

2007 National Firefighter Life Safety Summit Novato, California March 3-4, 2007

Section I: Background and Introduction

On March 3-4, 2007, fire service leadership gathered for the 2007 National Firefighter Life Safety Summit to continue to develop solutions to the continuing problem of firefighter line-of-duty deaths, and by extension, firefighter line-of-duty injuries. At the Summit's conclusion, the participants proffered over one hundred recommendations. These recommendations will become the material from which action plans for preventing line-of-duty deaths will be constructed and made available to all fire departments. The 2007 Summit was developed and delivered under the aegis of the National Fallen Firefighters Foundation (NFFF) and the Firefighter Life Safety Initiatives program (FLSI).

Every year, 100 or more firefighters die in the line of duty in the United States—on average, about one every 80 hours. Every six hours, a firefighter is seriously or critically injured on the job. Most of these fatalities and injuries could be prevented if firefighter safety was a primary concern of every fire firefighter, fire department and fire service organization. Recognizing that much can be done to prevent these deaths and injuries, the Firefighter Life Safety Initiatives Program was created to unite the fire service to address the problem, and more importantly, find and apply solutions.

Following the goals of the United States Fire Administration to reduce line-of-duty firefighter fatalities by 50% by the year 2014, the National Fallen Firefighters Foundation, partnering with fire organizations and fire service leaders from around the United States, has created pathways and programs by which to prevent line-of-duty firefighter deaths and, by extension, serious injuries. These are the Everyone Goes Home Program and the 16 Firefighter Life Safety Initiatives, created from the first National Firefighter Life Safety Summit in 2004, and six subsequent mini-summits held between 2004-2007 (reports from the first National Summit and the mini-summits are available at www.everyonegoeshome.com).

The 2007 National Firefighter Life Safety Summit was convened expressly to advance the Life Safety Initiatives and evolve more concrete and usable strategies through which fire departments can reduce the potential for line-of-duty disasters. Participants were asked not simply to provide general observations in evolving and refining the Everyone Goes Home program, but to identify specific strategies for

National Fallen Firefighters Foundation
2007 National Firefighter Life Safety Summit

implementing the 16 Firefighter Life Safety Initiatives such as to create for fire departments real ways to avoid the path to line-of-duty deaths. Individual action plans for each Initiative will be published by the Life Safety Initiatives program throughout the remainder of 2007.

The Summit took place at the Novato, California, headquarters of Fireman's Fund Insurance Company, the primary private sponsor of the NFFF's Everyone Goes Home program and the Firefighter Life Safety Initiatives program. Joseph J. Beneducci, President and Chief Executive Officer of Fireman's Fund welcomed the group to the Novato facility.

More than 200 U.S. fire service leaders attended the Novato Summit. Invited participants were part of an open, all-inclusive process, and represented all fire department types, and included national fire service organizations, life safety organizations, and survivors of fallen firefighters. Many of the participants of the 2004 National Firefighter Life Safety Initiatives (FLSI) Summit were in attendance at 2007 Summit also.

Building on 2004

The 2004 Summit marked a significant milestone: It was the first time that a major gathering united all segments of the fire service behind the common goal of reducing firefighter deaths. It provided an opportunity for fire service leadership to focus on the problems, jointly identify the most important issues, agree upon a set of key initiatives, and develop the commitments and coalitions essential to the process of significantly reducing line-of-duty deaths.

The 16 Firefighter Life Safety Initiatives, created by fire service leadership at the first FLSI Summit, are recognized quite widely as the quintessential blueprint for reducing firefighter line-of-duty deaths and injuries. They converge into an unprecedented strategy for reducing LODDs. However, a blueprint is just that. In convening a second Summit, the NFFF created a venue to add substance to its growing strategic template for line-of-duty death reduction that has been growing since the last Summit, primarily through the contributions of participants in the mini-summits which had focused the Initiatives on specific areas of the fire service: structural firefighting, wildland firefighting, fire prevention and public education, training, research, health-wellness-fitness, and vehicle safety. These smaller, more focused, conferences yielded excellent results. It was the NFFF's goal, through the 2007 National Summit, to build on the input and successes of the six focused summits—most importantly, to add dimensionality and impact throughout the fire service, *in real terms*.

The 2007 Summit is similarly significant, as it served to reinforce the fire service's commitment to the serious issue at hand. However, although the 2007 Summit followed a similar methodology as 2004 in terms of format, it asked the fire service to

National Fallen Firefighters Foundation
2007 National Firefighter Life Safety Summit

refine and add to its recommendations from three years earlier and, most importantly, to provide specific recommendations and solutions by which fire departments can implement the 16 Firefighter Life Safety Initiatives.

The Final Report of the 2004 Firefighter Life Safety Summit said, “This is the first step along a path that will require a huge commitment of energy and resources over several years. Some of the initiatives that were agreed upon will involve radical changes for the fire service. Any revolutionary movement requires committed and unwavering leadership to bring about this type of major change.” The 2007 Summit itself is testimony to the desire of fire service leadership to continue on its righteous path to both encourage and provide tools for fire department and firefighter safety. The meeting itself, and attendance therein, three years after the launch of the 16 Firefighter Life Safety Initiatives, is proof that the fire service is committed and unwavering to bringing about critical change on behalf of its own.

Methodology

All participants of the 2004 Summit were asked to return for 2007 meeting. Additional groups in both the fire service and life safety fields were invited to provide additional depth or expertise. All major fire service constituents were represented at the 2007 Summit (See **Appendix A** for a complete list of attendees and their organizations).

Prior to the Summit, the FLSI solicited and made available to participants “white papers” on each of the 16 Firefighter Life Safety Initiatives. These papers, written by experts in their respective fields, provided a primer or starting point for discussion and recommendations regarding the strategic implementation of the Initiatives. The *White Paper Series on the 16 Firefighter Life Safety Initiatives* is available at www.everyonegoeshome.com.

At the 2007 Summit, participants were grouped, by preference or expertise, within the focused area topics used for the mini-summits. Each of the groups were led by a designated lead facilitator and co-facilitator, by way of “think tank” exercises, through a process of delivering specific recommendations to fire departments on the implementation of the 16 Initiatives.

Opening remarks were provided by Chief Ron Siarnicki (Executive Director, NFFF) and Chief Charlie Dickinson (USFA Administrator). Richard Anderson, FLSI Program Director, reviewed the accomplishments of the FLSI program over the past two years in promulgating the 16 Life Safety Initiatives. Lead Facilitator and Moderator Chief Dennis Compton (NFFF Board of Directors and IFSTA) concluded the opening plenary session by commissioning the break-out groups, encouraging them to develop dynamic and meaningful recommendations.

Summary of Recommendations

National Fallen Firefighters Foundation
2007 National Firefighter Life Safety Summit

As the Summit discussion groups reported their conclusions, the recommendations fell into two groups: those that relate to a change in cultural behaviors and attitudes, and those that are directed toward a specific issue or problem. Many of the specific issues could be addressed by a “technological fix,” by solving an identified problem or implementing a recommended policy. The cultural issues are much more complex and require people to change in order to achieve the desired outcomes.

As the reports were presented to the full Summit, it became clear that, in many ways, the recommendations which dealt with “things” were much easier to define and describe than those which ask people to change. While the technological suggestions might create budget challenges or require a change in a policy or procedure, they were relatively simple to describe and understand. Trying to figure out how to alter an ingrained value system and change personal behaviors on a large scale to reflect a new safety culture is much more complex.

The central conclusions of the 2007 Summit were on were very similar to the conclusions of the first Summit in 2004. The issue of safety culture, which sometimes supports undesirable and unsafe behaviors, is the dominant factor that must be addressed in order to accomplish the desired reduction in firefighter fatalities.

Section II: Novato Summit—Findings and Recommendations

The primary theme of the Novato Summit was to focus on strategies that could be adopted by a fire department or a fire service agency to implement the goals and underlying principles of 16 Firefighter Life Safety Initiatives.

The participants were asked to consider the essential points of each initiative from a global perspective and then to identify the most effective methods to achieve those objectives on a local scale, whether they are small steps or comprehensive programs. The discussions included approaches that have already proven effective as well as innovative measures that the Summit participants were prepared to recommend.

The Summit participants were divided into six discussion groups to consider the implementation of the 16 Initiatives within different contexts and circumstances. Some of the resulting recommendations are applicable to a wide range of interests, while others are particularly applicable to one or two particular areas. Many of the recommendations could contribute to more than one of the Initiatives. In some cases different groups addressed the same Initiative from different perspectives, resulting in quite different recommendations.

The discussion groups reflected the work groups that had been established at the 2004 Summit and the subsequent mini-summits. They included: structural firefighting, wildland

firefighting, health-wellness-fitness, fire prevention and public education, training and research, and vehicles and equipment.

