of the general population. The common topics are cooking safety, electrical safety, smoking safety, space heaters and heating systems, and fireplaces (Fire Safety Solutions for People with Disabilities, 2007; Fire Safety Solutions for Oklahomans with Disabilities, N.D.; U.S. Fire Administration, 1999; U.S. Fire Administration, N.D.a; U.S. Fire

Administration, N.D.b). FPP also adds the topic of candle safety to the mix of primary risk reduction issues.

Concerning smoking, special emphasis was given to the use of oxygen while smoking (U.S. Fire Administration, N.D.a). This is especially pertinent to recent events in Fire District #1 where one man perished in a house fire. There is strong suspicion based on interviews with neighbors and the man's spouse that the fire was associated with his habit of smoking in bed while using oxygen.

Research question four: What are the secondary risk reduction issues affecting the mobility impaired residents of Fire District #1?

Secondary risk reduction issues concern the measures taken in response to a fire or emergency (U.S. Department of Homeland Security, 2008). Secondary risk reduction measures are those which have the desired outcome of helping the occupant escape the effects of the emergency and are actions prepared for in advance of the event.

As with the third research question regarding primary risk reduction issues, many of the secondary risk reduction issues parallel those of the community in general. Those which apply to all groups regardless of limitations include exit drills in the home, residential sprinkler systems, and smoke alarms (Fire Safety Solutions for Oklahomans with Disabilities, N.D.; Fire Safety Solutions for Oklahomans with Disabilities, N.D.; FireSafety.Gov, N.D.; U.S. Fire Administration, 1999; U.S. Fire Administration, N.D.a; U.S. Fire Administration, N.D.b).

As with prior discussions regarding risk reduction, these issues are of much greater significance to the mobility impaired population due their inability to efficiently self evacuate in an emergency. FPP recommends a smoke alarm designed specifically for the mobility impaired

resident which has a remote control for monthly testing and a battery with a ten-year life after which the smoke alarm is discarded and replaced with a new one (Fire Safety Solutions for Oklahomans with Disabilities, N.D.). The principles of operation of this particular device allow the resident a greater amount of control over their own risk reduction efforts, while still encouraging fire department involvement.

The second FPP publication also contains guidelines for establishing a smoke alarm program for persons with disabilities (Fire Safety Solutions for People with Disabilities, 2007). This guide is designed for fire department use and contains information regarding many facets of instituting a program as well as appealing to this specialized segment of the population with such suggestions as an easy to read font for printed material, and rules of etiquette for communicating with people with disabilities.

Fire extinguisher placement and use for the mobility impaired was noteworthy in two of the references. The U.S. Fire Administration recommended that fire extinguishers be strategically located for access by mobility impaired residents in their homes (U.S. Fire Administration, 1999). The United Spinal Association takes this measure one step further by suggesting that those confined to a wheelchair should mount the fire extinguisher directly to their wheelchair for easy access in the event of a fire.

Living or at least sleeping on the ground floor of the residence is a universal recommendation which draws no parallel to the mainstream population (Fire Safety Solutions for Oklahomans with Disabilities, N.D.; U.S. Fire Administration, 1999; U.S. Fire Administration, N.D.b; U.S. Fire Administration, N.D.a; United Spinal Association, N.D.). Coupled with this recommendation is the need for an unobstructed, efficient avenue of emergency egress. Again,

considering the fire fatality in Fire District #1, a slight rearrangement of furniture would have provided a more effective means of egress which may have allowed the occupant a better chance for escape from the fire regardless of the circumstances.

Those residents with mobility impairments who live above or below the ground level are encouraged to have extra wheelchair ramps available in case of the need to evacuate in emergencies (United Spinal Association, N.D.). Barring this, a safe haven or area of refuge and the availability of a cell phone for communication with emergency services during incident responses is strongly recommended.

