

FIRE AND LIFE SAFETY EDUCATION FOR THE LATINO COMMUNITY

Executive Analysis of Fire Service Operations
In Emergency Management

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Abstract

The Raleigh Fire Department had not identified effective methods of disseminating fire and life safety information to the Latino community. The purpose of this project was to identify, using descriptive research, methods to disseminate fire and life safety education information to the Latino community. The research questions were:

1. What are the barriers to reaching the Latino community with fire and life safety information?
2. What methods are being used to disseminate information to the Latino community by other agencies in Raleigh, N.C.?
3. What Spanish language media outlets are available in Raleigh, N.C.?
4. Does the Raleigh Fire Department need to develop a Latino Outreach Program?

The procedures included a literature review and the administration of a survey to Latino outreach programs in the community. The literature review revealed numerous barriers to reaching the Latino community using existing programs and the need to examine alternative methods for communicating fire and life safety information to a non-English speaking community. The survey resulted in the identification of existing Latino outreach groups in the area who were willing to assist the fire department in reaching this community and the methods and media outlets commonly used by these programs.

The recommendations included the development of a Latino outreach program within the department to interface with existing outreach programs in the community to develop long-term fire and life safety education programs. In conjunction with these efforts there is a need for Latino-specific cultural diversity training for all members of the department to develop a general understanding of the community and emphasize the importance and

reaching this often overlooked and underserved population. In the immediate future, it is imperative the fire department began distributing all public service announcements in Spanish, as well as, English and including Spanish language media outlets in the distribution list.

Table of Contents

	Page
Abstract	2
Table of Contents	4
Introduction	5
Background and Significance	5
Literature Review	9
Procedures	17
Results	18
Discussion	26
Recommendations	31
References	33
Appendix A Survey Cover Letter	36
Appendix B Questionnaire	37

Introduction

The Raleigh Fire Department has had a problem with effectively disseminating fire and life safety information to the Latino community. The purpose of this project is to identify effective methods to distribute fire and life safety education information to the Latino community. Descriptive research methodologies will be used to report what the current situation is and to investigate the options available for dissemination of fire and life safety information to the Latino community in Raleigh, N.C. A survey will be distributed to several local agencies to determine what methods are currently being used to deliver information to the Latino community.

The research questions are:

5. What are the barriers to reaching the Latino community with fire and life safety information?
6. What methods are being used to disseminate information to the Latino community by other agencies in Raleigh, N.C.?
7. What Spanish language media outlets are available in Raleigh, N.C.?
8. Does the Raleigh Fire Department need to develop a Latino Outreach Program?

Background and Significance

The state of North Carolina and the City of Raleigh know all too well the devastating consequences of major disasters. In fact, North Carolina has the ominous distinction of being on the list of Top Ten Natural Disasters three times. Two of these declarations, Hurricane Floyd and Hurricane Fran, had a direct impact on the Raleigh area. The federal government has made twenty-three major disaster declarations in North

Carolina since 1972, with the two most recent being ice storms that heavily impacted the Raleigh area in the winter of 2002 and 2003.

Communicating fire and life safety messages to the public before and during these events is always challenging, but there are special obstacles associated with reaching non-English speaking populations. According to a study conducted by researchers with the Pew Hispanic Center and the Brookings Institution (Suro & Singer, 2002), Raleigh was identified as one of eighteen new Latino destinations defined as a “hypergrowth” metro. Hypergrowth metros experienced a Latino growth rate over 300%. Raleigh topped the list of hypergrowth metros with an 1180% increase between the years of 1980 and 2000. The 2000 Census identified 19,308 people, or 7% of the population of Raleigh, as being of Hispanic or Latino origin (*Census*, 2000).

During the recent ice storms experienced in the Raleigh area, the lack of effective communication of fire and life safety information to the Latino community became painfully clear. During the December storm, carbon monoxide poisoning claimed four lives statewide, two of which were in the Raleigh area. Area hospitals treated as many as 335 children and adults suffering from the effects of carbon monoxide poisoning, a disproportionate number of whom were Latino. Sadly, many of these cases could be attributed to a lack of fire and life safety information related to such practices as burning charcoal in the house and sleeping in vehicles with motors running to keep warm (Perez, 2002). Unfortunately, a second ice storm leading to a federally declared disaster struck the state in March with very similar consequences. Hours after Governor Mike Easley had urged Hispanic families to refrain from using charcoal or generators indoors, two brothers from Mexico were found dead and a third brother in critical condition as a result

of using a generator in a home left without power because of the ice storm (Garber & Torres, 2003).

There is no reason to believe nature is going to spare the area from future disasters and all indications are the Latino community will continue to grow. The U.S. Census Bureau projects the Hispanic population will become the country's largest minority group in less than five years. Education is the only way to reduce the unnecessary suffering of this disenfranchised population.