Each discussion group was asked to focus on a group of the initiatives that have particular significance in relation to their field of expertise. Initiative number one, which addresses the “culture issue,” requires broad application to support all of the other initiatives and was included in all of the group assignments.

Many of the recommendations in the following sections make reference to “fire departments” and “fire chiefs” for editorial consistency. In most cases we use these terms to apply to the full spectrum of fire service organizations and the individuals who provide leadership for those organizations. Some of the recommendations are specifically directed toward a limited segment of the fire service or particular organizations, and where that is so, it is noted.

For the sake of this report, and in order to make greatest sense of the interconnectedness between the 16 Initiatives, we have taken the Initiatives and grouped them into six parts that reflect their commonality (**see Appendix B**). Within each group we have listed the appropriate initiatives and discuss the recommendations that emanated from the break-out groups.

PART ONE: Change Fire Service Culture—Attitudes and Behavior

The first group of initiatives (Numbers 1, 2, 3, 4, 5, 6, and 11) are all related to the overall goal of changing the way that fire service members integrate health and safety into to their work environment. Successful implementation of all 16 Initiatives requires the acceptance of these core components.

1 *Define and advocate the need for a cultural change within the fire service relating to safety; incorporating leadership, management, supervision, accountability and personal responsibility.*

Discussion

As in every previous consideration of the 16 Initiatives, the most fundamental priorities related to the need for a cultural change within the fire service that will **move health and safety issues from the periphery to the center of all activities and decisions**. A strong established system of cultural values influences the legitimacy and acceptability of different concepts and behaviors within the fire service, based largely on tradition and shared experience. The existing cultural orientation which often encourages or accepts unsafe attitudes and behaviors has been identified as the greatest challenge that must be overcome in order to make significant improvements in firefighter health and safety.

National Fallen Firefighters Foundation
2007 National Firefighter Life Safety Summit

Change in fire service will not come easily. A proud tradition of bravery and raw courage is one of the fundamental components of the established American fire service culture. Firefighters are known for and take great pride in their unswerving commitment to saving lives and protecting their fellow citizens from fires and other imminent perils. The fire service is viewed and sees itself as a “family” that is founded on the dedication and shared commitment of every “member” to the mission, to the organization and to each other. Firefighters are prepared to risk and, if necessary, lose their own lives to accomplish their mission.

A culture that takes pride in confronting potential death with raw courage has difficulty adapting to health and safety concerns as organizational priorities. While the fire service as a whole has recognized that too many lives are lost, too many firefighters are injured and too many die from resulting illnesses, the individual members have difficulty reconciling “be bold and be brave” with “be careful, exercise regularly and eat healthy foods.” This is an example of the cultural challenge that must be overcome to reach the goals of the Firefighter Life Safety Initiatives Program.

The danger will never be eliminated from the fire service and the element of risk, including the risk of death or injury, will always be present. The modern era has brought changes that have reduced the need to directly expose firefighters to many of those risks. Science and technology provide the ability to manage many of the risks and to avoid many of the dangers that, in the past, could only be challenged by human strength and unencumbered courage. **Today’s firefighter has the ability to be much more effective in performing his or her mission, while being much better protected than any previous generation from the forces that are likely to cause death or injury.**

The cultural challenge is a confrontation between the traditional values and a new set of values that has evolved with changing circumstances. The new value system views firefighters as highly-trained, technically-skilled and well-equipped professionals who value the importance of prevention and public education—who are prepared to manage complex and dangerous situations – and who also have the courage to face imminent danger when there is no other alternative. This evolution has already occurred in the fire service in many other countries and it must be accomplished within the American fire service before the Firefighter Life Safety Initiatives can be fully implemented.

There has been considerable discussion over the ability to cause a cultural change versus promoting and encouraging a cultural change. **Cultural changes occur gradually, as perceptions and expectations evolve; however the direction of change can be driven by the values that are taught, reinforced and rewarded.** The Summit participants emphasized the importance of steering the process by setting the appropriate expectations and ensuring that every member of the fire department is fully aware of them.

National Fallen Firefighters Foundation
2007 National Firefighter Life Safety Summit

The most fundamental step in the cultural adaptation process is to convince every member of every fire department that the organization has unequivocally adopted health and safety as fundamental values and that the leadership is committed to implementing the 16 Firefighter Life Safety Initiatives. The fire department must clearly define the organizational expectations that relate to health and safety and their application to every individual and every position. These expectations must incorporate health and safety as fundamental values, as opposed to additional considerations, in every program and activity. The leadership of the fire department must emphasize that no other concern ranks higher than ensuring that “everyone goes home.”

These expectations must be integrated into the organizational culture at every level, from initial entry to retirement, and continually reinforced through training and consistent application of the principles. **The roles and responsibilities of every individual must be clearly understood and all must be held accountable for a consistent standard of performance.** Positive achievements in health and safety should be recognized and inappropriate behaviors should be immediately corrected.

The cultural values of the organization should be specifically addressed to eliminate confusion or potential ambiguity. The fire department should consciously avoid rewarding unsafe or inappropriate behaviors, such as giving special awards or recognition for heroic acts that violate safety procedures. The status of “hero” should not be applied to an individual who acts recklessly and disregards established safety procedures. Heroism should be recognized when it occurs within the scope of acceptable practices and in situations where the risks are justified and there is no “safe” alternative.

Key Recommendations:

1. Actively promote a *safety culture* within the fire department:
 - a. Define the roles, responsibilities, and expectations of each position in the organization in relation to the safety culture.
 - b. Provide initial and continuing safety culture education for all organizational levels.
2. Assign individuals with the appropriate attitudes and skills to the training division to promote and reinforce the desired cultural change. Safety and risk management should be a main focus of all training activities from recruit to veterans.
3. Integrate safety and risk management into every activity of the fire department as important and visible organizational values.

National Fallen Firefighters Foundation
2007 National Firefighter Life Safety Summit

4. Implement a pledge of support for LACK: *Leadership, Accountability, Communication, and Knowledge*.
5. Develop a system of appropriate incentives and disincentives to produce positive results.
6. Reward and recognize safe behaviors and practices. Stop rewarding unsafe and inappropriate behaviors.
7. Challenge the cultural definition of “hero.”
8. Develop and implement a program that instructs all firefighters about the importance of their personal responsibility for their own safety and survival.

2. Enhance the personal and organizational accountability for health and safety throughout the fire service.

Discussion

Accountability is an essential component of the integration of a health and safety culture within a fire department. This begins with the organization accepting accountability for the health and safety of every fire department member. **The leadership of the fire department must clearly express this acceptance of overall responsibility, personally as well as organizationally.**

The fire department must hold every individual member accountable for their compliance with established procedures as well as the basic principles of health and safety. This formal accountability has an application at every level within the structure of the fire department.

Accountability implies that there are serious consequences for failure to follow established procedures and apply appropriate risk management principles. The fire department must apply consistent standards in order to establish and maintain this standard of accountability for health and safety, which includes thoroughly investigating any accident, injury or fatality and applying appropriate sanctions. Every member must also understand that certain situations may involve legal consequences as well as internal accountability.

In addition to the formal accountability, the fire service culture must **incorporate a sense of personal accountability** for health and safety. Each individual must understand that he or she is personally responsible for his or her own health, wellness and physical fitness, as well as operational safety and survival. As members of a team, each individual

is also personally accountable for the safety and survival of every other team member, which includes every other firefighter. These core values must be taught during the initial training and orientation process and continually reinforced for as long as the individual is a member of the fire service.

The fire service is also concerned with the related issue of personnel accountability during emergency operations. The hazardous nature of emergency incidents requires a systematic method to keep track of the location, assignment and status of every individual firefighter who is operating in a hazardous area. Personnel accountability requires a very structured and disciplined approach to incident management, which is directly related to the overall concept of personal and organizational accountability for the health and safety of every firefighter.

Key Recommendations:

1. Provide instruction and documentation to every member, at every level, explaining their health and safety responsibilities. Clearly state the expectations of each position.
2. Develop and implement a program that instructs all firefighters about the importance of their personal responsibility for their own safety and survival.
3. Ensure that every supervisor is aware of his or her personal and organizational accountability for the health and safety of all subordinates.
4. Teach all personnel the potential legal consequences of not being accountable.
5. Investigate serious injuries and fatalities and take corrective actions.
6. Promote accountability by focusing on empowerment, motivation and ownership.

3 Focus greater attention on the integration of risk management with incident management at all levels, including strategic, tactical, and planning responsibilities.