Another secondary risk reduction issue unique to the mobility impaired population is to practice unlocking doors and windows prior to the occurrence of an emergency (U.S. Fire Administration, 1999; FireSafety.Gov, N.D.; U.S. Fire Administration, N.D.b; U.S. Fire Administration, N.D.a). In the event of an emergency time is of the essence. This is not the moment to discover that a latch is just out of reach, or that the resident is unable to open a door or window and escape the hazard.

One item which is significantly absent from most sources is a recommendation for installation of residential sprinkler systems. With the current national debate between the International Code Council (ICC) and the various homebuilder's associations this would seem to take a front row seat for those who are most likely to benefit from the timely activation of a residential sprinkler system. The author knows of one such system in the small town of Point of Rocks 30 miles east of Rock Springs. The daughter of one of the residents is confined to a wheelchair. In a non-typical proactive stance, the homeowner opted to retrofit their home with a residential sprinkler system due to the lengthy response time by Fire District #1 crews. The lone

recommendation for residential sprinkler systems was FPP (Fire Safety Solutions for Oklahomans with Disabilities, N.D.).

Research question five: What are other fire departments doing to address the risk reduction needs of their mobility impaired residents?

A questionnaire was developed to determine the answer to the fifth research question. The questionnaire was then distributed through the NFAED2004 yahoo internet group. The survey was sent out to the 321 members of the group. Of those 321 members, 36 responded to the questionnaire. A copy of the questionnaire and the results can be found in Appendix A and Appendix B respectively.

In the first question only 22.2% of those responding had a program to identify the locations of the mobility impaired residents of their response areas.

The second question enquired whether or not their agency had been contacted by a resident of their community for the purpose of self-identification. At 69.4% it would appear that the principle of self-identification not unknown to the mobility impaired residents of the community in general.

The third question asked whether or not their fire department partnered with other community entities to locate the mobility impaired residents of the community. The respondents indicated that 36.1% have formed partnerships to determine the locations of the mobility impaired residents of their response area.

The fourth question was an assessment of with which entities the agency partnered. The answer allowed a response to more than one answer, running the gamut from other response

agencies and schools/classroom teachers to public libraries. The three most common partners identified are other public agencies; local government; and schools/classroom teachers in a three-way tie at 52.9%. Next in the order of entities were public health departments and senior centers tied at 41.2%; followed by hospitals/burn units and community agencies at 35.3%. The fourth position was occupied by a tie between coalitions; preschools; and churches at 29.4%. Fifth place in the polls were Community Emergency Response Teams (CERT) at 23.5%, followed by yet another three-way tie for sixth place between other communities; public housing/apartment managers; and businesses/employers at 17.6%. The seventh position was also occupied by two venues. Universities/colleges held the seventh position with rehabilitation clinics/physical therapists at 11.8%. Eighth in line were insurance companies and public libraries at 5.9%, again in a tie. The two remaining choices for partnering were home healthcare equipment suppliers and youth groups, neither of which were recognized as partners by any respondent. It is worth noting that 19 respondents skipped this question, which correlates loosely to the number of respondents in question three who indicated that their department has no partnerships for determining the locations of the mobility impaired residents of their response area.

Question four also allowed individual responses to identify partner entities. Two responses identified the 2-1-1 Texas Special Needs Registry; one person indicated that the New Hampshire enhanced 911 system notifies the responding units while en route of mobility impaired occupants at a particular residence. The remaining four individual responses indicated that they had not developed any partnerships for access to the mobility impaired residents of their response area.

The fifth question asked how the agency addressed the requirements of HIPAA concerning advance identification of the locations of the mobility impaired residents of their response area.

The majority of responses, 80.6%, encouraged self-identification by the mobility impaired residents when encountered during incident response. 22.2% provided the opportunity to self-identify through partners, and 5.6% obtained a signed waiver of privacy for pre-planning purposes.

Questions six through nine were in reference to the fire departments' curricula for primary and secondary risk reduction for the mobility impaired residents of their response area.

The sixth question asked whether the agency had developed a curriculum which specifically addresses the mobility impaired community. 88.6% responded in the negative, with one person skipping the question.