At present, the Raleigh Fire Department is ill-equipped to deliver this information with one non-Spanish speaking Fire and Life Safety Educator to serve a city of 300,000. In addition, an earlier study conducted to gauge the ability of the Raleigh Fire Department to deliver fire and fire safety information to Latino preschoolers discovered that less than 2% of Raleigh fire fighters spoke fluent Spanish, less than 5% held any level of Fire and Life Safety Education certification, and the majority were only "somewhat interested" in improving these skills. This lack of interest and ability by Raleigh Fire Department personnel makes it particularly challenging to reach Latinos with fire and life safety information using existing programs. The resulting recommendation was to identify key community outreach programs, organizations, and leaders in the area to assist in delivering this information (Styons, 2002).

One of the challenges in the Raleigh Fire Department's mission statement is to "maintain and improve the quality of life in the City of Raleigh through fire prevention, fire suppression, rescue, emergency medical and special services to all who live, visit, work or invest here" (City of Raleigh web page, [n.d.]). In order to meet this challenge for everyone in the city, including the non-English speaking population, it will be

necessary for the Raleigh Fire Department to explore additional avenues for delivering critical fire and life safety information to non-English speaking populations.

One of the enabling objectives of the Executive Analysis of Fire Service Operations in Emergency Management (EAFSOEM), a component of the Executive Fire Officer Program, is to “enhance the skills and abilities needed to manage the operational component of a fire and rescue department effectively” (*Executive Analysis of Fire Service Operations In Emergency Management Student Manual*, 2001). The EAFSOEM course focuses on the fire service’s ability to handle emergency operations during major disasters. One of the critical components during any incident is the ability to communicate effectively. This does not only apply to other public safety workers, but to the general public as well. There is a need to get critical information out concerning evacuation routes, hazards to avoid, emergency treatment, signs and symptoms, and a myriad of other potentially life saving information. If the Raleigh Fire Department cannot effectively communicate with 7% of the population this is going to be very difficult to do.

One of the operational objectives of The United State Fire Administration is “to appropriately respond in a timely manner to emergent issues” (*Operational Objectives, [n.d.]*). The rapid growth of the Latino population in this country is clearly an emergent issue. The 2000 Census reported the Hispanic population had become the fastest growing U.S. minority. At the same time, Hispanics have quickly become the largest ethnic/race group in the country, surpassing African Americans (Suro & Singer, 2002). By 2050, Hispanics are expected to make up one-quarter of the population (Joinson, 2000). The fire service can no longer ignore the needs of this growing population.

Literature Review

One of the initial decisions to be made in writing this paper is to determine what to call the subjects of the paper. While there is “no universally accepted term to describe this incredibly diverse population” (Alire & Archibeque, 1998, p.2), for the purposes of this paper the author will refer to the population as Latino primarily because the City of Raleigh elected to use this term in naming a Latino Liaison Coordinator for the Community Services Department. Latino and Hispanic are the two most often used terms to describe the composite group, although both terms can have very different meanings.

One obvious and major difference is that Hispanic is obviously an English word while Latino is a Spanish word meaning Latin, as in Latin America. Another major difference between the terms has to do with the issue of acculturation. Very generally speaking, Hispanic tends to connote acceptance of majority cultural values, integration into the majority culture, and political traditionalism, while Latino tends to connote the acceptance, preservation, and promotion of a unique cultural heritage, and political activism. A third major difference is that the terms emphasize different racial and cultural backgrounds. Individuals who use Hispanic generally are emphasizing European Spanish heritage, while those who use Latino are acknowledging and celebrating indigenous or mestizo (mixed European and Indian) backgrounds. (Alire & Archibeque, 1998, p.3)

“Most Hispanics, when asked to describe their cultural heritage or ethnic identity, will first respond with a reference to their nationality (such as Mexican, Puerto Rican, Peruvian), even in the second or third immigrant generation” (Castex, 1994, p. 8). This struggle to group a diverse population of varying cultures and races is not unlike that

experienced by Native Americans and African Americans. One of the most effective ways to address this issue is to simply ask a representative from the community which term is preferred and use it.

Barriers

The language barrier is generally considered to be the largest obstacle in reaching the Latino community. While the assumption of most non-Latinos is that Spanish is the language of choice, this is not always true. “In fact, the home language of 3.05 million of the 14.61 million Hispanics counted in the 1980 census was not Spanish” (Castex, 1994, p. 5). There are several languages used by Latinos, in addition to Spanish. English, Dutch, French, and Portuguese are the major European languages. However, there are also many Native American languages such as Mayan, Quechua, and Aymara commonly spoken as well. The fact is, Spanish may be a second language for many Spanish-speaking Latino immigrants (Castex, 1994). Ed Morales, in his 2002 book *Living in Spanglish: The Search for Latino Identity*, identified a new language in America, Spanglish. Spanglish evolved with Latino laborers struggling to pronounce strange English words and their English-speaking bosses trying to add in a sprinkling of Spanish for effect. Morales writes:

Latinos who came to the United States began to rewrite their history in a new language, Spanglish. Spanglish is the ultimate space where the in-between ness of being neither Latin American nor North American is negotiated. When we speak in Spanglish we are expressing not ambivalence, but a new region of discourse that has the possibility of redefining ourselves and the mainstream, as well as

negating the conventional wisdom of assimilation and American-ness. (Morales, 2002, p.95)

As complicated as this problem might seem, clearly, it is incumbent on the Raleigh Fire Department to determine a way to communicate with the local Latino community in order to effectively reach it with pertinent fire and life safety information.