Discussion

The integration of risk management with incident management refers specifically to **the need to apply the principles of risk management within the process of incident management**. Risk management refers to a systematic process to identify and evaluate the risks that are present in a particular situation and determine the appropriate course of action. The evaluation process must consider the risks in relation to potential benefits or anticipated outcomes of a course of action. Incident management refers to the structured

system that is used to direct and control those actions. In order to be effective, **risk management must be fully integrated into incident management and must guide the decision making process that determines the appropriate strategy, tactics, and the plan for each situation.**

Effective incident management ensures that operations are conducted within a structured system of guidelines and procedures. The entire system of incident management procedures is designed to provide direction, coordination and control over emergency incident operations. Risk management guidelines and procedures are intended to limit the exposure of firefighters to potential death or injury in situations where the potential benefits do not justify the risks, by identifying acceptable and unacceptable risk situations. **When the two systems are properly integrated, the Incident Commander has the basis to make risk-based strategic decisions along with the capability to apply them through the appropriate strategy and tactics.**

Key Recommendations:

1. Create, teach, apply and evaluate written standard operating procedures and/or guidelines (SOPs/SOGs).
2. Adopt and enforce incident management systems, policies, and procedures to be used in all situations.
3. Place a priority on training programs that are directed toward risk management, risk benefit analysis, and situational awareness at all levels.
4. Adopt and implement relevant risk management policies and procedures, based on national standards (NFPA 1500/1561), recommended policies (IAFC Rules of Engagement), and best practices.
5. Adopt effective and comprehensive training and education programs to include post-incident analysis, case studies, best practices, scenario-based training, and rapid decision making.
6. Adopt and implement a pre-incident survey program to identify the risks and hazards associated with individual structures and occupancies.
7. Integrate the risk management model that is commonly used for fireground operations into vehicle response and roadway scene operation applications.
8. Implement the nationally recognized "Staff Ride" program at the local organizational level. *A staff ride is a case study that is conducted on the actual ground where the event happened. The intent is to put the participants in the shoes*

National Fallen Firefighters Foundation
2007 National Firefighter Life Safety Summit

of the decision makers in order to experience the same leadership and decision-making issues and learn for the future.

9. REFERENCE:
http://www.fireleadership.gov/toolbox/staffride/main_support_documentation.html
10. Participate in the National Firefighter Near-Miss Reporting System and review reported cases to identify risk management factors.
11. The **National Fallen Firefighters Foundation** should provide access to a database of training plans for fire departments, which incorporate standard operating procedures in a standardized format that are appropriate for a community's profile. The plans shall incorporate risk analysis to determine the actions firefighters need to complete in order to control each type of incident and the resources that are required.

Note: The Wildland Firefighting group recommended that all local fire service administrators shall adhere to recognized practices of span of control.

4. All firefighters must be empowered to stop unsafe practices.

Discussion

The initiative that addresses empowering all firefighters to stop unsafe practices is directly related to the three preceding initiatives. This concept requires a mature safety culture at every level within a fire department. It also **demands a balance between accountability and discipline, which must be based on the principles of risk management.**

The Summit participants noted that the language of this initiative statement should be reviewed and possibly changed to clarify the intent. Many individuals have interpreted the initiative as a direct challenge to the authority of officers within a structured command hierarchy. The real intent of the initiative is to provide a process that will work effectively within a structured command system. Attempts will be made to clarify the intent of this initiative as the process moves forward, and the suggestion to revise it will be re-considered at the next national LODD Summit.

The concept of empowerment to stop unsafe practices can be applied in several different contexts. At the most fundamental level it calls for all firefighters, at any rank or level within the organization, to simply stop doing things that they recognize as unsafe practices, such as habitually disregarding safety rules and circumventing safety procedures. Every individual should be personally accountable for eliminating any recognized hazard, if the decision is within his or her scope of authority.

The legal “right to refuse” establishes the right of a worker to refuse to perform a function if he or she believes that it is dangerous. The health and safety regulations in most jurisdictions establish an employee’s legal right to refuse to perform unsafe work, without fear of reprisal, and provide an administrative mechanism to review and resolve disputes over safety issues. This regulation could apply to many situations in a fire department; however emergency operations are usually excluded, because of the urgency and inherently dangerous nature of the work.

A different approach is required to apply the “stop unsafe practices” principle in the context of emergency operations within an incident command structure. Any firefighter, who believes that a situation is dangerous, has a responsibility to call attention to the problem. “Failure to communicate” has been identified as a contributing factor in many accident investigations.

The “Crew Resource Management” model provides a systematic process for a subordinate to make a supervisor aware of a situation where there is an immediate safety concern, while maintaining the authority and responsibility of the supervisor to make an informed decision. Many fire departments have adopted the CRM model and provided the training for all their members. The CRM training reinforces the ability of a firefighter to take action without fear of unwarranted discipline, along with the supervisor’s responsibility to evaluate the situation and determine the appropriate course of action.

Key Recommendations:

1. All fire departments should adopt the “Crew Resource Management” system:
 - a. Provide CRM training for all members,
 - b. Emphasize the use of “Challenge and Confirm” to prevent unsafe actions,
 - c. Use case histories to demonstrate the importance of questioning situations based on observations, perceptions, experience and intuition,
 - d. Use simulation to create realistic training scenarios.

2. Recognize and reward “speak up” safety actions.

NOTE: The Wildland discussion group specifically recommended review and revision of the *national assignment turn down checklist and policy* – to be completed by January 2008 to ensure the changes are included in the NWCG - Incident Response Pocket Guide.

5. Develop and implement national standards for training, qualifications, and certification (including regular recertification) that are equally applicable to all firefighters based on the duties they are expected to perform.

Discussion

This initiative is directed toward the problem that many firefighters are inadequately trained or lack the skills that are required to perform the functions that they may be called upon to perform. **The inadequacy of training places individuals at risk and also compromises the overall safety and effectiveness of many fire department operations.** Every firefighter should be trained to a level that is appropriate for the duties that the individual is expected to perform and should demonstrate proficiency in performing the required skills.

The basic mechanisms that are required to implement this initiative already exist. The existing professional qualifications standards and certification processes define the minimum standards of training that should be provided and the levels of competence that should be demonstrated by anyone who is expected to function as a firefighter. The existing systems provide a progression of certification levels and numerous areas of specialization that may be applied to almost any set of circumstances.

The nationally recognized system of training standards and certification processes is available to the vast majority of firefighters and fire departments. For a variety of reasons, many fire service members have not been trained to these minimum standard levels and many fire departments do not participate in the certification system. In addition, most of the existing certification processes do not require individuals to “recertify” periodically, to demonstrate that their knowledge is up to date and their proficiency has been maintained.

The primary strategy for implementing this initiative involves widespread adoption, adaptation and continuing development of the existing professional qualifications training and certification systems. The NFPA professional qualifications standards establish minimum expectations that should apply to every firefighter. Higher standards or specialized training requirements may be appropriate, if an individual is expected to perform duties that are not adequately addressed by the NFPA standards.

Key Recommendations:

1. All firefighters must be trained and qualified to perform their assigned duties standards and must demonstrate proficiency in performing required functions. The Fire Chief shall ensure that the requirements are met or restrict the individual's ability to respond, without exceptions.

National Fallen Firefighters Foundation
2007 National Firefighter Life Safety Summit

2. The existing professional certification systems and the appropriate NFPA professional qualifications standards should be used as the foundation for implementing this initiative.
3. **The NFPA should include firefighter safety as the first element of all firefighter professional qualification standards.** The standards making process must allow for increased firefighter involvement and provide support for this participation.
4. The Chief of the Fire Department should be certified (and re-certified) to demonstrate that the top person in the department has all of the knowledge, skills, abilities and competencies to lead the organization.
5. Promotion to Chief of Department should require educational achievement as well as a series of certifications.
6. Fire chiefs must be able to effectively communicate the necessity and cost effectiveness of firefighter safety and training to their governing bodies.
7. Fire departments should:
 - a. Identify existing weaknesses in compliance with NFPA standards in 1000 and 1400 series, as well as any applicable state standards, and implement strategic programs for change and compliance,
 - b. Require mandatory certifications at all levels (firefighter, technician, officer, technical rescue, hazmat, etc.),
 - c. Implement annual Job Performance Requirements (JPR) compliance,
 - d. Provide incentives for accredited certifications applicable to an individual's job duties,
 - e. Provide training and time for employees to obtain and maintain certifications,
 - f. Improve leadership by mandated certification,
 - g. Require initial and refresher training for all drivers of all fire department vehicles (new and existing apparatus, as well as privately owned vehicles that are used to respond to incidents) in accordance with NFPA 1002,
 - h. Require all fire department members to meet the requirements of NFPA 1001 for traffic control training.

8. Support Federal initiatives for a nationwide credentialing system to foster reciprocity of emergency responder qualifications.
9. Instructor qualifications for certification and a recertification should include specific, performance-based requirements that are aligned with changing national consensus standards. This is particularly important in high hazard training activities such as live fire training, high angle rescue and diving exercises.
10. All personnel conducting plan review, inspection and public education should have nationally accredited certifications applicable to their job duties.

