

Initiative

14

Public education must receive more resources and be championed as a critical fire and life safety program.

Executive Summary

Educating the public on how to prevent fires from ever occurring in the first place can contribute significantly to reducing firefighter deaths. It is a simple concept that may seem too basic for discussion in this national forum except that it is also an idea not widely embraced with credibility, much less given priority. If a fire doesn't happen, response is not needed. If evacuation plans are in place and practiced by family members, responding firefighters will not as frequently face the personal risk associated with rescuing trapped citizens. Moreover, fighting dangerous fires will become a less frequent necessity as individuals assume personal responsibility for maintenance of smoke alarms and as they adopt early suppression technologies such as fire sprinklers.

Fire and life safety education (**FLSE**) is an effective means for establishing fire safe behavior with individuals of all ages and abilities, and for promoting understanding and acceptance of regulations and technologies that can improve safety within the homes, businesses, and institutions inhabited by those individuals. This White Paper will offer a perspective on the status of FLSE delivered through our Nation's fire departments, some understanding of the discipline and how it can impact our fire problem and ideas for elevating FLSE to a

position recognized as a critical operation within fire departments. The 14th Initiative asks us to rethink our priorities in the fire service—to recognize the central and enduring value of public education, and to raise fire prevention to the level of other department operations.

Introduction: Recognizing the Problems

People are dying from fire in their homes, where enforcement of regulations that might ensure increased safety is not possible because of our constitutional right to do as we please at home: “our home is our castle”. We must rely on other means for protecting the people within those homes and the firefighters who respond to preventable, deadly fires.

By far the largest percentage of fire deaths, 82% in 2005, occur in home structures. According to the NFPA report, *US Fires in Selected Occupancies: Homes* (March 2006), the leading causes of structure fires are cooking equipment, heating equipment, electrical distribution or lighting equipment, intentional acts, smoking materials, candles, exposure to other fire, clothes dryers or washers, and playing with heat sources. The common denominator in deadly home fires is people. As one experienced public educator puts it, “Cigarettes don’t cause fires, people do; the cigarette doesn’t light itself and fall asleep on the sofa.” The problem that accounts for 82% of civilian fire deaths as well as firefighter death and injury requires a component of the overall solution that is aimed at people.

Recommendation # 1: *Collect and analyze data from you community and understand why and how your citizens are at risk. Your plans for Fire and Life Safety Education (FLSE) will have more impact if they are targeted toward existing problems. If you don’t have members who know how to collect and interpret data, seek assistance.*

Why do people cause or contribute to fires that result in devastation, death, and injury to themselves and others? The reasons may be due to ignorance; they never knew that volatile fumes from a flammable liquid spread and ignite so easily. Knowing is not the same as understanding; they may know they need a smoke alarm but not understand correct placement and maintenance in order to keep it operational, nor understand that smoke is deadly. There are other complicating factors such as physical or cognitive disabilities, inability to read or understand safety instructions written in English, impairment due to alcohol or drug use, and poverty. Discovering the root causes for unsafe behavior enables the educator to plan targeted interventions for prevention.

Recommendation # 2: *After every fire, get into the routine of conducting a rootcause analysis—looking for any system breakdowns, including public education shortfalls.*

Education is an effective tool for developing understanding, acquiring skills,

and changing attitudes and behaviors. It is also a vehicle for social change. Dissemination of information and presentations to the public can build community support for regulations that can substantially increase safety through environmental solutions such as residential fire sprinklers. An educational strategy combines appropriate interventions including (1) education: instruction focused on understanding and application of information, (2) engineering: technologies that provide fixed or passive safety, (3) enforcement: support of codes, standards, and regulations that can have positive impact on environmental safety, and (4) enabling factors: making products and procedures for change assessable and available. Education can impact our complex fire problem and save firefighters lives but someone at the local level must be in a position to apply programs when and where they are needed, comprehensively and systematically. Many successful public education programs require champions who will stand up for the program and have excellent advocacy skills.

Recommendation # 3: *Seek champions within and outside your fire department. Fire chiefs should model pro-FLSE behavior by providing funding and staff to deliver FLSE material, and by making FLSE a priority. Outside champions can include teachers, community leaders and even those who have survived a residential fire incident.*

Most fire departments conduct some public education. There is great disparity, however, in the types of activities conducted and the importance placed on fire and life safety education as an integral function of the department. We do not currently have a clear picture of either the quantity or effectiveness of fire prevention activities that are conducted by fire departments in the U.S. But we are about to learn much more.

