

**National Fallen Firefighters Foundation
Firefighter Life Safety Initiatives Program**

Indianapolis Mini-Summit

The second in a series of mini-summit meetings was conducted at the Fire Department Instructors Conference in Indianapolis on April 13, 2005. These sessions are organized by the National Fallen Firefighters Foundation as part of the Firefighter Life Safety Initiatives Program and are scheduled in conjunction with major fire service conferences and events.

The purpose of conducting the mini-summit meetings is to solicit suggestions, comments and observations from fire service members regarding the most appropriate implementation strategies for the 16 Firefighter Life Safety Initiatives. The Foundation has received a grant under the Assistance to Firefighters Program and additional funding from the Fireman's Fund Insurance Company to champion the implementation of the initiatives as part of a major effort to reduce firefighter fatalities. The mini-summits also provide an opportunity to provide greater insight into the initiatives for group of individuals, with the hope that they will become personally committed to the program.

The mini-summit in Indianapolis was directed toward the essential role of fire service instructors and training programs in the effort to promote firefighter safety. A total of 82 individuals from the United States and Canada participated in the full day session. Four separate groups were assigned specific topic areas to discuss and develop recommendations. The reports produced by each group are presented in this document.

Cultural Change

The issue that has been identified most consistently as the key factor in reducing firefighters fatalities and injuries is a change in the prevailing fire service culture with regard to safety. The prevailing culture of the fire service glorifies the acceptance of extreme personal risk far ahead of the thoughtful analysis and management of risk factors. Instead of having a commitment to safety incorporated into the fundamental values of the fire service, in too many cases safety is considered as an afterthought and an inconvenience. This cultural orientation allows firefighters to feel justified in violating established safety standards and regulations, if they are perceived as a hindrance to a more important mission.

The cultural issue is a critical concern in discussions of firefighter training, because, along with skills and knowledge, many of the basic professional values are instilled through training. Changing the cultural orientation of firefighters must begin with training and must be continually reinforced through on-going training. In order to change the culture and modify firefighter behaviors, training systems must adopt, advocate and demonstrate an unambiguous commitment to safe practices. The thought process that justifies any risk "in an emergency" should not be the accepted standard for organizations that are in the business of dealing with emergency situations.

The group that was asked to address the cultural issue identified several steps that should be implemented by training officers and organizations, beginning with clearly identifying the personal responsibility of every firefighter for their own safety and for the safety of every other member of the fire service. This sense of universal responsibility

and accountability must be presented as a fundamental fire service value at every level, including individuals, team members and companies, as well as every rank level and organizational component. The concept of joint personal and organizational responsibility must not be compromised by a sub-culture that presents a competing set of values

A project is needed to clearly identify and challenge the most common safety falsehoods that have been accepted over the years and place this information in the hands of every fire service instructor. This approach will address the instructor's personal responsibility to present a consistent safety message and to correct misinformation and improper practices, whenever they are encountered. Instructors must "walk the walk" - not just "talk the talk" and must demonstrate a personal commitment to safe practices.

The fire service culture cannot be changed simply by teaching a new culture to a new generation of firefighters; old beliefs and practices must be challenged and changed. One of the serious challenges facing this effort is the problem of teaching one approach in the training environment and then sending the students out to practice what they have learned in an environment that has not accepted the same values. The new values must become the officially recognized and practiced cultural values throughout the organization, even if their introduction is met with stubborn resistance. The leadership of the organization, starting with the Fire Chief, must understand, accept and fully support the cultural change and there must be consequences for non-compliance with adopted safety policies. Successful implementation will only occur when company officers and senior firefighters change their behavior.

Fire service instructors must also reinforce the value of competently performing all basic firefighter job skills. The ability of a team to function effectively and safely depends on the ability of each individual to competently perform all of the required skills. Many firefighter skills require repetitive practice to develop the essential competence and confidence.

The emphasis in training is too often placed on speed ahead of safety. Trainees often learn how to get things done quickly, even if safety has to be compromised, instead of learning how to work safely, even if speed has to be compromised. There are really very few situations where lives truly depend on saving a few seconds and many situations where the investment of a few extra seconds to work safely could save a life. Instructors must not push for speed ahead of skillful execution.