Note The Wildland firefighting work cited a specific training recommendation: The Fire service administrator will ensure the training and use of “Lookouts, Communications, Escaper Routes, and Safety Zones” (LCES) by all personnel at all times.

6. *Develop and implement national medical and physical fitness standards that are equally applicable to all firefighters, based on the duties they are expected to perform.*

Discussion

Firefighting and related duties are recognized as highly hazardous activities that place individuals at exceptional levels of risk. Health maintenance and physical fitness programs are essential to ensure that firefighters are capable of performing their duties safely and effectively are not exposed to excessive risks of injury or occupationally related medical conditions. The specific requirements must be based on appropriate expectations for the duties that each individual is expected and authorized to perform.

The Summit participants placed a strong emphasis on ensuring that every individual is both medically and physically “fit for duty” and limiting or prohibiting the participation of anyone who is unfit. Many currently active firefighters would not be eligible to participate in emergency operations, if the existing medical and physical fitness standards were fully applied. While this policy could create a serious short term problem for many fire departments, it was considered too important to ignore or even defer. Approximately half of all firefighter line-of-duty deaths are directly related to medical conditions, particularly heart attacks and strokes.

National standards have been adopted for annual medical examinations, physical fitness programs and health and wellness programs to ensure that firefighters are medically and physically fit. Many fire departments have developed comprehensive approaches to deal with health-wellness-fitness issues that may be used as model programs. The primary

goal of this initiative is to extend this type of program to every firefighter. The secondary objectives include promoting efforts to keep the standards current and improve existing programs.

The existing standards and model programs have proven to be very effective in the fire departments where they have been applied. Their application is limited by the cost in some cases and by user-resistance in other cases. On the other hand, these programs have already saved the lives of many firefighters and could save many more lives if they were universally implemented. The cost-effectiveness of investments in health-wellness-fitness programs has been proven in several case studies.

Note: The general discussions made note of several issues that could have broad significance in the overall mission to impact on health and safety in the fire service. It was noted that the strongest single forces in promoting advances in these areas over the past 25 years have been the adoption OSHA Fire Brigade Regulations (CFR 1910.156) and NFPA Standard 1500. The basic OSHA requirements have not been revised since they were first issued in 1980 and many fire departments have not fully implemented the requirements of NFPA 1500 that were released in 1987. The OSHA program should be revisited and updated to establish a new minimum platform for mandatory regulations that would apply to a large segment of the fire service.

Key Recommendations:

- 1. All firefighters must meet the appropriate medical and physical fitness requirements in order to be eligible for duty.** The Fire Chief shall ensure that the requirements are met or restrict the individual's ability to participate in strenuous and stressful duties, including firefighting, other emergency response duties and operational training. **No exceptions shall be made to medical and fitness requirements.**
2. Every fire department should implement mandatory medical examinations and physical fitness programs for all members, in accordance with NFPA standards.
3. Every fire department should adopt a health and wellness accountability policy that holds ALL members accountable for their own health maintenance.
4. The fire department and organizational stakeholders should be partners in the development and implementation of the health and wellness programs, based on the IAFC/IAFF Joint Wellness and Fitness Initiative.

National Fallen Firefighters Foundation
2007 National Firefighter Life Safety Summit

- a. The program should include obtaining vital signs (pulse, blood pressure, respirations) from every firefighter on a regular basis. The monitoring should take place at a fire department facility not less than once a month.
 - b. The program should include a “No Tobacco” policy to reduce the adverse health consequences of tobacco use.
5. The **National Fallen Firefighters Foundation** should work with other fire service organizations to support the development and implementation of health and wellness programs throughout the fire service.
 6. The **National Fallen Firefighters Foundation** should work with other fire service organizations to conduct a landmark study to establish the cost/benefit factors and effectiveness of health and wellness programs.

11 *National standards for emergency response policies and procedures should be developed and championed.*

The original intent of this Initiative was to address vehicle safety and reduce fatalities from accidents related to emergency response. **Vehicular accidents and roadway incidents are the second leading cause of firefighter fatalities.** The recommendations included **developing national model procedures for the operation of emergency vehicles, including training and certification programs for drivers.** This effort should also include the development of model criteria for defining when emergency response to an incident is appropriate, as a strategy to reduce unnecessary exposure to the elevated risk of emergency response.

This initiative has also been quoted to support efforts to ensure that all fire departments have the appropriate resources to respond to emergency incidents, making reference to NFPA Standards 1710 and 1720, and apply standard operating procedures and guidelines to their emergency operations.

The resource issue is directed toward providing the resources that are required to operate safely and effectively at the scene of a fire or other type of emergency incident. This includes the 2-in/2-out policy, the establishment of rapid intervention teams (RITs), the ability to rotate and rehabilitate or replace fatigued crews and the ability to conduct and support effective operations. If the necessary resources are not available, the operational strategy should be limited to those functions that can be performed safely using the resources that are available.

The consistent use of standard operating procedures and guidelines and the application of an incident management system to all emergency situations are fundamental safety

National Fallen Firefighters Foundation
2007 National Firefighter Life Safety Summit

requirements. The discussion emphasized the necessity of ensuring that all fire departments have the appropriate training and recognize the importance of operational policies and procedures.

Key Recommendations:

1. Fire departments should incorporate motor vehicle safety programs into their organizational culture:
 - a. Enforce 100% seat belt use,
 - b. Adopt policies that reinforce obeying traffic laws when responding, including response in privately owned vehicles,
 - c. Require initial and refresher training for all drivers of fire department vehicles in accordance with NFPA 1002,
 - d. Establish requirements for driver training and certification, including specific authorization to drive specific vehicles or classes of vehicles,
 - e. Require routine driver license checks,
 - f. Provide and require wearing ANSI-approved, high-visibility reflective vests on roadway incidents.

2. The **National Fallen Firefighters Foundation** should sponsor the development of a consensus-approved, national best practices document for emergency and non-emergency response procedures that would apply to emergency vehicles and personally owned vehicles. This document should include criteria for determining which incidents qualify for emergency versus non-emergency response.

3. The **National Fallen Firefighters Foundation** should endorse and support implementation of the National Unified Goal for Traffic Incident Management.

4. All fire departments should comply with NFPA Standards 1710 and 1720, as appropriate, with regards to resources and staffing. These documents should be based on the risks that are present in the community and the levels of service that the department is expected to provide.

5. All fire departments should operate within a system of standard operating procedures and/or guidelines and utilize an incident management system for all emergency incidents and training exercises.

PART TWO: Research and Learn From Experience

Initiatives 7 and 9 are both related to conducting research, gathering data and producing information to support the overall objectives of the Firefighter Life Safety Initiatives Program.

7. Create a national research agenda and data collection system that relates to the initiatives.

Discussion

The research agenda and data collection system recommendations are directed primarily toward national organizations, including NFFF, USFA, DHS, NIST, NIOSH, NFPA, IAFC, IAFF and NVFC. **Individual fire departments support the implementation of this initiative by participating in data collection systems**, including NFIRS and National Firefighter Near Miss Reporting System and by supporting research projects that are directed toward improving firefighter health and safety.

Key Recommendations:

1. All fire departments should consistently participate in the NFIRS data collection system.
2. The **National Fallen Firefighters Foundation** should continue to promote the National Fire Service Research Agenda and support individual research efforts and projects.
 - a. Seek and support funding for research projects,
 - b. Support the establishment of research centers to focus on various aspects of the Research Agenda,
 - c. Support the establishment of a system to make pertinent research available and useful to the fire service.
3. The **United States Fire Administration** should support and encourage participation in NFIRS.
 - a. Incentives should be provided to encourage participation,
 - b. Reporting and coding should be simplified, as much as possible.

9 *Thoroughly investigate all firefighter fatalities, injuries, and near misses.*

The most important reason for investigating accidents, injuries, fatalities and near-miss occurrences is to focus efforts on preventing recurrences. Every negative experience should provide lessons, along with an incentive and a motivation to make changes. These negative occurrences must be investigated and analyzed to identify the problems before corrective actions can be implemented. The investigation process must be thorough and impartial to identify the true circumstances and causal factors in each situation and the fire department must be committed to taking the necessary actions to correct the problems that are identified.

Safety analysts have determined that most serious accidents involve a series of undesirable occurrences and circumstances. The individual contributing factors may occur hundreds of times before the full set of circumstances come together in a manner that results in a serious injury or fatality. **The most effective strategy to prevent negative outcomes, including injuries and fatalities, is to identify the contributing factors and take action to correct them.**

The lessons that are learned from an investigation should be widely shared to contribute to improving firefighter health and safety on as large a scale as possible. The purpose of the NIOSH Fire Fighter Fatality Investigation Program is to obtain information for research and educational purposes. In addition, detailed fatality investigation reports are often produced by internal fire department teams or specially appointed incident review boards.