A lack of education and work force preparation place the Latino population at a higher risk than other groups.

Hispanics have much lower high school completion rates than blacks and whites since the early 1970's. The rate for Hispanics (age 18 to 24) in 1998 was 63 percent, compared with 81 percent for blacks and 90 percent for whites. This suggests that many Hispanic youth and young adults will be less prepared than other 18-to 24-year-olds to enter or progress in the labor force. (Child Trends, 2001)

Social workers in many areas are servicing a growing Latino population. These workers have learned the importance of recognizing the special needs and problems associated with communicating in a second language.

An agency sensitive to the needs of its clients, for example, may have materials and forms printed in Spanish, and the social worker may presume that all clients can read them. But some clients may not be literate in Spanish. Or some may speak both English and Spanish but may only be able to read in English, making discussions of forms and legal documents very complex. (Castex, 1994, p. 6)

These underlying literacy issues need to be considered when providing written fire and life safety information to the Latino population. It is important not only to print the information in Spanish, but the message needs to be basic and to the point.

The language and literacy challenges faced by the Latino population also have had an adverse impact on the economic condition of the group. “Hispanics are three times as likely to live below the poverty level as non-Hispanic whites” (Joinson, 2001, p. 2). Unfortunately, poverty is the primary predictor of injury. Individuals living in poverty are more likely to live in hazardous environments, which increase the risk of injury. Substandard housing, crowded living conditions, lack of safety devices and limited access to health care are common among the poor (Fire House.com, Safe Kids, [n.d.]). It is these hazardous conditions that make it so important for the fire service to establish lines of communications in order to share fire and life safety messages

Transportation is a major concern for Latinos. It impacts many aspects of Latino life, including the ability to gain access to social services such as health care. Transportation is a key factor in finding and keeping employment. Simply stated, “If you don’t have a car, you don’t have a job.” (Davis, Gilder, Muriera, Patel, Shaffer, 1997, p.90). Public transportation is available in the area, but not widely used. Schedules and maps are printed in English, which causes difficulty for many. Generally, Latinos rely on each other for transportation, carpooling or paying a neighbor to take them where they need to go (Davis, Gilder, Muriera, Patel, Shaffer, 1997). It is paramount that public service agencies recognize the transportation barrier and realize the necessity of taking the product to the customer where they live and work.

Legal status is an ongoing issue for many undocumented immigrants. “Legal status affects mobility, employment availability, the ability to assert rights, and even the ability to plan for the future on more than a day-to-day basis” (Castex, 1994, p.9). Ignorance of basic rules and regulations, such as car seat violations and seatbelt laws, can cause hardship to both documented and undocumented immigrants. Many immigrants are hesitant to take advantage of community services offered to them due to uncertainty about their legal standing. This was an issue during the recent ice storm when many Latinos refused to go to emergency shelters for fear of questions about their immigration status (Perez, 2002). Nolo Martinez, the Director of Hispanic/Latino Affairs appointed by the Governor in North Carolina explains the relationship between law enforcement and Latinos in the state:

Many Hispanic immigrants come from countries that use the military to handle public safety, and they’re not well respected. People fear them and run away from them. Here the relationship between the police and the community is different, but many Hispanics don’t understand that; plus they have language differences and they don’t know the laws. (Howe, 1999)

This lack of trust is often apparent on emergency scenes when uniformed fire fighters are confused with law enforcement officers.

Methods of Information Dissemination

There are several options available for information distribution to the Latino community. Written materials in the form of newspaper articles, Internet sites, brochures and flyers are some of the formats that could be used to disseminate written emergency information to the Latino community. However, in light of the fact that Latinos are the

least educated segment of the American population, with a staggering 56% of Latinos in this country thought to be functionally illiterate (Alire & Archibeque, 1998), it is unlikely that distributing written information would be as effective as delivering spoken messages in the native language.

Delivering information verbally to Latinos is a more effective means of distributing information, provided it is delivered in the native language (Castex, 1994). Information broadcasted in Spanish over the local Spanish language television and radio stations will likely be better understood and reach more members of the community. Verbally delivering information in person to Latinos is effective as long as the information is delivered in the native language. However, it is also very labor intensive and this can be a challenge during a major emergency. Another consideration for the public safety sector is the fear of authority and lack of trust that exists among Latinos (Castex, 1994). Public safety organizations need to consider the impact of delivering information in uniform, which might be received with suspicion, therefore the message could be lost in “translation”.

While there are several methods available to the Raleigh Fire Department to distribute information, determining the best way to use the limited resources available will be a special challenge.