All of the professional organizations that are involved in fire service training must support and reinforce a common vision to achieve the cultural change that is required. The same consistent philosophy should be expressed by state training directors and institutions, the National Fire Academy, TRADE, the International Society of Fire Service Instructors, the International Association of Fire Chiefs, the International Association of Fire Fighters and the National Volunteer Fire Council.

Accountability

The same discussion group emphasized the personal responsibility of fire service instructors to be accountable for their own skills and competencies and for the integrity of the instruction they present. Instructors should never present information they do not fully understand and support or teach skills they have not personally mastered. More

important, an instructor must never allow a student who has not met a required training standard to advance, if that action could expose the individual or other firefighters to avoidable risks. The instructor has a moral and professional responsibility to ensure that required training occurs, not simply that the required number of hours of instruction are provided.

The instructor also has a responsibility to ensure that training activities are performed safely. The training environment is often designed to expose trainees to potential risks, however the instructor is personally responsible for ensuring that those risks are recognized, the appropriate safety measures are implemented and all required safety practices are followed. A training exercise is not an uncontrolled environment, where unknown and unanticipated situations can be encountered.

A fire service instructor is accountable for the safety of all training activities that occur under his or her supervision. In the case of training activities that involve multiple instructors, there should be a hierarchy of responsibility for training that is parallel to the incident management structure for a real incident. This includes the assignment of safety officers to oversee the application of safe practices during training activities.

Skills should be practiced using all the same safety procedures and equipment that should be in place in a real situation. While individual skills may be learned incrementally, the ultimate objective should be to demonstrate the ability to perform competently and consistently, using all of the tools and equipment that would be used at an actual incident. The players should practice the exact same activities under the same circumstances as they will be expected to function at a real incident.

Also, under the broad topic of accountability, the mini-summit participants noted the importance of adopting and using standard systems of incident scene accountability. All of the fire service components that could be expected to respond together at a real incident should adopt and train with an identical accountability system. Training should reinforce the use of the accountability system as an absolute requirement.

Stopping Unsafe Practices

One of the important principles incorporated in the 16 Firefighter Life Safety Initiatives states that all firefighters must be empowered to stop unsafe acts and practices. This initiative involves the empowerment to take action as well as the responsibility of every individual to be observant and to react appropriately when an unsafe situation is observed or suspected. The ability to recognize potentially unsafe situations can be developed by providing firefighters with case histories and lessons learned from investigations, accident reports and near-miss reporting. The empowerment, responsibility and appropriate response components must be refined through the adoption of procedures, such as “crew resource management” and the acceptance of a safety culture within the organization.

Training is necessarily involved in the implementation of this initiative. Its application is equally important in training activities and actual incident operations.

Professional Certification, Training, Medical and Physical Fitness Standards

A second discussion group was asked to consider the implementation of uniform national standards for training, qualifications and professional certification as well as uniform medical and physical fitness standards for all firefighters. The discussion noted that the basic foundation for such standards already exists within the NFPA standards system and the existing professional qualifications systems, however their application is subject to a tremendous range of laws, regulations, situations and circumstances.

All of the participants agreed that the standards should be uniform and should be based on a realistic evaluation of the duties that an individual is expected to perform. There should not be different standards for two individuals who are expected to perform the same duties and who will be exposed to the same risks, depending on their status as a career or volunteer firefighter. The relationship between expected duties and performance standards will have to be refined, so there is no doubt that the appropriate standards are being applied in each situation.

This is a particular issue in the volunteer fire service, where training, medical and physical fitness standards are often relaxed in order to accommodate willing members. The excuse that higher standards will make it impossible to maintain functional volunteer services does not justify the current situation. The premise that a volunteer cannot be expected to perform at the same level as a career firefighter is unrealistic. The failure to apply appropriate medical and physical fitness standards to volunteer firefighters is associated with high cardiovascular death rates. In addition to the personal risk, a firefighter who is unable to perform is likely to place other firefighters at risk in a critical situation.

The need for improved driver training standards was noted in particular. In many states emergency vehicle drivers are exempted from licensing requirements that would apply to the drivers of equivalent commercial vehicles. Too many fire departments allow unqualified individuals to drive large and heavy emergency vehicles and, in many cases, the driving regulations that do apply are not enforced. The discussion group believed that more stringent driver training and licensing regulations should be adopted and legally enforced and that driver training requirements should be applied whenever grant funds are allocated for the purchase of fire apparatus.