The National Firefighter Near-Miss Reporting System was developed to compile and share the information that comes from the many situations that could have resulted in injury or death. The system is designed to facilitate voluntary reporting and provide easy access to the data via the Internet.

Key Recommendations:

1. All fire departments should participate in the National Firefighter Near-Miss Reporting System by encouraging all members to make use of the on-line reporting system.

National Fallen Firefighters Foundation
2007 National Firefighter Life Safety Summit

2. Fire departments should actively review the Near-Miss Reports, as well as NIOSH Firefighter Fatality Investigation Reports and detailed reports of individual investigations from other fire departments. The information that is obtained should be incorporated into training programs and prevention strategies.
3. Every fire department should have an established process to investigate accidents and injuries, including a plan for investigating serious injuries and/or fatalities. The plan for conducting major investigations could involve a state or regional team that can provide the necessary resources and expertise.
4. Regional teams should be established to conduct investigations (or provide assistance in conducting investigations) of line-of-duty deaths, using a standardized protocol.
5. The results of investigations should be widely shared to make the information available to other fire departments, standards making bodies and related organizations.

PART THREE: Obtain and Apply Technological and Engineering Solutions

Initiatives 8, 10 and 16 are all related to efforts to provide firefighters and fire departments with apparatus, equipment, systems and procedures that will contribute to improvements in health and safety.

8 Utilize available technology wherever it can produce higher levels of health and safety.

Discussion

Advances in technology are continually improving the ability of firefighters to perform more effectively and with reduced personal risk. All fire departments should place a priority on obtaining and making use of technological advances that contribute to the overall objectives of health and safety. These advances include improvements in protective clothing, self-contained breathing apparatus with integrated PASS devices, portable radios, accountability systems, thermal-image cameras, self-rescue devices and other systems that are directly related to firefighter safety. Technological advances that increase operational effectiveness also contribute to firefighter safety by reducing exposure to dangerous situations and the risk of over-exertion.

In many cases cost is a prohibitive factor in obtaining new technology. The cost of fully equipping a firefighter with personal protective clothing and equipment has increased

as the technology has advanced and more demanding performance requirements have been incorporated into the applicable standards. The higher cost should be considered in relation to the benefits of improved performance, including the costs associated with a preventable injury or fatality. The avoidance of one serious injury would justify the cost of providing the best equipment that is available for many firefighters.

Key Recommendations:

1. Every fire department should evaluate the need for technology and work toward providing the most effective tools and equipment to improve firefighter health and safety.
2. Every fire department should continually monitor changes in standards and advances in technology and identify priority areas for adopting improvements.
3. The cost of adopting new technology should be weighed against the costs associated with a preventable firefighter injury or fatality.

10 Grant programs should support the implementation of safe practices and/or mandate safe practices as an eligibility requirement.

Discussion

Grant programs provide opportunities for fire departments to obtain resources and invest in improvements that would not be affordable under normal circumstances. In addition, grant programs provide opportunities for the sponsoring agencies to influence and promote positive changes within fire departments. Both of these factors should be oriented toward placing a priority on making improvements in firefighter health and safety.

The intent of this Initiative is to encourage the organizations that provide grant funds to ensure that the funds are used to leverage health and safety improvements, by requiring a fire department to demonstrate a level of compliance with safe practices before funds will be provided for any other purpose. If the fire department does not meet the set standard of health and safety, grant funds would be earmarked for addressing the deficiencies.

The initiative is also intended to encourage fire departments to make improvements in health and safety their top priority when they apply for grant funding.

Key Recommendations:

National Fallen Firefighters Foundation
2007 National Firefighter Life Safety Summit

1. Fire departments should identify the areas where grant funding could be used to address health and safety issues and grant programs that could provide the necessary funds.
2. Organizations that provide grant funds should place a priority on supporting and leveraging compliance with established safety standards. Specific safety initiatives should be identified as priorities in the annual guidelines for grant programs.
3. A fire department that applies for grant funding should be required to either:
 - a. Demonstrate a level of compliance with health and safety standards, or
 - b. Use the grant funds to work toward compliance with those standards.
4. The **National Fallen Firefighters Foundation** should actively support the continuation and expansion of grant programs with an emphasis on health and safety programs.

#16 *Safety must be a primary consideration in the design of apparatus and equipment.*

This initiative is addressed primarily toward the designers and builders of fire apparatus and equipment, as well as standards-making and regulatory organizations. The manufacturers have to invest in research and development projects to make improvements in their products and support advances in the applicable standards. The standards-making organizations must be responsive to the needs of the fire service and ensure that their documents incorporate advances in technology.

The fire service influences this process by demanding improvements in safety and by purchasing vehicles and equipment that meet the highest standards of safety. The fire service has a duty to provide the safest available equipment to protect fire firefighters, which includes ensuring that the equipment is properly maintained and inspected. The purchasing process should prioritize implementing safety improvements and eliminating recognized hazards.

Key Recommendations:

1. Every fire department should place a priority on obtaining the safest possible apparatus, equipment and tools and ensuring that they are properly maintained and inspected.

National Fallen Firefighters Foundation
2007 National Firefighter Life Safety Summit

2. Apparatus and equipment designers and builders should work closely with the fire service to develop improvements that are functional, user-friendly and place an emphasis on safety.
3. User training should be mandatory before new apparatus and equipment can be placed in service.
4. The **National Fallen Firefighters Foundation** should support the development a user-driven guidance document to assist in the design of safe emergency vehicles and equipment.
5. The **National Fallen Firefighters Foundation** should continue to promote the effort to scientifically assess the ergonomics and the anthropometrics of fully dressed firefighters riding in emergency vehicles (Safe-Seating Project).
6. The **National Fallen Firefighters Foundation** should work with other fire service organizations and the NFPA standards process to bridge the gap between safety requirements for new apparatus and the condition of existing apparatus.

PART FOUR: Reduce Exposure to Violent Incidents

12 National protocols for response to violent incidents should be developed and championed.

Firefighters frequently find themselves involved in violent or potentially violent situations, most often when responding to emergency medical and rescue incidents. In some cases firefighters have been the direct targets of violence. Terrorist incidents also expose firefighters to the risk of violent death or injury.

The strategies for reducing the risks associated with violence include recognition of potentially dangerous situations as well as procedures to keep firefighters away from uncontrolled situations, whenever possible. This approach requires training and coordination with law enforcement and communications personnel. Clear policy statements should guide firefighters to avoid potentially violent situations and to withdraw when unanticipated violence is encountered.

Key Recommendations:

1. Fire departments should work with other agencies to develop and implement joint SOPs/SOGs for all emergency response personnel (fire, law enforcement, EMS) and dispatchers, including the use of an effective incident management system.

2. All emergency response personnel and dispatchers should be trained in awareness factors for potentially violent incidents.

Part Five: Reduce Exposure

Initiatives 14 and 15 are directed toward reducing life safety risks to firefighters by reducing the frequency and severity of fires and other types of emergency incidents.

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

Discussion

Fire and life safety education offers the most effective vehicle to proactively engage the community and impact on the factors that cause fires and other types of emergency incidents. **The direct connection between public education efforts and firefighter health and safety is often overlooked.** While public fire and life safety education programs are primarily directed toward increasing public safety, every success on the prevention side is also a positive accomplishment toward reducing the exposure of firefighters to dangerous situations.

Fire fighters should support public education programs for both reasons; to better protect their communities and to contribute to their own safety.

Key Recommendations:

1. Fire chiefs should demonstrate leadership by:
 - a. Including fire prevention and public education in the fire department mission statement, not as an “after-thought.”
 - b. Committing sufficient resources to fire & life safety education (personnel and funding),
 - c. Creating a ladder of upward promotion within the department for individuals who are dedicated to fire & life safety training,
 - d. Institutionalizing the philosophy that fire & life safety education are responsibilities of every individual within the organization,
 - e. Prevention and public education should be included in initial firefighter training as well as monthly training programs for all firefighters and officers,

National Fallen Firefighters Foundation
2007 National Firefighter Life Safety Summit

- f. The local fire service administrator shall be informed and educated about the issues, concerns, and advocacies of recognized state and federal groups.
2. Fire departments should:
 - a. Collect and analyze demographic data and incident/risk data to identify target populations and establish priorities for Fire and Life Safety Education programs,
 - b. Engage the target communities in the design, development, implementation and evaluation of Fire and Life Safety Education programs,
 - c. Establish advocacy partnerships with community leaders, civic organizations, teachers and survivors.
 3. National fire service organizations should:
 - a. Include fire prevention and public education in their Mission Statements,
 - b. Dedicate a portion of distributions/journals/magazines to prevention and education,
 - c. Publicize case studies of fire departments that have managed to secure adequate support for comprehensive FLSE initiatives,
 - d. Support national programs to recognize the importance of fire prevention and public education programs,
 - e. Support the development of validated program justification and evaluation tools that can be used by local jurisdictions,
 - f. Develop “best practice” models and produce materials to support local efforts.