Spanish Speaking Media Outlets

Traditionally, public safety organizations rely on media outlets to get information out to the public during major emergencies. Evacuation routes, shelter locations, closings and delays, and emergency precautions are just a few examples of the important information passed on by local television and radio stations. In the past, this information

is relayed only in English in this area. There are two prominent Spanish-language radio stations in the area, Que Pasa 1030 AM and La Super Mexicana 540 AM. Unfortunately, neither of these stations have a source of emergency power, making them of little use during major emergencies with wide spread power outages such as ice storms and hurricanes (Headrick, Hennessey-Fiske, Perez, 2002).

According to Nielsen Media Research (Carbone, 2003) the average Hispanic watches more television than their non-Hispanic counterpart. Until recently, there has been no way to take advantage of the local audience. Fortunately, the nation's largest Spanish-language television network has agreed to buy WKFT-TV Channel 40, a Fayetteville, North Carolina based station during the first quarter of 2003. According to census data the Los Angeles- based Univision will reach at least a third of all Latinos living in North Carolina. Ivan Para, executive director of the local non-profit group El Centro Hispano, said Univision's entry to the market "will be one of the most important vehicles in the state for communicating information to Hispanics." Para went on to explain:

A local station with Univision's broad reach—the network's soap operas, variety and sports shows typically enjoys an 80 percent share among viewers who speak Spanish—could have helped warn Hispanics not to use gas or charcoal grills to heat their homes after the December 4 ice storm left thousands in the Triangle without power. Hispanics accounted for a disproportionate share of carbon monoxide poisonings because some could not understand public service announcements broadcast in English. (Fisher, 2002)

The two predominant Spanish language newspapers in the area are La Conexion and Que Pasa. Both of these are weekly publications distributed statewide and have offices in Raleigh. El Noticiero Mexicano is a smaller local publication. All of these papers are privately owned.

While there are many Spanish language web sites available, the two most popular in the Raleigh area are operated by non-profit statewide advocacy groups. El Pueblo is a non-profit advocacy and policy organization dedicated to strengthening the Latino community. Ayudate is produced in partnership with N.C. Governor's office for Latino/Hispanic affairs. Both of the sites offer extensive information and resources in Spanish.

The Raleigh Fire Department is fortunate to have these media outlets available. Many rural areas do not have these resources available to them and are faced with even more challenges in distributing information to the Latino community.

Latino Outreach Program Need

The Raleigh Fire Department Mission Statement charges it with the "maintenance and improvement of the quality of life in the City of Raleigh through prevention, fire suppression, rescue, emergency medical and special services to all who live, visit, work or invest here". At the present time, the Raleigh Fire Department has a single fire educator who is expected to perform fire inspections with 50% of her time. It is a challenge to meet even the most basic fire education needs for the English speaking majority who have the benefit of a well- developed infrastructure of fire and life safety education built into the school system and other public programs. Reaching a population that does not speak the language and has no previous exposure to these

concepts is out of the question. The existing fire education program of the City of Raleigh Fire Department does not and cannot address the needs of this often forgotten community; thereby, failing to meet the mission.

Fortunately, there are some resources available within the Raleigh Fire Department at large. In an Applied Research Project conducted in 2002, five individuals reported speaking fluent Spanish. Twelve individuals held some level of Fire & Life Safety Educator training as defined in NFPA 1035 and sixty-two reported being “very interested” in participating in programs providing fire safety education to Latino preschoolers as support staff (Styons, 2002). The Fire and Life Safety Educator reported being very interested in assisting with the development of a Latino Outreach Program, but emphasized she could not do it alone. (Jan Parker, personal communication, April 15, 2002).

Procedures

The initial research for this applied research project began at the Learning Resource Center in Emmitsburg, MD, searching for relevant articles, journals, and applied research projects. A visit to the county library produced additional books and Internet information. A contact in the research department of the major newspaper, The Raleigh News and Observer, was able to provide numerous newspaper articles from across the state relating to the recent winter storms and the impact on the Latino community.

The second step involved an extensive Internet search resulting in several articles and papers that proved to be very useful. The federally funded Educational Resources Information Center (ERIC) proved to be very productive.

The final step was the distribution of a survey to multiple Latino outreach programs and organizations in the Raleigh area. There were a number of organizations identified throughout the state on several websites. A decision was made by the author to distribute surveys to every organization in Wake County. There were a total of 32 surveys distributed of which 21 responded. This provided a participation rate of 65.6%. Most of the organizations provided email addresses and the surveys were sent via the Internet, others were faxed or mailed. The surveys were returned via the same mode received. Before distributing the survey the author asked three individuals to complete the survey and offer feedback. A few adjustments were made before full distribution to clear up any confusing questions.

Limitations

The return of the surveys in a timely manner required quite a bit of follow up for completion. Several of the organizations were volunteer or part time organizations with limited resources. Fortunately, most organizations responded promptly after a follow-up telephone call to explain the purpose of the project. However, the expertise of the individuals completing the surveys is difficult to judge.

Results

Research Question 1. What are the barriers to reaching the Latino community with fire and life safety information? This was established using research and a survey tool.

Table 1

What do you consider to be the major barriers to reaching the Latino community?