Question seven attempted to define the topics in the primary risk reduction program for the mobility impaired residents of the community. The most common response at 74.3% was n/a, or not applicable, reinforcing the response of question six. The remaining topics were smoking safety at 17.1%; cooking safety at 14.3%; candles and voluntary home safety inspections of mobility impaired residences both at 11.4%; electrical safety and heating system at 8.6%; rounding out the responses were space heaters, fireplaces, and personal oxygen use safety all tied at 5.7%. One respondent skipped this question.

Questions eight and nine assessed the secondary risk reduction efforts of the fire department. The eighth question addressed the various secondary risk reduction topics promoted by the agency. The top position was smoke detectors at 55.9%, followed by exit drills in the home at 47.1%. The limitation of these two responses was that they did not ask whether these programs were independent of any regular education curricula of the agency. The third place reply was n/a at 41.2% of respondents indicating no secondary risk reduction efforts by the

department. The next item of interest was the reduction of clutter in the escape route at 32.4% in fourth place. Fifth in line were details regarding self-identification and Fire Extinguishers at 29.4% each. The least common secondary risk reduction topic was the involvement of the fire department in developing emergency procedures with five responses at 14.7%.

Question eight also provided for individual response. One person indicated that although their agency had no formal program to address the secondary risk reduction requirements of the mobility impaired residents of their response area, they did provide education in some of the areas listed. Two people skipped this question entirely.

The ninth question attempted to define the efforts of fire departments to provide smoke alarms to the mobility impaired residents of their response area that are specifically designed for those persons. The field was almost even with 47.1% of agencies providing these specialized smoke alarms and 52.9% not providing specialized smoke alarms. Two respondents also skipped question nine.

The last question provided the respondent an opportunity to share any comments relative to the risk reduction needs of the mobility impaired residents of their department's response area. The responses to this question were all left to the individual. One person responded that question five should also have provided a n/a response.

Two people responded that the local dispatch system provides information regarding the presence of mobility impairments at a residence while en route to an emergency. One of these people indicated that the information was recorded from previous responses as a "premise history." The conclusion drawn by the author is that locations of the mobility impaired residents of the response area are catalogued as they become known through incident response. When a

residence known to be associated with a mobility impairment next required an emergency response, that information came up in reference to the address on the dispatch console.

One person replied that escape planning and ensuring good egress were facets of their programs; one person indicated that lack of manpower presented a significant obstacle to implementing a program specific to the risk reduction needs of the mobility impaired segment of their response area. One respondent indicated that they had only one entity in their jurisdiction who shared information regarding individuals who may require assistance in the event of emergency evacuation. Only eight respondents provided information for question ten.

The final portion of the questionnaire provided the respondents the opportunity to receive a copy of the results. Three of those completing the questionnaire requested a copy of the results.

Discussion

The risk reduction issues of the mobility impaired residents of Fire District #1 was deliberately chosen as a topic by the author due to the lack of information regarding these issues within the organization. These efforts have proven that the lack of information is fairly widespread throughout the fire service in general.

A search of the National Fire Academy's Learning Resource Center card catalog found no prior research efforts by other EFO relative to this topic. The few references available on the subject for the most part relied on each other for content. This lack of effort and evidence is supported by the statements of FPP who indicates that there are very few messages aimed at the mobility impaired population (Fire Safety Solutions for People with Disabilities, 2007).

The Nobody Left Behind Report reinforces the absence of information, noting that only 21% of emergency managers have developed measures to assist those with mobility impairments during emergencies (Fox, White, H., Rooney, & Rowland, 2007). It would appear that in this case there is not much new under the sun.

The collective voice of those with mobility impairments is equally hushed with only one reference found from the customer side of the client/provider relationship. The questionnaire results did seem to imply a greater level of participation by the mobility impaired population than that of the fire service. Almost 70% of the individuals responding to the questionnaire indicated that their agency had been contacted by someone with a mobility impairment to self-identify. This is in contrast to the one in five fire departments who have programs to identify the locations of the mobility impaired residents in their community and the one in three who have developed partnerships for the same.