15 *Advocacy must be strengthened for the enforcement of codes and the installation of home fire sprinklers.*

Discussion

National Fallen Firefighters Foundation
2007 National Firefighter Life Safety Summit

The fire service must stand behind the adoption and enforcement of codes that will provide for safer communities and a safer environment for firefighters. We have the technology to build safer communities, if we educate the public and decision makers on the social and economic benefits. Firefighters must also be educated to recognize the benefits and promote these strategies.

The opposition to stronger codes often comes from developers and is based on cost concerns. **The fire service should address this argument by demonstrating the economic benefits of sprinklers and other investments in fire protection and safety.** The discussion should focus on quality of life in the community, noting that residential sprinkler systems provide the best protection for the occupancies that experience the greatest number of fires, civilian fatalities and firefighter fatalities.

The fire service should participate in the development of model building and fire codes and in every step of the development, design, plans review and inspection processes. The fire service should also build coalitions with other organizations that support residential sprinklers.

Key Recommendations

1. All fire departments, fire fighters and fire service organizations should actively promote the life safety benefits of residential fire sprinklers.
2. Fire Chiefs should:
 - a. Promote the adoption and enforcement of current model building and fire codes,
 - b. Communicate the importance of fire prevention to local community leaders, making the connection that fire protection has economic benefits and contributes to a community's quality of life,
 - c. Ensure that personnel who are involved in code enforcement are properly trained and certified.
3. The National Fallen Firefighters Foundation should:
 - a. partner with other organizations that support fire prevention, code enforcement and home sprinklers.
 - b. support studies to demonstrate the economic benefits of fire prevention,
 - c. develop and/or recommend "best practice" models for fire departments,
 - d. Identify key partners that can support local efforts to adopt codes,

- e. Identify resources for fire prevention training for fire departments,
- f. Encourage the insurance industry to proactively support strong fire prevention programs and home sprinklers by adjusting rates to offer significant incentives.

PART Six: Reinforce New Cultural Norms

13. *Firefighters and their families must have access to counseling and psychological support.*

Discussion

The relationship that links fire fighter safety to the need for counseling and psychological support is complex and interrelated to several other initiatives. There is a direct relationship between the need for cultural change in relation to health and safety and behavioral change. Studies have concluded that behavior modification is often effective in changing attitudes, while it is much more difficult to change behaviors by attempting to influence attitudes. Strategies to create culture change must concentrate on behavior change as a first necessary step.

Organizational culture is strongly linked to behavior and accountability. In order to change the culture of a fire department, these forces must intersect and interact. Strategic approaches to cultural redirection cannot be accomplished in piecemeal fashions, nor will changes persist unless they are consistently reinforced at all levels. Successful marketing and promotional strategies from other fields, including public health, should be examined and adapted for use in a fire service environment.

The nature of the fire service mission exposes firefighters to situations that involve extreme psychological stress, which impact directly on their health and their personal lives, as well as their reactions to dangerous situations. The significance of behavioral and psychological health in relation to firefighter safety has been recognized and widely accepted for more than 25 years and a wide range of programs, approaches and overall intervention strategies have been employed by different organizations. There has not been a broad consensus of professional opinion on the specific goals, objectives, priorities, scope of services or organizational structures that should be incorporated into a program. Many successful programs have been modeled and adapted to address a variety of situations.

One of the major challenges in implementing this initiative is the difficulty in justifying the costs in relation to proven or anticipated benefits. Many behavioral health issues are only marginally connected to occupational causes, although they often have serious occupational consequences. The value of various approaches has been established

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2007 National Firefighter Life Safety Summit

anecdotally and through small scale studies; however there is no single source of guidance that can be consulted or referenced.

NFPA 1500 *Standard on Fire Department Occupational Safety and Health Program*, mandates access to mental health services and employee assistance programs, but provides no specific guidance on the program details; much less options or levels that are appropriate for different types of organizations, communities and situations. The body of knowledge and experience is expanding and more information is becoming available, although many fire departments have difficulty obtaining and interpreting the information and resolving differences of opinion without professional assistance.

The range of programs that fit within the scope of this initiative is very broad, from behavioral modification to promote health and physical fitness, to preventing or treating post-traumatic stress. Most of the recommendation that were produced in relation to this initiative are directed toward national organizations, including the National Fallen Firefighters Foundation, to promote the development of more effective programs that can be adopted and implemented at a local level. The discussions strongly recommended developing options that would be offered rather than prescriptive solutions and programs.

Key Recommendations:

Fire departments should:

1. Focus efforts to promote cultural change (Initiative #1) and accountability for health and safety (Initiative #2) with professionally validated behavior modification strategies.
2. Provide open access for firefighters and their families to a system of competent, confidential, effective professional services that address a range of basic mental health support services . The basic services should include family issues, substance abuse, stress management and personal counseling
3. Provide professionally validated programs to deal with individual traumatic incidents and occupational stress

The **National Fire Academy** should:

4. Prepare and release hand-off courses to enable widespread adoption.
5. Promote specific vectors of change within the fire service through the Executive Fire Officer program

The **National Fallen Firefighters Foundation** should:

National Fallen Firefighters Foundation
2007 National Firefighter Life Safety Summit

6. Promote consultation and assistance in adapting to various organizational cultures, along with awareness of the best treatment resources.
7. Provide consultation and assistance in locating providers when needed in emergency situations.
8. Develop and disseminate training and guidance on evidence based best practices in behavioral health and wellness for fire service entities.
9. Develop fuller, operationalized standards regarding member assistance options for fire service agencies, geared toward the range of agencies, communities, and resources available.
10. Develop mechanisms and relationships needed to bring evidence and best practices from other arenas to bear on behavior and lifestyle change programs in the fire service.
11. Develop and disseminate options for organizational response to workplace events that reflect current evidence based best practices for immediate support, effective surveillance and screening, referral to competent specialty care where indicated, and strategies for longer term support where desired.
12. Develop accessible, usable resources for mental health providers serving fire service members and families to ensure capacity to deliver competent evidence based treatment for major conditions.
13. Work with Substance Abuse Mental Health Services Admin., National Center for PTSD (*Post Traumatic Stress Disorder*), the International Society for Traumatic Stress Studies, and other groups to adapt emerging best practices to fire service settings.
14. Interact with academic, military and other sectors on issues of mutual interest and seek opportunities to promote research and adapt successful techniques to the fire service.
15. Work with Medical University of SC/National Crime Victim Treatment and Research Center to explore funding and development of online Cognitive Behavior Therapy training for fire service providers (as developed with National Child Traumatic Stress Network for traumatized children).
16. Work with risk management, human resource and employee benefits components to provide model specifications for mental health benefits

National Fallen Firefighters Foundation
2007 National Firefighter Life Safety Summit

17. Support research efforts to determine the most effective intervention strategies for dealing with traumatic events.
18. The National Fallen Firefighters Foundation should also consider organizing additional summits or similar events to focus on tangential yet critical emergent psychological issues within the fire service.

Appendix A: 2007 Summit Participants

Lead Facilitator and Moderator

Dennis Compton, Chief (Ret.) Mesa Fire Dept./IFSTA/NFFF Board

National Fallen Firefighters Foundation
2007 National Firefighter Life Safety Summit

NFFF Host

Chief Ronald J. Siarnicki, Executive Director, National Fallen Firefighters Foundation

Firefighter Life Safety Initiatives Program Staff

Richard R. Anderson, Program Director

William A. Manning, Communications Director

Chief Richard Marinucci, State Advocacy Program Director

Robert Colameta, National Manager, *Courage to Be Safe* Program

Dr. JoEllen Kelly, Program Development Manager

Christine King, Program Manager

Vincent Brennan, Session Logistics Coordinator

Larry Curl, Session Logistics Coordinator

Dan McDonough, Session Logistics Coordinator

Report Writers

J. Gordon Routley, Chief (Ret.), Shreveport (LA) Fire Department, IAFC Safety & Health Section

William A. Manning, Communications Director, FLSI Program

Session Facilitators

Derek Alkonis, Captain, Los Angeles (CA) County Fire Department

Mike Apicello, Public Affairs Officer, National Interagency Fire Center, Boise (ID)

Heather Burford, Chief, Ridgefield (CT) Fire Department, State Advocate

Dr. Burt Clark, Chair, Management Science Program, USFA/National Fire Academy

Steve Edwards, Director, Maryland Fire Rescue Institute

Aaron Feldman, Division Chief (Ret.) Vancouver, BC, Canada

Dr. William F. Jenaway, Executive Vice President, VFIS/ESECG

Dr. Cortez Lawrence, Acting Director, National Fire Programs, FEMA/DHS USFA

Daniel Madrzykowski, Fire Protection Engineer, NIST

Kevin Roche, Assistant Fire Marshal, Phoenix (AZ) Fire Department

Gary Tokle, Vice President, NFPA

Bill Troup, Fire Program Specialist, National Fire Data Center, USFA

Mike Wieder, Assistant Director, IFSTA Publications, Oklahoma State University (OSU)