Barriers	Primary	Secondary
Language	16	0
Socioeconomic	2	2
Transportation	1	5
Literacy	1	5
Fear of Authority	1	2
Cultural	0	7

In responding to Survey Question 1 (Table 1), 16 or 76% of the respondents considered language to be the primary barrier to reaching the Latino community. Cultural, transportation and literacy issues were also identified as significant obstacles. These barriers were also identified during the literature review on the subject.

Research Question 2. What methods are being used to disseminate information to the Latino community by other agencies in Raleigh, N.C. The following eight questions are related to this subject.

Table 2

Do you have a Latino Outreach Program?

Response	#	%
Yes	19	90.4
No	2	9.5%

In responding to Survey Question 2 (Table 2), 19 of the 21 respondents indicated their organizations operated a Latino outreach program. Only two respondents did not.

Table 3

What delivery methods of written information does your organization utilize?

Response	#	%
Handouts/Flyers	16	76.1
Spanish Newspapers	15	71.4
USPS	9	42.8
Internet sites	5	23.8
English Newspapers	4	19.0
English Magazines	2	9.5
Spanish Magazines	2	9.5

In Survey Question 3 (Table 3) respondents reported handouts and flyers along with Spanish newspapers were the most popular forms of written information distribution with 76.1% and 71.4% respectively. The United States Postal Service was in the middle of the pack with 42.8% or 9 groups reporting usage. Internet sites were utilized by almost a quarter of the groups (23.8%). English newspapers were used by 19% and English and Spanish magazines were utilized by just fewer than 10% (9.5 %) of the groups.

Table 4

In what language is the information printed?

Response	#	%
Bilingual	16	76.1
Spanish	4	19.0
English	1	4.8

The majority of respondents (76.1%) to Survey Question 4 (Table 4) reported printing written information bilingually. This did prove to be true on the web sites, which offered English and Spanish versions and many of the informational handouts were printed in English and Spanish. The newspapers, however, were printed almost exclusively in Spanish.

Table 5

Do you provide written materials for individuals to keep?

Response	#	%
Yes	19	90.5
No	2	9.5

The overwhelming majority, 90% of the groups, reported providing written materials in Survey Question 5 (Table 5). This can be an expensive option but is obviously thought to be worthwhile by the majority. Only two of the groups did not provide written information. Several of the respondents wrote comments suggesting that written information in Spanish be targeted to a low literacy level. This would coincide with information in the literature review concerning the educational and literacy levels of the Latino population.

Table 6

What types of physical contact points does your organization utilize?

Response	#	%
Community Sites	16	76.2
Door to Door	10	47.6
Formal Classroom	6	28.6

Field Day	5	23.8
Churches	3	14.3

It appeared that reaching the Latinos one-on-one was best accomplished by going to them. The response to Question 6 (Table 6) indicated that Community Sites (76.2%) and Door to Door (47.6%) were the most popular methods of physical contact. It is likely the transportation barriers listed in Table 1 (Question 1) contribute to this outcome. Formal classroom sessions (28.6%) and field days (23.8%) were closely followed by churches at 14.3%.

Table 7

Who makes these physical contacts and in what language?

Response	#	%
Agency Employee/Bilingual	17	80.1
Agency Employee/Spanish	7	33.3
Volunteers/Bilingual	5	23.8
Volunteers/ Spanish	6	28.6

Most of the organizations (80.1%) reported in Survey Question 7 (Table 7) that bilingual members from their agencies were the primary contacts with members of the community. One third of the contacts were Spanish-speaking employees. Bilingual and Spanish-speaking volunteers were represented at about the same rate at 23.8% and 28.6% respectively. Most groups used a combination of employee and volunteer contacts.

Research Question 3. What Spanish language media outlets are available in Raleigh, N.C? Survey Questions 8 through 10 provide this information.

Table 8

Please list the names of any publications/internet sites used?

Response	Type	#	%
La Conexion	Spanish Newspaper	4	19
Que Pasa	Spanish Newspaper	2	9.5
El Pueblo.org	Internet	2	9.5
Auydate.org	Internet	1	4.8
NC Justice.org	Internet	1	4.8
Networkia.org	Internet	1	4.8
Wakegov.com	Internet	1	4.8
Iglesianuevoshorizontes.org	Internet	1	4.8

The response to survey question 8 (Table 8) is somewhat confusing. Although 15 respondents in the earlier survey question 3 (Table 3) reported using Spanish newspapers as a method of information distribution, only six actually listed the name of the newspapers with La Conexion being the most popular, making the list four times, followed by Que Pasa, which was mentioned twice. There were six Internet sites listed, but only one El Pueblo, with 2, received more than one mention.

Table 9

Which of the following media outlets does your organization utilize?