Additional points noted in this discussion include:

- ❑ “Safety in training” should be included as a requirement in the fire department accreditation process.
- ❑ Funding authorizations and grant appropriations for fire departments should require compliance with training and safety standards
- ❑ All existing training, certification, medical and physical fitness standards should be reviewed on a regular schedule to ensure that they are meeting safety goals.
- ❑ A unified effort must be undertaken within the fire service to develop and adopt a single set of national consensus standards. The same standards should be applied and enforced by OSHA and state occupational safety and health agencies.

- ❑ The necessary funding and assistance must be provided to allow the fire service to participate in the standards development and revision process.
- ❑ The implementation of higher standards can only be accomplished if the resources are made available to provide the necessary training and ensure that all firefighters have access to it.
- ❑ Funding is also required to ensure that all firefighters are provided with the appropriate personal protective clothing and equipment.
- ❑ There should be a direct connection linking medical and physical fitness programs to the national training and certification standards, beginning with initial/recruit training and continuing through an individual's fire service career or participation.
- ❑ Firefighter training programs should include health maintenance, healthy eating habits, exercise and self-care components.
- ❑ Fitness and ergonomics programs should be developed to complement training and physical performance skills, such as pulling hose and swinging an axe.
- ❑ Funding for exercise and nutrition programs should be obtained through political action and cooperative agreements with partner organizations.
- ❑ Partnerships should be developed with insurance providers, health care industry, medical care facilities, all aspects of the medical profession, (e.g. chiropractic, cardio, muscular-skeletal), health-fitness facilities, sports trainers, physiotherapists and corporate sponsors.

Risk Management

The initiative that promotes the integration of risk management with incident management refers specifically to a structured process for making strategic and tactical decisions at an incident scene. When this approach is applied, the potential benefits to be gained are weighed against the potential risks that could be involved in a particular course of action. An action plan that needlessly exposes firefighters to an excessive level of risk is unacceptable.

The risk management process must be guided by established principles of acceptable risks in specific situations. It is accepted, for example, that standard offensive interior fire suppression tactics expose firefighters to a set of inherent risk factors. These risks are well known and are balanced by a standard approach to operational safety that includes protective clothing, self-contained breathing apparatus, structured command and supervision, reliable communications, an accountability system and rapid intervention capability.

Even with these safety measures in place, it is only acceptable to expose firefighters to the inherent risks where there is a reasonable expectation that lives or property can be saved. Where there is a serious potential to save a life, a relatively high level of risk to firefighters can be acceptable; however no risk is acceptable when there is no realistic

potential to save a life. Similarly, the inherent level of risk is acceptable in a situation where an offensive attack is likely to save property of value, but unacceptable where there is no property to be saved. If circumstances indicate that the level of risk exceeds the acceptable threshold, it becomes unacceptable to conduct interior operations to save property. This basic risk management approach gives the decision between offensive and defensive strategies at each situation.

The participants observed that strategic risk assessment skills have tended to be based on the experience of the incident commander, yet it is increasingly difficult to obtain an adequate foundation based on personal experience. As younger officers tend to see experience fewer fires, the ability to evaluate conditions and apply good judgment must be acquired through education, training, simulation and the application of basic risk management principles. The discussion noted that the current fire officer certification process tends to emphasize administration, management and supervision and does not assign sufficient weight to basic strategy and tactics.

The discussion of risk management went beyond the issue of integrating risk management with incident management to advocate the application of a structured risk management philosophy to a range of decision-making situations. The mission of the fire service is a fundamental component of community risk management and public perceptions of acceptable risk. Firefighters should be trained to understand and apply the basic principles of risk management from the time they enter the fire service. The fire service model for a more general application of risk management is already provided by NFPA Standard 1500.

Additional points noted in this discussion include:

- ❑ The concepts of risk management and acceptable risk should be introduced in recruit training programs and continue through all levels of certification and training up to chief level officers.
- ❑ The term “risk management” may have a negative connotation to firefighters who do not consider management as their responsibility. The group suggested the following alternative terms for consideration:
 - Risk Reduction
 - Risk Control
 - Risk Survivability
- ❑ Strategy and tactics and “Crew Resource Management” should be integrated into the Fire Fighter I certification standards and continue through all levels of professional certification.
- ❑ Initial certification training should emphasize the need for someone to be in command before beginning tactical operations and include more emphasis on survival skills.
- ❑ Command level simulation training should be a mandatory requirement in all promotion processes for career and volunteer command level officers. The National Fire Academy should partner with state training organizations develop a national model for command simulation training programs.