Scribes

Note: Staffing provided by Scientific Commercial Processing Systems

Julia Boggs

Nikki Cassidy

Jennifer Eyler

Angie Krantz

Tonia Roberts

Nancy Weiler

Survivors

National Fallen Firefighters Foundation
2007 National Firefighter Life Safety Summit

Eileen Coglianesse, Survivor, Chicago (IL)
Wife of Lieutenant Edmund Coglianesse, LODD 1/26/86

Gerry and Jo Ann Gettman, Survivors, Lakeport (CA)
Parents of Volunteer Firefighter Matthew Black, LODD 6/23/99

Cathy Hedrick, Director of Survivor Programs, NFFF
Mother of Volunteer Firefighter Kenny Hedrick, LODD 1/12/92

Helen King, Survivor, NFFF Advisory Board, Alamo (TN)
Wife of Firefighter Larry Joe King, Sr., LODD 8/16/98

Gregg Turner, Survivor, Mill Valley (CA)
Uncle of Firefighter Sekou Turner, LODD 5/22/02

Ken and Helen Worthen, Survivors, Woodland (CA)
Parents of Firefighter Eric F. Reiner, LODD 3/23/98

Patrick and Marlene Moore, Survivors, Basehor (KS)
Parents of Firefighter Jared Moore. LODD 12/29/04

Jo Ann Tilton, Survivor, Katy (TX)
Wife of Chief Gary Tilton, LODD 10/20/04

Attendees

Amy Acton, Executive Director, Phoenix Burn Society
Terry Anderson, President, Anderson Manning Media Group
Meredith Appy, President, Home Safety Council
Steve Austin, Project Manager, CVVFA Emergency Responder Institute, Newark (DE)
Barry Balliet, President, Provident Agency
Rob Barker, Chief of Training/State Advocate, Warsaw (IN) Fire Department
Rebecca Becker, Financial Manager, NFFF
Richard Braddee, Safety and Occupational Health Manager, NIOSH
Johnny Brewington, President, International Association of Black Professional Firefighters
John Buckman, Chief, German Township (IN) Fire Department
Danielle Cagan, Community Relations Director, Fireman's Fund Insurance Company
Tom Carr, Chief, Montgomery County (MD) Fire Department
Scott Carrigan, Lieutenant/State Advocate, Nashua (NH) Fire Rescue
Michael Chiaramonte, Chief Fire Inspector (Ret)/Lynbrook, NY Fire Dept./NFFF Advisory Board
John S. Coleman, Manager, Community Mitigation Services, Insurance Services Office
Malachy Corrigan, Director, Counseling Services Unit, FDNY
Anthony Corrolla, 3M
Henry Costo, Captain/Safety Officer, Philadelphia (PA) Fire Department
Rob Dahl, Deputy Chief/State Advocate, Boring (OR) Fire Department

National Fallen Firefighters Foundation
2007 National Firefighter Life Safety Summit

David Daniels, Chief/ Renton (WA) Fire & Emergency Services/Chair, IAFC Health & Safety Section
Kate Dargan, Asst. State Fire Marshal, California
Ron Deadman, Division Chief/State Advocate, Avondale (AZ) Fire Department
John DeHooge, Chief, Waterloo (Ontario) Fire Department, Canada
William Delaney, Public Education Officer, Montgomery County (MD) Fire Department
Martin DeLoach, Chief/State Advocate, Brighton Area (MI) Fire Department
Ron Dennis, Assistant Fire Chief/State Advocate, Avondale (AZ) Fire Department
Felice Dennison, National Account Executive, PDSI Software
Mike Devoe, Vice President, Marketing, Fireman's Fund Insurance Company
Charlie Dickinson, Acting US Fire Administrator, USFA/Preparedness Directorate/DHS
Tim Dolan, Board Director, International Association of Wildland Fire
David Driscoll, Chief, California Department of Forestry
Richard Duffy, Assistant to General President, IAFF
Rita Fahy, Manager, Fire Database & Systems, NFPA Fire Analysis & Research Division
Mark Flagler, Firefighter/State Advocate, Cincinnati (OH) Fire Dept.
Stephen (Red) Flegal, Industrial Fire Chief, West Grove (PA) Fire Company
Janelle Foskett, Associate Editor, *Wildland Firefighter Magazine*
Megan Foucht, Assistant Editor, *FireRescue1.com*
Alex Furr, Director, National Fire Data Center, USFA, National Fire Academy
Daniel Gaumont, Chief, Watertown (NY) Fire Department
Ray Gayk, Ontario (CA) Fire Department, *Wildland Firefighter Magazine*
Richard Gist, Principal Asst. to Director, Kansas City (MO) Fire Department
William Goldfeder, Chief/NFFF Board Director, Loveland-Symmes (OH) Fire Dept.
John Granby, Vice President, Lion Apparel
Rick Griffin, Captain, LaGrange (IL) Fire Department
Rick Griggs, Fire Captain/Paramedic, Riverside County (CA) Fire Department
Tom Hales, Senior Medical Epidemiologist, NIOSH/CDC
Les Hallman, Director, Florida Division of State Fire Marshal's Office
Robert Halton, Editor in Chief, *Fire Engineering Magazine*
Jim Harmes, President, IAFC
Ed Hartin, Battalion Chief, Gresham (OR) Fire & Emergency Services
Karen Haun, Marketing Manager, American LaFrance
Alan Hay, Chief of Safety, FDNY
Billy D. Hayes, Chief/Regional Advocate, Riverdale (GA) Fire Department
Chris Hebert, Founder/Publisher, *Firehouse.Com*
Dan Hermes, First Vice President, Illinois Fire Chiefs Association
Jimmy Hill, Deputy Chief, Los Angeles (CA) Fire Department, IFMA
Jay Holloway, Channel Manager, 3M
Gavin Horn, Research Program Manager, Illinois Fire Service Institute
Amy Hultman, Program Manager, IAFC, Near-Miss Program
Linda Hurley, Chief of Staff, NFFF
William Jahnke, President, WHP Training Towers
Greg Jakubowski, P.E., CSP, FSFPE, Merck Global Safety and Environment
Ed Jansen, Battalion Chief, North County (CA) Fire Authority
Chris Jelenewicz, P.E., Society of Fire Protection Engineers
Todd Johnson, Battalion Chief, North County (CA) Fire Authority
Nicol Juratovac, Lieutenant, San Francisco (CA) Fire Department

National Fallen Firefighters Foundation
2007 National Firefighter Life Safety Summit

Ron Kanterman, Chief, Merck Emergency Services, Rahway (NJ)
Bradley Karbowsky, Business Manager, Road Sprinklers Fitters Local
Brian Kazmierzak, Division Chief of Training/State Advocate, Clay Territory (IN) Fire Department
Leonard King, NFFF Board Director, Maryland Fire Service
Ann Kinzler, First Responder Customer Marketing, Fisher Safety
Mike Kleinman, Professional Health Services, Havertown (PA)
Tom Korb, Fire Service Marketing Manager, Scott Health & Safety
Steve Kreis, Assistant Chief, Phoenix (AZ) Fire Department
Brian Kurzel, Battalion Chief, Charlotte (NC) Fire Department
Steve Lawrence, Partner, Rosecliff Partners, LLV
Cynthia Leighton, Director, Public Safety Markets, Motorola
Chris Lemon, Division Chief, German Township (IN) Fire Department
Mark Light, Interim Executive Director, IAFC
Murray Loflin, Director of Fire Training, West Virginia University Fire Service Extension
Walter Malo, Safety Program Manager, Florida State Fire Marshal's Office
Ed Mann, Pennsylvania State Fire Commissioner/State Advocate
Jenniffer Manning, Total Contact
Brooks Martin, Captain/Regional Advocate, Bismarck (ND) Fire Department
Peter Matthews, Editor, *Firehouse.Com*
Scott McCollum, Chief/State Advocate, Swift Creek (NC) Fire Department
Mac McGarry, Regional Manager, Elkhart Brass
Brian McMahan, Battalion Chief/State Advocate, Eastside (WA) Fire & Rescue
Ernie Mitchell, Chief (Ret.)/Regional Advocate, Pasadena (CA) Fire Department
William Mora, Captain/State Advocate, San Antonio (TX) Fire Department
Pat Morrison, Health & Safety Director, IAFF
Fred Mowrer, Associate Professor/Dept. of Fire Engineering, University of Maryland
Daniel Mulrean, Director and Instructor, Gymflesh
Eric Nagle, Fire Service Programs Specialist, NFFF
Chris Naum, Fire Protection & Industrial Safety Manager, James A. Fitzpatrick Nuclear Power Plant
Chris Neal, Director, Fire Protection Publications/IFSTA
Susan Nicol, Staff Writer, *Firehouse.Com*
Wendy Norris, Chaplain, Federation of Fire Chaplains
John Oates, Battalion Chief/State Advocate, West Hartford (CT) Fire Department
Don Oliver, Chief, Wilson (NC) Fire Department
Albert Olmos, President, National Association of Hispanic Firefighters
Tom Olshanski, USFA Public Affairs Coordinator
Cathy Patterson, Program Specialist, DHS, G&T
Mark Peterson, Battalion Chief/Regional Advocate, Renton (WA) Fire & Emergency Services
Michael Petroff, Chief (Ret.), Western Director, FDSOC, St. Louis (MO)
Peter Piringier, Public Information Officer, Montgomery County (MD) Fire Department
John Price, Captain/State Advocate, Anaheim (CA) Fire Department
Vickie Pritchett, Associate Director of Public Fire Education, National Fire Sprinkler Association
John Proels, L.A.S.T. Coordinator, NFFF
Doug Pulliam, Western Regional Director, Elkhart Brass
Dr. Sara Pyle, Assistant Professor, Preventive Medicine, Kansas City University of Medicine and Bioscience