To establish a benchmark, in the fall of 2006, The Home Safety Council (HSC) contracted with The Johns Hopkins Bloomberg School of Public Health to conduct a survey of Fire and Life Safety Education in U.S. Fire Departments. Understanding the current level of public education activity, identifying the needs for improving efforts, and knowing the obstacles that are preventing greater commitment to FLSE will help guide development and distribution of resources that can assist the fire service in Championing Public Education. Results of that survey will be analyzed and reported in the spring of 2007.

Looking at the preliminary results from the first 1,000 departments reporting we can see an emerging picture. Early findings indicate that 91% of fire departments do conduct some public education. Of these 65% use uniformed personnel who also have other responsibilities in the department. Twenty-eight percent use non-uniformed personnel who have other responsibilities. Only 15% of the departments that conduct public education have personnel exclusively assigned to FLSE, either uniformed or non-uniformed.

Recommendation # 4: *Commit the resources to train at least one person in your department to deliver and evaluate FLSE material.*

Without the commitment of personnel assigned to FLSE as their primary responsibility, it is not surprising that most public education efforts take the form of presentations and demonstrations to broad audiences and dissemination of information at select times of the year. According to HSC's survey, presentations to elementary school audiences account for more than 85% of public education activity. Those presentations may support on-going instruction carried out within the classrooms or they may be single events. The next frequent activity, reported by just over 75% of departments, was fire safety week/month events. Presentations to older adult audiences and health/safety fairs account for 50% of the FLSE activity. Just over 30% of the 1000 departments in the early reports are involved in juvenile fire-setting intervention activities. Other high-risk targeted programs fall below 30% of fire department activity. The primary focus for presentations is "general fire prevention."

Recommendation #5: *Widen the scope of your fire and life safety education outreach by planning beyond school-based presentations; offering fire prevention programs to your community should not be confined to Fire Prevention Week in October.*

More telling is how FSLE is perceived within the department. Again from early findings of the survey, 5% said it was not an important part of department activity. Fifty-two percent said it was supplemental to other activity. Thirty-six percent said it was important, and only 8% thought it a critical part of department activity. Significant barriers to conducting public education activities were identified as not enough funding, too many competing priorities within the department, lack of time, and not enough personnel. A significant barrier to championing public education as a critical program is the view in 57% of fire departments which said that it is either not important or supplemental to their mission.

Recommendation # 6: *Examine the actual commitment of your department to FLSE. Review staffing and funding levels. Conclude this self-study with a forum or meeting of your staff (including field and other operational officers) to discuss how everyone can increase their level of accountability in the area of FLSE.*

Responsibility and Accountability

If we are to elevate FLSE to a valued position in the fire service, leadership must believe that when fully supported, public education is critical to community risk reduction. We have seen evolution of the fire service as society and hazards inherent to it have evolved. Change is not always comfortable, but just as EMS has become a fully integrated operation, so must public education. Before that can happen we need to agree on an understanding of FLSE and how it can positively impact community risk reduction.

"Public education" is a term used in a generic sense and all too often

interpreted as presentations or events. Education is a guided process for learning, designed to develop or change attitudes that result in desired (fire safe) behavior. To better define and differentiate public education activities we can look at NFPA 1035, *Standard for Professional Qualifications for Public Fire and Life Safety Educators*. The Standard defines **Public Fire and Life Safety Education Strategy** as an organization's comprehensive plan that is designed, through public fire and life safety education programs, campaigns, and initiatives, to eliminate or mitigate risks that endanger lives, health, property, or the environment. **Program** is defined as a comprehensive strategy that addresses safety issues via educational means. **Initiative**, often used interchangeable with program, targets a specific issue and audience(s) and is terminated when program goals are achieved.

Educational Methodology is the sum of knowledge and skills, including instructional materials, used by the public fire and life safety educator to create a positive outcome related to learning objectives. A **Lesson** (presentation, demonstration, activity) is a component of a program in which the educator directly presents fire or life safety information to a group. A fire department's education strategy is based on identified community risks and it encompasses various programs and initiatives designed for a variety of audiences to address specific fire and life safety issues.

The Standard is written to allow for civilian entry according to certification of job performance requirements at the following levels:

1. Public Fire and Life Safety Educator I: The individual who has demonstrated the ability to coordinate and deliver existing educational programs and information.
2. Public Fire and Life Safety Educator II: The individual who has demonstrated the ability to prepare educational programs and information to meet identified needs.
3. Public Fire and Life Safety Educator III: The individual who has demonstrated the ability to create, administer, and evaluate educational programs and information.