- ❑ Risk assessment should be part of the incident commander's standard decision making matrix for training as well as emergency operations.
- ❑ Public education programs should explain "why" and "how" firefighters are deployed in interior structural operations.
- ❑ Dispatch protocols for fire response, similar to EMS dispatch protocols, should be developed
 - An automatic alarm, without telephone verification of smoke or fire, should call for only the first due engine to respond under "emergency" conditions. All other apparatus should proceed "non-emergency".
 - Mutual aid should be based on dispatching the closest available/appropriate apparatus.
 - Self-dispatching should be discouraged because of the risk to firefighters. Self-dispatch contrary to procedures should result in disciplinary action.
 - Standard response protocols for single-family dwellings, apartment complexes, high-rise buildings, highway incidents and other scenarios should be developed. The protocols should include automatic dispatch of additional resources upon confirmation of a working fire.
 - The standard response protocols should include a recommendation for a required number of chief officers at working fires.
- ❑ Every firefighter should have a medical and physical assessment prior to appointment and annually thereafter. The ability to respond to emergency calls should be confirmed through this process.
- ❑ Drug and alcohol use/abuse policies should be developed and enforced at the local level.
- ❑ A model national firefighter health records maintenance program should be developed.
- ❑ An interview process should be developed to analyze the attitude toward safety of every firefighter at 1, 3, 5 and 10 years of service.
- ❑ Development of Command evaluation process for existing officers that evaluates their capabilities to recognize and identify basic firefighting risks...
- ❑ Location monitoring, biometric monitoring and other advanced technologies should be embraced by the fire service.
- ❑ Fire departments should have a closer connection to the research and development of fire apparatus, tools and equipment.

Safety in Training

The topic of how to conduct training activities safely received special attention at the mini-summit in Indianapolis. This discussion was directed toward the urgent need to eliminate training fatalities and significantly reduce the number of injuries that are incurred in training activities. Any loss of life or serious injury in a supervised training activity was viewed as absolutely unacceptable. The discussion participants noted that the officer in charge must be absolutely accountable for the safety of everyone involved in a training activity and could be subject to legal action if standard safety practices were not followed.

Even relatively minor injuries incurred in training should be carefully investigated. All risks and potential hazards should be identified before an exercise is conducted and appropriate safeguards should be in place, including safety officers, medical treatment capability and, where appropriate, rapid intervention crews.

The discussion participants emphasized the need to make all training officers aware of their responsibilities to ensure that training is conducted safely and all applicable standards, such as NFPA 1403, are followed. It was noted that many individuals still seem to be unaware of their responsibilities or the obligation to follow standards. In several cases the investigations of training fatalities have revealed major lapses in judgment and a lack of awareness of safety standards. All of the agencies and professional organizations that are involved in firefighting training should be emphasizing these responsibilities to fire officers and instructors.

Additional points noted in this discussion include:

- ❑ A process should be developed to ensure that all lesson plans and educational programs are in accordance with state and national standards, and that the approved lesson plans are followed.
 - Partners: Fire service professional and training organizations
 - Time frame: 2 – 3 years
- ❑ A National Fire Service Instructor accreditation program should be established, with criteria for periodic re-accreditation.
 - Partners: Fire service professional and training organizations
 - Time frame: 2 – 3 years
- ❑ A training program on consequence-based decision making for instructors should be developed.
 - Partners: Educational and all fire service professional organizations
 - Time frame: immediate priority
- ❑ Negligence in the training setting should result in professional sanctions as well as legal penalties.
- ❑ Sophisticated fire training simulators should be developed to eliminate the need for live fire training.
 - Partners: NIST, NASA, DOD, academic institutions, training agencies; private sector - Hollywood special effects and electronic gaming
 - Time frame: 5 to 10 years
- ❑ Fire Instructor 1 certification should be reestablished as a prerequisite for Fire Officer 1 certification within NFPA 1021

- A project should be conducted to determine what other types of agencies with similar training needs have done to develop safe training practices.