National Fallen Firefighters Foundation
2007 National Firefighter Life Safety Summit

Shane Ray, Chief/State Advocate, Pleasant View (TN) Fire Department, Associate Director,
National Fire Sprinkler Association
Marc Revere, Chief, Novato (CA) Fire Department
Kevin Richter, Chief, Contra Costa County (CA) Fire District
Bill Rifenburgh, Deputy Chief, New York State Office of Fire & Prevention Control
Ed Roper, President, North American Fire Training Directors (NAFTD)
J. Gordon Routley, Chief (Ret.), Shreveport (LA) Fire Department, IAFC Safety & Health Section
Chris Rovenstine, Vice President, Marketing, Kidde
Robert Saba, Coordinator, FLC/CTC Fire Fighting Task Force, Allison Park (PA)
Larry Sagen, Director, Fire 20/20
John Salka, Battalion Chief, FDNY
Kevin Scott, Western Regional Manager, International Code Council
Jeff Seaton, Program Coordinator "Nobody Gets Left Behind" Training Group/Lee & Associates,
ISFSI
Tim Sendelbach, Chief/President, ISFSI
Jeff Siegrist, Regional Director, Provident Agency
Andrew Smith, Chief Training Officer, Mountain View (CA) Fire Department
Ron Smith, Senior Training Officer, Campbell County (WY) Fire Department
Dan Smits, Shift Commander, Calumet City (IL) Fire Department
Lewis Southard, Assistant Director, Fire and Aviation Management, Bureau of Land Management,
Washington, DC
Christina Spoons, Firefighter, West Dundee (IL) Fire Department
John F. Sullivan, Anna Maria College
Kenn Taylor, IAFC, Great Lakes Division
Leigh Taylor, Safety Compliance Officer/State Advocate, Georgia State Fire Marshal's Office
Tim Taylor, Fire Marshal, Prince William (VA) Department of Fire & Rescue
Vickie Taylor, Behavior Health Consultant, NFFF
Adam Thiel, Deputy Fire Chief, Goodyear (AZ) Fire Department
Jamie Thompson, News Editor, *FireRescue1.com*
Jim Tidwell, Vice President, International Code Council
JoAnn Tilton, Katy Insurance Services Division
John Tippet, Battalion Chief/Program Manager, IAFC – Near-Miss Program
Lonnie Toby, Military Firefighter Heritage Foundation
Peter Tolosano, Regional Fire Operations Safety officer, US Forest Service Pacific Southwest
Region
Gregg Turner, Survivor, Mill Valley (CA)
Robert Tutterow, Health & Safety Officer, Charlotte (NC) Fire Department
Bruce Varner, Chief, Santa Rosa (CA) Fire Department
Timothy Wall, Chairman, Volunteer Fire Officers Section (VFOS)
Jim Walter, Vice President, Technical Marketing, Total Fire Group
Mike Ward, Assistant Professor/Emergency Health Services Program, George Washington
University
Jackie Wasni, Vice President/Mid-Atlantic Region, Motorola
Steve Westermann, First Vice President, IAFC
Judi Whitlow, Financial Assistant, NFFF
Mike Wilbur, Lieutenant, FDNY
Larry Williams, EMS/Training and Safety Chief, Dothan (AL) Fire Department
Janet Wilmoth, Editor in Chief, *Fire Chief Magazine*

National Fallen Firefighters Foundation
2007 National Firefighter Life Safety Summit

Maggie Wilson, Director of Health & Safety, National Volunteer Fire Council
Helen Worthen, Survivor, Woodland (CA)
Ken Worthen, Survivor, Woodland (CA)
David Wylie, Canadian Fallen Firefighters Foundation
Anastasios Zavales, Medical Director, Gymflesh

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National Fallen Firefighters Foundation
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Appendix B: Initiative Groups

INITIATIVES		COMMON FACTOR
1	DEFINE AND ADVOCATE THE NEED FOR A CULTURAL CHANGE WITHIN THE FIRE SERVICE RELATING TO SAFETY; INCORPORATING LEADERSHIP, MANAGEMENT, SUPERVISION, ACCOUNTABILITY AND PERSONAL RESPONSIBILITY.	FUNDAMENTAL CHANGE IN FIRE SERVICE CULTURE, ATTITUDES AND BEHAVIOURS
2	ENHANCE THE PERSONAL AND ORGANIZATIONAL ACCOUNTABILITY FOR HEALTH AND SAFETY THROUGHOUT THE FIRE SERVICE	
3	FOCUS GREATER ATTENTION ON THE INTEGRATION OF RISK MANAGEMENT WITH INCIDENT MANAGEMENT AT ALL LEVELS, INCLUDING STRATEGIC, TACTICAL, AND PLANNING RESPONSIBILITIES	
4	ALL FIREFIGHTERS MUST BE EMPOWERED TO STOP UNSAFE PRACTICES	
5	DEVELOP AND IMPLEMENT NATIONAL STANDARDS FOR TRAINING, QUALIFICATIONS, AND CERTIFICATION (INCLUDING REGULAR RECERTIFICATION) THAT ARE EQUALLY APPLICABLE TO ALL FIREFIGHTERS BASED ON THE DUTIES THEY ARE EXPECTED TO PERFORM.	
6	DEVELOP AND IMPLEMENT NATIONAL MEDICAL AND PHYSICAL FITNESS STANDARDS THAT ARE EQUALLY APPLICABLE TO ALL FIREFIGHTERS, BASED ON THE DUTIES THEY ARE EXPECTED TO PERFORM.	
11	NATIONAL STANDARDS FOR EMERGENCY RESPONSE POLICIES AND PROCEDURES SHOULD BE DEVELOPED AND CHAMPIONED.	
7	CREATE A NATIONAL RESEARCH AGENDA AND DATA COLLECTION SYSTEM THAT RELATES TO THE INITIATIVES.	RESEARCH & LEARN FROM EXPERIENCE
9	THOROUGHLY INVESTIGATE ALL FIREFIGHTER FATALITIES, INJURIES, AND NEAR MISSES.	
8	UTILIZE AVAILABLE TECHNOLOGY WHEREVER IT CAN PRODUCE HIGHER LEVELS OF HEALTH AND SAFETY.	OBTAIN AND APPLY TECHNOLOGICAL AND ENGINEERING SOLUTIONS
10	GRANT PROGRAMS SHOULD SUPPORT THE IMPLEMENTATION OF SAFE PRACTICES AND/OR MANDATE SAFE PRACTICES AS AN ELIGIBILITY REQUIREMENT.	
16	SAFETY MUST BE A PRIMARY CONSIDERATION IN THE DESIGN OF APPARATUS AND EQUIPMENT.	
12	NATIONAL PROTOCOLS FOR RESPONSE TO VIOLENT INCIDENTS SHOULD BE DEVELOPED AND CHAMPIONED	REDUCE EXPOSURE TO VIOLENT INCIDENTS
14	PUBLIC EDUCATION MUST RECEIVE MORE RESOURCES AND BE CHAMPIONED AS A CRITICAL FIRE AND LIFE SAFETY PROGRAM.	REDUCE EXPOSURE
15	ADVOCACY MUST BE STRENGTHENED FOR THE ENFORCEMENT OF CODES AND THE INSTALLATION OF HOME FIRE SPRINKLERS.	
13	FIREFIGHTERS AND THEIR FAMILIES MUST HAVE ACCESS TO COUNSELLING AND PSYCHOLOGICAL SUPPORT.	REINFORCE NEW CULTURAL NORMS

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