Job responsibilities are divided into four categories, (1) administration, (2) planning and development, (3) education and implementation and (4) evaluation. In addition, the Standard includes job performance requirement for certification of Public Information Officer, Juvenile Firesetter Intervention Specialist I, and Juvenile Firesetter Intervention Specialist II. The duties performed by those assigned to public education include a multitude of operations and require diverse skills, with or without certification.

Recommendation # 7: *Create a ladder of upward promotion in your department for individuals who seek and successfully achieve higher levels of FLSE training and certification. Include FLSE achievements as a promotional advantage for all members. Support those individuals who seek this training by providing funding if possible, and time for them to acquire training.*

Public information, therefore, may be understood as the sum of fire department education activity where resources are not allocated for targeted programs and dedicated staff. Activities that are intended to inform the public do not include all elements of an education program. Awareness initiatives help the public know what to do and this may be all that is needed for some segments of the community. They already have the ability, motivation, skills, and means to do the right thing once they know the problem and the recommended solutions. Dissemination of fire safety information on a regular basis is a logical, cost-effective measure and part of an overall Education Strategy. However, messages aimed at broad audiences may not reach the hard-to-reach. "Telling" doesn't always work as evidenced by the fact that we continue to have fires that could have been prevented if only years of repeated messages were heeded.

Recommendation # 8: *Understand the difference between public education (a guided process of learning) and public information (intended only to inform or update) where expectations and outcomes are different.*

Targeted educational programs based upon identified risks and root causes for unsafe behavior take into consideration characteristics of the audience; they address a specific problem and are designed to meet specific objectives. Such efforts are needed to effect positive change for the hard-to-reach and high-risk populations. As a result the audience will demonstrate safe behavior because they not only know, they understand, can apply the information, and ultimately, they value or believe the importance of the message. Therefore it becomes part of their behavior. Risks are reduced with the potential to save the lives of citizens and first responders.

Resources for Fire and Life Safety Education

Although the goal for FLSE in every department is to have a dedicated professional staff with training and certification, the immediate need is for FLSE that will reduce fire deaths and injuries in all communities now. Resources are available for carrying out an effective public education strategies where dedicated staffing and funding within the department is not currently available. Here is a five step sequence that any department can follow to immediately begin FLSE:

1. Identification of major fire problems: From response data the fire department identifies specific hazards, targeted areas or groups within the community.

2. Selection of educational objectives that address the problems: Participate in a community safety coalition, form partnerships or an education committee with other professionals who have expertise and experience in public safety and education. With their input and based upon fire reports, determine realistic objectives to address the identified problem(s).

3. Design and/or selection of programs and initiatives: Design and/or selection of programs and initiatives: With input from teachers, and/or school administrators, and your community partners, select programs or materials that meet the objectives and are appropriate to the intended audiences.

4. Implementation of the plan: According to the HSC survey the reasons given for under-delivery of FLSE material are time and the availability of personnel. Institutionalized programs are efficient and effective because once a program is developed, with guidance from the fire department, instruction continues year after year with minimal impact on department resources. Classroom teachers, staff at senior centers, and literacy tutors are logical partners for delivering prevention instruction to those in their care. Programs are available, specifically designed for the fire department to initiate and then support with presentations. Partnerships and collaborative efforts greatly extend the reach of programs and add credibility through joint ownership. Likely partners include other safety organizations and agencies, colleges and universities, hospitals, insurance groups, community service groups, auxiliaries, and businesses. A fire and life safety coalition, under the department's leadership, can contribute personnel for implementation of programs as well as planning an educational strategy and evaluating efforts. Many departments train volunteers to serve as members of citizens Fire Corps, extending their capabilities for community assistance and public education.

5. Evaluation to determine impact and need for revision or adaptation: Resources are wasted if programs do not accomplish their objectives. The only way to determine effectiveness is through some type of evaluation. Pre- and post-testing, focus groups, surveys, observation, anecdotal information, and documentation of emergency response over a period of time are some of the methods for measuring success. If experience with program evaluation is not available within the department, assistance in design, implementation, data collection, analysis and reporting are skills to add through community partners. Colleges and universities would be a great place to ask for student or staff assistance with evaluation.

Resources are readily available to those who deliver FLSE from national organizations and agencies. The National Fire Academy offers on and off-campus courses and independent study for public educators. State and national conferences offer instruction and valuable networking opportunities with other educators who are always more than eager to share experience, ideas, and resources. *Fire and Life Safety Educator*, is a comprehensive training manual published by IFSTA designed to provide the public educator with the knowledge and skills needed to successfully perform as addressed in NFPA 1035. The manual can be used to update FLSE skills and to design training within the department. Programs and materials that are accurate and reliable, and targeted to

high-risk groups are available from national organizations and agencies that have expertise in instructional development and injury prevention. Many resources are free, or they can be purchased at little cost. The Fire Safety Literacy Project, available through the Home Safety Council's Expert Network, partners fire department personnel with local adult literacy tutors to teach fire safety skills to adults with low-level reading skills in English, reaching a high-risk segment of the population often missed by more traditional methods. Information, materials, and other resources are available from the lead federal partners and member agencies and organizations at www.firesafety.gov.

Recommendation # 9: *Using the sequence suggested in this White Paper for the selection, presentation and evaluation of FLSE material, your department will be active partners in fire prevention in your community, and you will help save the lives of firefighters. There is no valid excuse for your department not to be involved in public fire and life safety education—material is available and free in many cases.*

Fire and Life Safety Education and Community Risk Reduction

Many of us have heard more than one high ranking member of the fire service question whether or not public education should be a function of the department. With expanding responsibilities for highly technical operations and training, should educating the public be left to others in the community? Hopefully this is not the case. The fire service understands intimately the devastation caused by fire and also how to prevent it. They deal with the results of community negligence, not knowing or understanding, and not being able. They are also the most respected and trusted members in the community and the best source for directing public education efforts. From experience with incident response, the department knows where and why more fires occur in their community, and is thereby in the best position to identify targets for prevention through education. There is no question that FLSE is an essential component of a fire department service delivery system and cannot be left to others to effectively administer and deliver. The fire service must embrace fire and life safety education as a way to prevent firefighter deaths, and critical to community risk reduction.

The best possible scenario is one where the department structure includes certified public fire and life safety educators supported by administration from the top down, including a budget. There are certainly wonderful examples of how a fully integrated public education division fulfills a critical role in fire departments now. Before that can happen in most departments however, we need evidence of a shift in thinking and commitment. Here are some ways we may judge when that has occurred:

1. Fire service administration will recognize public education as an integral strategy to community risk reduction.
2. Management training will include understanding of educational methodology

and the role education plays in achieving goals of the department.

3. FLSE personnel will be included in organizational activities along with other critical operations.
4. Continuing education, training, and certification opportunities will be made available to public educators.
5. The operation of FLSE will be allocated equipment and training for optimum performance, commensurate with other department operations.
6. Resources will be allocated within the department budget.
7. When review and assessment is made of department activity, the reason a fire death or injury was not prevented will receive as much attention as the analysis of emergency response.
8. All members of the department will see education as important to operations and they will treat fire and life safety educators with equal professional respect as modeled from the top administration down.
9. Assistance to Firefighters Grant funding for prevention and safety projects will be written based upon the department's community risk reduction strategy. The prospect of purchasing injury prevention curriculum for every classroom will be as important as the purchase of any other tools and equipment that a fire department needs to perform its mission.
10. Accountability for prevention of fire death and injury to the public and to firefighters will reside within the fire department.

Conclusion

Fire and life safety education must remain a responsibility of the fire department. There is no other group of individuals in each community with the same understanding of fire and the toll it takes on human life and property, nor with the commitment to invest what ever it takes to protect others in their charge. When the decision is made by fire service leadership to aggressively champion FLSE as a critical part of the fire department service delivery system, the resources necessary for making it a reality will be there. The lack of resources is a symptom of the larger issue, not the problem. Funding and personnel will be assigned when it is valued as critical to community risk reduction and to preventing needless death and injury to firefighters and the community they serve.

Recommendations

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References

Selections From U.S. Fires in Selected Occupancies, Homes, Marty Ahrens,

Fire Analysis and Research Division, NFPA, March 2006

NFPA 1035: *Standard for Professional Qualifications for Public Fire and Life Safety Educators*, 2005 Edition, NFPA

The Home Safety Council's National Survey of Fire and Life Safety Education in the U.S., conducted by the Center for Injury Research and Policy at the Johns Hopkins Bloomberg School of Public Health, available March 2007, Home Safety Council

Additional Resources

www.firesafety.gov A Web portal for lead agencies: Center for Disease Control and Prevention/Injury Center, Consumer Product Safety Commission, and the U. S. Fire Administration

Firesafety.gov member agencies and organizations

ABA: www.ameriburn.org

AIA: www.aia.org

American Red Cross: www.redcross.org

CFSI: www.cfsi.org

HUD: www.hud.gov

Home Safety Council: www.homesafetycouncil.org &

www.homesafetycouncil.org/expertnetwork

Indian Health Service: www.ihs.gov

IAFC: www.iafc.org

IFMA: www.nfpa.org

NASFM: www.firemarshals.org

NFPA: www.nfpa.org

Safe Kids: www.safekids.org

Underwriters Laboratories: www.ul.com

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