Fire District #1 and the fire service in general can do much better. The relative invisibility of the residents of Fire District #1 with mobility impairments can not be allowed to continue. These individuals are those who are most likely to suffer the greatest harm during emergencies due to their limited ability to self evacuate or evade the hazards present in an emergency. In the words of the Fireman's Prayer "I want to fill my calling and give the best in me, To guard my neighbor And protect his property" (Linn, 2006). This includes all of our neighbors, not only those who can easily access the tools and education regarding primary and secondary risk reduction.

Nor can the quiet observance by those with mobility impairments from the peripheral shadows of emergency response be endorsed through the continuation of status quo. These

people need to be made aware of their ability to make their environment safer and reduce the effects of fire and other emergencies when the need for emergency response arises.

The Fire District #1 organization needs to develop a program to accurately identify the locations of the mobility impaired residents of the response area. This objective can be best accomplished through partnerships with entities and agencies who interact with these individuals on a regular basis. The active cultivation and use of these partnerships will enable Fire District #1 to access those with mobility impairments living within the area. This will allow a consistent venue by which the mobility impaired population of Fire District #1 can be informed of the risk reduction factors which directly affect them.

Through established partnerships and consistent access and interaction with the mobility impaired residents of Fire District #1 the increased risk of loss of life and property can be reduced.

Recommendations

Based on the results of this research efforts the author recommends that Fire District #1 take a more proactive stance regarding the primary and secondary risk reduction issues of those persons with mobility impairments living within the response area.

The following recommendations are made to Fire District #1:

- Greater measures must be employed to find the locations of the mobility impaired residents living within Fire District #1 response area.
 - Methods of surveillance must be developed and maintained which allow periodic contact with the mobility impaired residents of Fire District #1.

- A list of local and pertinent out-of-area partners needs to be identified and a working relationship established to facilitate self-identification by those with mobility impairments.
- A form to allow self-identification through partners should be developed which gives Fire District #1 permission to contact those mobility impaired residents who wish to self-identify.
- A flier with information regarding the importance of self-identification and risk reduction should be developed and distributed through the list of partners.
- Curricula must be developed to address the primary and secondary risk reduction issues of the mobility impaired residents of Fire District #1
 - These curricula will be developed to reduce the primary and secondary risk reduction issues as identified through this research effort.
 - These curricula must be living documents which provide for modification based on the individual needs of the mobility impaired resident.
- Periodic follow-up and contact must be continued to maintain the accuracy of the information regarding location of the mobility impaired for use during incident response.

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Appendix A

Introduction

This survey is being conducted in conjunction with the second year EFO course Executive Analysis of Community Risk Reduction. The intent of this questionnaire is to determine what risk reduction measures other fire departments are employing to reduce the risks for injury and loss of life due to fire for the mobility impaired residents of their community. Thank you in advance for your assistance.

Surveillance

This set of questions provides information regarding advance planning and efforts by your agency to locate the mobility impaired residents of your community

1. Does your department have a program to identify the locations of the mobility impaired residents of your response area?

Yes

No

2. "Self-identification" is an act initiated by someone to identify themselves to a response agency as having a mobility impairment. This process is designed to provide advance notice for fire departments to know and understand the needs and locations of these people, as well as assisting them with risk reduction needs specific to their personal requirements. Has your agency ever been contacted by a mobility impaired resident for the purposes of "self-identification"?

Yes

No

3. Does your agency partner with other entities to locate the mobility impaired residents of your community?

Yes

No

4. With which entities does your agency partner? (check all that apply)

Schools/classroom teachers

Preschools

Universities & Colleges

Hospitals and burn units

Rehabilitation clinics/physical therapists

Public health departments

Local government

Public library

Other communities

- Other fire departments & emergency response agencies (i.e. law enforcement, ambulance services, etc.)
- Churches
- CERT
- Home healthcare equipment suppliers (home oxygen, etc.)
- Business/employers
- Insurance companies
- Homeowner's associations
- Senior Centers
- Coalitions (Safe Kids, Injury Free, etc)
- Public housing/apt managers
- Community agencies (Red Cross, Hospice, Respite Care)
- Youth groups (Scouts, Boys & Girls Clubs)