Response	Type	#	%
La Super Mexicana	Radio	4	19
La Ley Uninison	Radio	3	14.3
La Pantera	Radio	2	9.5

La Mexicana	Radio	1	4.8
Que Pasa	Radio	1	4.8
WTIK	Radio	1	4.8
Hora Latinia	Radio	1	4.8

Survey Question 9 (Table 9) is a list of the media outlets utilized to deliver verbal information to the Latino community. There were a number of Spanish radio stations mentioned with La Super Mexicana topping the list with 19% of the groups and La Ley Uninison with 14.3%. Several others were mentioned by at least one group. While none of the groups reported using television coverage at this time, five of the groups indicated they were anxiously waiting for the local Spanish-speaking Univision station to begin broadcasting. No doubt this is based in the knowledge that there is a large Latino television audience. Currently, the only Spanish speaking television stations available in the area are cable channels, which do not address local issues.

Table 10

What types of programming venues are utilized?

Response	#	%
Community Access	10	47.6
Public Service Announcements	9	42.8
News Programs	9	42.8
Paid Programming	2	9.5

The responses to Question 10 (Table 10) concerning types of programming venues were predictable. The no cost/low cost options of Community Access (47.6%),

PSA's (42.8%), and news coverage (42.8) were the winners. Only two groups mentioned using paid programming as an option. This is understandable considering that many of these groups are non-profit and volunteer organizations. It will likely hold true for the local fire department as well.

Research Question 4. Does the Raleigh Fire Department need to develop a Latino Outreach Program? Clearly, the Raleigh Fire Department has an obligation to provide services to all citizens, English-speaking and non-English speaking. The significant numbers of Latinos currently in the city and continued rapid growth only serve to make the need more urgent. The need for fire and life safety education for the Latino community is clearly there, based on results. The tragic loss of lives during the ice storms of 2002 and 2003 made it painfully clear that the quality of life of a significant portion of our community is not what it should be. The loss of life can be directly linked to a lack of education.

There were frantic efforts made by Latino outreach programs and public safety organizations to get the word out concerning the dangers of carbon monoxide poisoning. There were no existing task forces or emergency alert systems in place for reaching the Latino community. With all of the Spanish language radio stations off the air, the only option was to go door to door in Latino neighborhoods and try to get the information out using flyers and brief conversations. This was accomplished using National Guard units, the majority of whom did not speak Spanish, and Spanish-speaking volunteers. Ivan Para, the Executive Director of El Centro Hispano, resorted to bribing children with promises of ice cream and treats if they would spread the word throughout their neighborhood

(Perez, 2002). Clearly, there was a need for a pre-existing network to deal with this type of crisis.

In these challenging economic times it is unlikely the Raleigh Fire Department will see an increase in the Fire and Life Safety Education Program. The old adage of “doing more with less” has never been truer. If the Raleigh Fire Department is going to provide additional services to the Latino community it will clearly have to be creative, and do so within the framework that exists. The concept of a Latino Outreach Program made up of fire department personnel who are willing and able to reach out to those in need is likely the most viable alternative.

This result of this component of the research project has clearly identified several barriers to overcome before reaching the ultimate goal of providing fire and life safety information to the Latino community. In addition it has identified Latino outreach programs in the Raleigh area, shed light on the methods these organizations are using to reach the Latino community, and the resources available in the area. The development of a Latino Outreach Program represents the first step toward developing working partnerships with existing outreach programs and will enable the Raleigh Fire Department to provide the level of service this often overlooked sector of our community so desperately needs.

Discussion

The barriers to reaching the Latino community are numerous. Not surprisingly, the language barrier is the most difficult to overcome. This dire struggle to communicate effectively across cultures has encouraged the adoption of a mingling of English and Spanish, resulting in a new language, or Spanglish, much like a Spanish language

“ebonics” (Morales, 2002). Seventy-six percent of the organizations surveyed responded that language was the primary barrier to reaching the Latino community.

Cultural differences can have a significant impact on communicating successfully with Latinos. The simple awareness of the Latino male dominance in the family can make dealing with groups of Latinos less stressful (Alire & Archibeque, 1998). “This culture tends to be very agreeable and as children they’re taught to be somewhat passive finding it difficult to make eye contact with authority figures” (Joinson, 2000, p. 5). Unfortunately, many of us are biased to these types of behaviors and interpret them as a lack of initiative or evasiveness.

Families living in the lower socioeconomic strata of the community are particularly at risk. “Strategies that reduce financial barriers to safety devices, increase education efforts and improve the safety of the environment are effective at reducing death and injury among these populations at risk” (Fire House.com, Safe Kids, [n.d.] p.1). These socioeconomic challenges are closely tied to literacy.

Hispanics have had much lower high school completion rates than blacks and whites since the early 1970’s. The rate for Hispanics (age 18 to 24) in 1998 was 63 percent, compared with 81 percent for blacks and 90 percent for whites. This suggests that many Hispanic youth and young adults will be less prepared than other 18- to 24-year-olds to enter or progress in the labor force (Child Trends, 2001).

Fear of authority and transportation issues are also commonly seen as significant barriers to reaching this growing community.