Other (please specify)

5. How does your department address the privacy issues of HIPAA associated with advance identification of the locations of the mobility impaired residents of your response area? (check all that apply)

- Encourage “self-identification” when encountered during response
- Signed waiver of privacy for pre-planning purposes
- Opportunity to “self-identify” and provide waiver/contact information through partners

Primary Risk Reduction

This set of questions will provide information regarding activities which address primary risk reduction efforts of your agency for the mobility impaired residents of your community

6. Does your agency have a risk reduction curriculum designed specifically for the mobility impaired residents of your response area?

- Yes
- No

7. What topics of primary risk reduction specific to the mobility impaired residents of your response area are addressed in your agency’s program? (check all that apply)

- Cooking safety
- Electrical safety

- Smoking safety
- Space heaters
- Heating systems
- Fireplaces
- Candles
- Personal oxygen use safety
- Voluntary home safety inspections of mobility impaired residences
- j. N/A

Secondary Risk Reduction

These questions will provide information regarding the efforts of your department with regards to the secondary risk reduction activities provided to the mobility impaired residents of your response area

8. What topics relevant to secondary risk reduction are addressed in your agency's program?

- Home smoke alarms
- Residential home fire sprinkler systems
- Exit drills in the home

- Practicing opening and closing windows and doors before an emergency occurs
- Sleeping/living on the ground floor of the residence/apartment
- Reduction of clutter in the escape route
- Involvement of the fire department in developing emergency procedures
- Details regarding “self-identification”
- Fire extinguishers – use of and practical positioning for access during emergencies
- N/A

Other (please specify)

9. Does your fire department have a program to distribute smoke alarms designed specifically for people with mobility impairments?

Yes

No

10. What other information would you like to share concerning the risk reduction needs of the mobility impaired residents of your agency’s response area?

11. If you would like a copy of these results, please enter your contact information here:

Appendix B

1. Does your department have a program to identify the locations of the mobility impaired residents of your response area?

	Response Percent	Response Count
Yes	22.2%	8
No	77.8%	28

Answered question: 36

Skipped question: 0

2. "Self-identification" is an act initiated by someone to identify themselves to a response agency as having a mobility impairment. This process is designed to provide advance notice for fire departments to know and understand the needs and locations of these people, as well as assisting them with risk reduction needs specific to their personal requirements. Has your agency ever been contacted by a mobility impaired resident for the purposes of "self-identification"?

	Response Percent	Response Count
Yes	69.4%	25
No	30.6%	11

Answered question: 36

Skipped question: 0

3. Does your agency partner with other entities to locate the mobility impaired residents of your community?

	Response Percent	Response Count
Yes	36.1%	13
No	63.9%	23

Answered question: 36

Skipped question: 0

4. With which entities does your agency partner? (check all that apply)

Entity	Response Percent	Response Count
Schools/Classroom Teachers	52.9%	9
Preschools	29.4%	5
Universities & Colleges	11.8%	2
Hospitals & Burn Units	35.3%	6
Rehabilitation Clinics/Physical Therapists	11.8%	2
Public Health Departments	41.2%	7
Local Government	52.9%	9
Public Library	5.9%	1
Other Communities	17.6%	3
Other Fire Departments & Emergency Response Agencies (i.e. law enforcement, ambulance services, etc.)	52.9%	9
Churches	29.4%	5
CERT	23.5%	4
Home Healthcare Equipment Suppliers (home oxygen etc.)	0.0%	0
Business/Employers	17.6%	3
Insurance Companies	5.9%	1
Homeowner's Associations	5.9%	1
Senior Centers	41.2%	7
Coalitions (Safe Kids, Injury Free, etc.)	29.4%	5
Public Housing/Appartment Managers	17.6%	3
Community Agencies (Red Cross, Hospice, Respite Care)	35.3%	6
Youth Groups (Scouts, Boys & Girls Clubs)	0.0%	0