There are a number of delivery methods currently being used by agencies in the Raleigh area to reach the Latino community. Handouts and flyers offer a relatively

inexpensive way to distribute and post information to high traffic areas and can easily be updated with current important information. However, the distribution process can be labor intensive and time consuming (Perez, 2002). Spanish-language newspapers are widely distributed within the Latino community and can be an excellent vehicle for posting informational materials, such as where to go to have a child safety seat installed or inspected. There is a time issue, however, since the two local Spanish language newspapers are published weekly. The United States Postal Service is a readily available and proven method of distributing information, but it can be costly and there is no way to ensure the information is being read. Once again, there is a delay in the actual printing and delivery of the information that would not be optimum during a large-scale emergency.

In an effort to increase the likelihood that someone will be able to read written information, it is best printed in English and Spanish. Written materials provided for individuals to keep should be bilingual and written at a level that can be understood by the masses. It is important to keep in mind, “Hispanics have had much lower high school completion rates than blacks and whites since the early 1970’s. The rate for Hispanics (age 18-24) in 1998 was 63 percent, compared with 81 percent for blacks and 90 percent for whites” (Child Trends, 2001).

Interacting with people face to face in their native language is an excellent, if labor-intensive way to communicate. There are several special challenges when dealing with the Latino community. Social workers discovered that when communicating with the Latino population it is important to “be sensitive to the possibility that clients who appear evasive or resistant to suggestions may be frightened about revealing undocumented

status” (Castex, 1994). This proved to be a significant problem during the recent winter storms when Latinos were hesitant to go to shelters due to a fear of authority and their legal status.

This face to face type of communication is best achieved by individuals who are familiar with the customs and are trusted by the community. It is necessary to take the message to the people where they are. Predetermining areas with key populations will help agencies focus limited resources on the largest groups. Some of the locations identified by Wake County Human Services are churches, soccer leagues, and mercados, or Latino stores (Davis, Gilder, Muriera, Patel, Shaffer, 1997). Of course, developing a trusting relationship will take time and cannot be accomplished during times of crisis.

Several methods for reaching the Latino community have been identified above. Some of these such as Spanish newspapers and literature sent through the postal service will be effective tools before an emergency strikes. Others, such as passing out flyers, Spanish language television and radio, and community canvases are effective during an actual emergency. Ideally a combination of the two would be used. Proactive fire and life safety education programs that are in place before disaster strikes would greatly enhance any last minute efforts to get the word out concerning major emergencies.

Fortunately, there are a number of Spanish-language media outlets in the Raleigh market. The Spanish-language newspapers can be used to distribute prevention information. However, since these papers are weekly publications, it is not likely they will be of much use during an unexpected emergency such as extreme weather or a terrorist attack. The Spanish-language radio stations can be particularly useful during an actual emergency for the same reason English-language radio stations are so successful.

Many people have battery-operated units or access to automobile radios. It would be more effective, however, if these stations could secure emergency generators, which would enable them to stay on the air during power outages often associated with weather-related emergencies (Headrick, Hennessey-Fiske, Perez, 2002).

Local Spanish language television has only recently become available, but this could be very helpful. “Surveys have shown that medical, financial, and immigration issues are the sought-after news stories by Hispanic stations” (Carbone, 2003, p. 1). The ability to tap into this popular Latino media outlet to deliver information on smoke detectors, seatbelt use, and carbon monoxide poisoning could save many lives (Fisher, 2002).

Certainly the Raleigh Fire Department is not the only agency facing the struggle of accessing and interfacing with the diverse Latino community in the area. At least nineteen agencies have met this challenge by developing Latino outreach programs. Nolo Martinez, director of Hispanic/Latino affairs and special advisor to the Governor’s Office identified communication as the main issue for Hispanics in the areas of public safety:

There are basically two ways in which our criminal justice and public safety systems work: one is to react to problems when they come up, and the other is to establish links with the community. Unless there is communication, though, there is a big barrier to both. (Howe, 1999)

The notion of developing a working partnership between the Raleigh Fire Department and existing Latino outreach programs is not a new one. In a 2002 ARP, *Reaching Latino Preschoolers with Fire and Life Safety Programs* (Styons), the author identified the need to seek out willing and qualified participants within the Raleigh Fire Department to

partner with existing Latino outreach programs, thereby optimizing the resources of both groups.

Recommendations

As stated earlier, the problem is that the Raleigh Fire Department has not identified effective methods of disseminating fire and life safety information to the Latino community. The purpose of this project is to identify effective methods to disseminate fire and life safety education information to the Latino community. The need to share this information was tragically demonstrated during the winter storms of 2002 and 2003 when the Latino population suffered a disproportionate number of injuries and deaths due to a lack of basic fire and life safety education.

At present, there are no efforts being made by the Raleigh Fire Department to reach the Latino community with this very critical life saving information. The existing fire education program in the Raleigh Fire Department is severely over-taxed and additional resources within the Raleigh Fire Department are limited. Clearly, the Raleigh Fire Department was not in a position to distribute fire and life safety education to the Latino community. The following recommendations were made to the fire chief based on the literature review, survey results, and the analysis of the results of this applied research project:

1. Develop a Latino Outreach program or task force to partner with existing Latino outreach programs in the community.

These partnerships will allow the fire department to take advantage of the networks that already exist in the community and focus their limited resources

on education of fire department personnel and obtaining and developing appropriate fire and life safety information for dispersal.