Other (please specify):

1. State of Texas Special Needs Registry
2. We don't partner with anyone, we notified as to status when dispatched to a residence or nursing facility.
3. The above are not in relation to Mobility Impaired individuals, but about other services
4. No program
5. None
6. We utilize a Texas State sponsored 2-1-1 help line to identify our special needs population. The University of Texas collects the information that the 2-1-1 operators take and sends it out to all entities that have requested this information. Our region has developed a web based database to download the raw data into. Locally we call each person that has identified themselves as special needs every six months to update our local database with changing health issues or deaths.
7. NH enhanced 9-1-1 has a supplemental Ali program which notifies us. The information is only available to responders when they subject calls 9-1-1.

Answered question: 17

Skipped question: 19

5. How does your department address the privacy issues of HIPAA associated with advance identification of the locations of the mobility impaired residents of your response area? (check all that apply)

	Response Percent	Response Count
Encourage Self-Identification when encountered during emergency response	80.6%	29
Signed waiver of privacy for pre-planning purposes	5.6%	2
Opportunity to "Self-Identify" and provide waiver/contact information through partners	22.2%	8

Answered question: 36

Skipped question: 0

6. Does your agency have a risk reduction curriculum designed specifically for the mobility impaired residents of your response area?

	Response Percent	Response Count
Yes	11.4%	4
No	88.6%	31

Answered question: 35

Skipped question: 1

7. What topics of primary risk reduction specific to the mobility impaired residents of your response area are addressed in your agency's program? (check all that apply)

Primary Risk Reduction Category	Response Percent	Response Count
Cooking Safety	14.3%	5
Electrical Safety	8.6%	3
Smoking Safety	17.1%	6
Space Heaters	5.7%	2
Heating Systems	8.6%	3
Fireplaces	5.7%	2
Candles	11.4%	4
Personal oxygen use safety	5.7%	2
Voluntary home safety inspections of mobility impaired residences	11.4%	4
N/A	74.3%	25

8. What topics relevant to secondary risk reduction are addressed in your agency's program?

Secondary Risk Reduction Category	Response Percent	Response Count
Home smoke alarms	55.9%	19
Residential home fire sprinkler systems	14.7%	5
Exit drills in the home	47.1%	16
Practicing opening and closing doors and windows before an emergency occurs	8.8%	3
Sleeping/living on the ground floor of the residence/apartment	11.8%	4
Reduction of clutter in the escape route	32.4%	11
Involvement of the fire department in developing emergency procedures	14.7%	5
Details regarding "self-identification"	29.4%	10
Fire extinguishers - use of and practical positioning for access during emergencies	29.4%	10

9. Does your fire department have a program to distribute smoke alarms designed specifically for people with mobility impairments?

	Response Percent	Response Count
Yes	47.1%	16
No	52.9%	18

Answered question: 34

Skipped question: 2

10. What other information would you like to share concerning the risk reduction needs of the mobility impaired residents of your agency’s response area?

1. Question five should have a NA answer choice.
2. Our agency only enters known information on mobility impaired residents as a “Premise History” entry in our Computerized Dispatch system. When a call comes in to the address, the information is included with the dispatch information.
3. Our county dispatch and fire have established a program related to this valuable tool for taking care of our community... we drag along behind. HOWEVER we are going to a Central Dispatch next year and this program should carry over to us FINALLY!
4. Escape planning and ensuring good egress.
5. This is something we haven’t developed, predominantly due to manpower issues.
6. You may want to look at the Texas Department of Emergency Management web site for further information on 2-1-1 registration.
7. We have applied for AFG to provide smoke detectors to seniors.
8. At this time we have only one facility in our area that forwards information to us regarding people who would need assistance in a fire/evacuation situation.

11. If you would like a copy of these results, please enter your contact information here:

1. BC David McCrady; mccradydw@owensboro.org

2. Andy King, Franklin, TN; andyk@franklintn.gov

3. jolson@wake.gov