2. Provide Latino-specific cultural diversity training for fire department personnel.

While the purpose of this paper was to provide fire and life safety education to the Latino community, this cannot be accomplished without educating fire department personnel as well. The key to overcoming the many barriers identified in the research is education. There is a pressing need to develop a mutual understanding and trust between both groups. This training could be organized by the City of Raleigh Training Office, which routinely organizes cultural diversity and supervisory training for all city employees.

3. All public service announcements should be provided in English and Spanish and Spanish-language media outlets should be added to the distribution list.

While this is somewhat of a “quick fix”, it is a way to get emergency information out to the community until the networks proposed above can be developed. With hurricane season underway, there could be an immediate need to broadcast shelter locations, evacuation routes, and information relating to fast moving water hazards.

Certainly, these recommendations are just the first steps toward developing a meaningful and productive relationship with the growing Latino community in Raleigh, N.C. A recommendation to future readers of this project is to take a look at the community served and identify groups of individuals who do not fit in to the traditional “fire service box” and make sure the needs of the entire community are being met.

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Executive Analysis of Fire Service Operations in Emergency Management Course

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Appendix A Survey Cover Letter

RALEIGH FIRE DEPARTMENT

Dear Sir or Madam:

I am a Battalion Chief with the Raleigh Fire Department and am currently enrolled in the Executive Fire Officer Program at the National Fire Academy. A component of this class is to complete an applied research project each year. This year I have elected to identify methods by which the Raleigh Fire Department can disseminate fire and life safety information to Latino citizens before and during a large-scale emergency, such as a hurricane or an ice storm. The Latino community is the fastest growing population in the Raleigh area, as well as, the rest of the United States. With this in mind, I am trying to determine what resources are available to the Raleigh Fire Department to disseminate this important fire and life safety information to the Spanish speaking public. It would be most helpful if someone in your organization could complete the survey and return it via e-mail. If a hard copy is preferable, please send me a note and I will gladly mail out a copy of the survey. Thank you for your assistance in this matter.

Sincerely,

Tommie Ann Styons
Battalion Chief

919-625-0730 cell
919-420-2362 work

Tommie.Styons@ci.raleigh.nc.us

Appendix B Questionnaire

Latino Information Distribution Survey

Name of Organization:

1. What do you consider to be the major barriers to reaching the Latino community?

Primary	Secondary
<input type="checkbox"/> Language	<input type="checkbox"/> Language
<input type="checkbox"/> Literacy/Education	<input type="checkbox"/> Literacy/Education
<input type="checkbox"/> Cultural	<input type="checkbox"/> Cultural
<input type="checkbox"/> Socio-economic	<input type="checkbox"/> Socio-economic
<input type="checkbox"/> Transportation	<input type="checkbox"/> Transportation
<input type="checkbox"/> Fear of Authorities	<input type="checkbox"/> Fear of Authorities
<input type="checkbox"/> Other- please list	<input type="checkbox"/> Other – please list

Comments:

2. Do you have a Latino/International Outreach program? Yes

Methods of Information Distribution

Please check all that apply:

Written Information

3. Which delivery methods of written information does your organization utilize?

<input type="checkbox"/>	United States Postal Service
<input type="checkbox"/>	Handouts/flyers
<input type="checkbox"/>	Bulletin Boards
<input type="checkbox"/>	English Newspaper
<input type="checkbox"/>	Spanish Newspaper
<input type="checkbox"/>	English Magazine
<input type="checkbox"/>	Spanish Magazine
<input type="checkbox"/>	Private Internet sites
<input type="checkbox"/>	Governmental Internet sites
<input type="checkbox"/>	Other:

Comments: In what language is the information printed?

<input type="checkbox"/>	Spanish
<input type="checkbox"/>	English
<input type="checkbox"/>	* Bilingual

4. Do you provide written materials for individuals to keep?

<input type="checkbox"/>	Yes
<input type="checkbox"/>	No

Comments:

Verbal Information

5. What types of physical contact points does your organization utilize?

<input type="checkbox"/>	Formal Classroom
<input type="checkbox"/>	Field Day
<input type="checkbox"/>	*Latino Community Sites
<input type="checkbox"/>	Door to Door Canvas
<input type="checkbox"/>	Other

* I.e. flea markets, grocery stores, celebrations, etc.

Comments:

6. Who makes these physical contacts and in what language?

	Language of delivery	English w/o translator	English /w translator	Spanish	Bilingual
<input type="checkbox"/>	Individuals from your agency	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Volunteers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments:

7. Please list the names of any publications/internet sites used?

8. Please list the names and channels of any television and radio stations used?

9. What type of programming venues are utilized?

<input type="checkbox"/>	News Programs
<input type="checkbox"/>	P.S.A.'s
<input type="checkbox"/>	Community Access
<input type="checkbox"/>	Paid Programming
<input type="checkbox"/>	Other

Comments:

Thank you for your time in completing this survey. Please feel free to add any additional comments or suggestions.

Comments: