



# Everyone Goes Home™

**FIREFIGHTER LIFE SAFETY**

**INITIATIVES**

**JANUARY 2007 EDITION**

*Newsletter*

## **NATIONAL FALLEN FIREFIGHTERS FOUNDATION PLANS 17-CITY FIREFIGHTER LIFE SAFETY WHISTLESTOP TOUR**

The National Fallen Firefighters Foundation is set to launch in April and May 2007 a whistlestop tour of 17 cities to promote firefighter life safety and the Everyone Goes Home program. Sponsored by Dunkin Brands, this media event, gathering both local and national coverage, will spotlight the important role firefighters play in our communities and advocate the importance of communities becoming involved in a grassroots Everyone Goes Home campaign to help further the cause of firefighter life safety.

Numerous dignitaries and fire service leaders will be on hand at each of the events. Within the context of music, fun, and community spirit, the Everyone Goes Home message of reducing firefighter line-of-duty deaths and injuries, will be front and center stage in cities across America. Whistlestop cities planned include San Francisco, Sacramento, Los Angeles, San Diego, Phoenix, Chicago, Nashville, Miami, Tampa, Atlanta, Charlotte, Montgomery County (MD), Philadelphia, New York, Hartford, Providence, and Boston.

### **NFFF LIFE SAFETY INITIATIVES TO BE SUBJECT OF KEYNOTE PRESENTATION AT FIREHOUSE WORLD**

The Firefighter Life Safety Initiatives take center stage at the upcoming Firehouse World Conference in San Diego, California. On Tuesday, February 27, at 8:30 a.m., Chief Ronald Siarnicki, NFFF executive director, and Chief Richard Anderson, Firefighter Life Safety Initiatives project director, will deliver the keynote presentation entitled "Leadership, Accountability, Culture, Knowledge." The presentation asks the question, "Are you on the path to a line of duty death?" It examines the root causes of line-of-duty deaths and the role of leadership, accountability, culture, and knowledge as it impacts the end result. This is a "don't miss" presentation that will change your life and the lives around you.

This program is made possible through the efforts of the



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## NFFF HOLDS FIREFIGHTER LIFE SAFETY INITIATIVES FIRE PREVENTION MINI-SUMMIT

On January 13, 2007, in Washington, D.C, the NFFF convened a think tank to begin development of an action plan to reduce firefighter line-of-duty deaths and injuries through proactive, improved fire prevention efforts throughout the United States. One hundred members of the fire service and related safety groups attended, including fire department prevention officers, fire marshals, public fire safety educators, fire protection engineers, and burn professionals. The Fire Prevention Mini-Summit was an important step in the process of creating a direction for implementing the fire prevention, life safety, codes, and public education components of the 16 Firefighter Life Safety Initiatives.

Attendees were split into interactive task groups in the areas of fire prevention, fire research, codes and standards, burn care, and technology. The groups based their work plans on recommendations from the America Burning Revisited report that were never implemented. "America Burning Revisited contained some excellent proactive fire prevention material that, for the most part, has been ignored. This worked well as our starting point," said Richard Anderson, project director for the Life Safety Initiatives team. "We also moved some people into groups outside of their areas of expertise so that we'd get some cross-pollination of thought, and that worked well, too."

### Group recommendations, in general summary, included:

**Prevention:** Elevate the role of prevention (all hazard) in the fire department mission. Increase the credentials of prevention public educators. Market prevention using programmatic messages to key audience including national, local internal, external, and public policy makers to increase awareness so necessary resources can be obtained to reduce incidents and their severity.

**Fire Research:** Set agenda for research into fire and other risks for which the fire and emergency services community have responsibility. Establish a reasonable set of priorities for fire issues includ-

ing issues connected with building codes and standards.

**Codes and Standards:** Advocate codes that address firefight safety including the requirement for the installation of home fire sprinklers. Develop a long-term implementation strategy for fire sprinklers and effective smoke alarms in residential occupancies.

**Burn Care:** Support care giving and expand the capability to manage all aspects of burn-related issues.

**Technology:** Utilize cause-oriented technologies in the reduction of fire incidents and their severity to include fire-safe cigarettes, flame retardant furniture, cooking safety devices in addition to suppression technologies to control fire growth. Utilize active technologies to provide enhanced early warning technologies.

The action plan for implementing these general recommendations included specific actions to be taken at the local and national levels. The groups also identified deliverables and estimated timeline and necessary resources; created a risk management plan that identified risks and barriers to completion and a means to manage or overcome them; and who should be responsible for actions.

These recommendations will be delivered to participants of the Life Safety Initiatives National Summit this March, during which they will be considered, refined, and finalized as a blueprint for implementation of the Initiatives.



Attendees at Fire Prevention Mini-Summit, Washington, DC.



## **NFFF CONVENES SECOND NATIONAL LINE-OF-DUTY DEATH PREVENTION SUMMIT, MARCH 3-4, NOVATO, CALIFORNIA**

On March 3-4, 2007, 300 fire service leaders will meet, by invitation, at Fireman's Fund Insurance Company Headquarters in Novato, California, for the second National LODD Prevention Summit, conducted by the National Fallen Firefighters Foundation and the Everyone Goes Home™ Firefighter Life Safety Initiatives Program team.

The meeting follows the historic Summit held in Tampa in 2004, which resulted in the 16 Firefighter Life Safety Initiatives. Since then, the NFFF fully implemented the Everyone Goes Home™ Firefighter Life Safety Initiatives Program and strategic objectives to promote and support the Initiatives, including production and distribution of the Firefighter Life Safety

Resource Training Kit, the national Everyone Goes Home™ Advocates Program, the *Courage to be Safe* training program, and other important programs.

However, since the 2004 Summit, more than 200 firefighters have died in the line of duty and thousands of firefighters have been critically injured; clearly, there is more work to be done. The purpose of this second National LODD Prevention Summit is to take implementation strategies to the next level, in part by conducting a think-tank forum that leverages the talents and ideas of fire service leadership.

### **DRIVE TO SURVIVE**

By Christopher Daly, Goshen Fire Department, West Chester PA

Each year approximately 25 percent of firefighter fatalities are caused while responding to or returning from an alarm. When we examine the reasons for these crashes, they are almost always the same: rollovers, ejections, intersection crashes...we just can't seem to learn. Until we decide to learn from past mistakes, the problem will continue and more names will be added to the Fallen Firefighters Memorial at Emmitsburg, Maryland.

Why do fire trucks crash? It's simple: We drive too fast and we don't wear our seatbelts. I also believe that some fire apparatus operators aren't properly trained to understand the physical forces that influence how an emergency apparatus will behave on the road. Fire departments often send their drivers to an emergency vehicle operator course (EVOC) and think that these classes magically create super-drivers. Unfortunately, some EVOC courses fail to properly explain the dynamics and physics of a large vehicle as it drives down the road. This creates a generation of apparatus operators who don't understand the limits of driving a large vehicle. I equate it to teaching an EMT class without going over basic anatomy. The student knows how to put on a ban-

dage, but doesn't know why he or she is doing so.

Proper training of apparatus operators is an important aspect to any safe driving program. The fire service spends countless hours training on handline advancement, search and rescue and other fireground related evolutions. This type of training is absolutely necessary, but how many times each year do we really get to use it? On the other hand, every response that we go to requires someone to drive to the scene. Yet, when was the last time your department held training specifically for its drivers? Firefighters have "can do" attitudes...it's a fact of life. However, we sometimes apply this attitude in "can't do" situations. Many drivers of emergency vehicles complete a standard EVOC course, drive for a few years and then think that they can handle an emergency vehicle under any circumstances. Wrong. At some point, physics will take over and control of the vehicle will be lost. Using the same theories used by crash investigators, this article will discuss some of the ways that Mother Nature can steal control of an emergency vehicle and cause a crash.

#### **Coefficient of Friction**

The coefficient of friction of a roadway measures how "sticky" it is. A dry asphalt roadway usually has a friction value of around 0.8 to 0.9. On wet or icy



## ***DRIVE TO SURVIVE (Continued from Page 3)***

roads, these values can drop to 0.2 or 0.3. What does all this mean? Drivers must be aware of road conditions because they significantly affect how fast a vehicle can travel. The lower the friction value, the longer it takes a vehicle to come to a stop. Slippery or wet roads will reduce safe operating speeds by a large margin. You can't drive the same way on a dry, sunny day as you would on a cold, rainy night.

### **Critical Speed of a Curve**

How many times have we heard about a fire truck losing control while rounding a curve? Every curve in the road has a speed known as the "critical speed." If a vehicle travels faster than the critical speed, it will lose control and drive off the road. It doesn't matter how long you have been driving, or how good you think you are, if you exceed the critical speed of a curve, you will lose control on the vehicle.

In order to calculate the critical speed of a curve you need only two things, the radius (or sharpness) of the curve, and the coefficient of friction of the roadway. As the curve gets sharper, or the road more slippery, the critical speed goes down. In other words, if it's raining, you can't drive through the curve at the same speed as if it were dry! You also can't round the curve at the same speed that you are approaching it...SLOW DOWN!

Let's consider a curve with a 150-foot radius, a pretty common curve for most of our districts. On a dry day, with a coefficient of friction of 0.9, the critical speed for the curve is 44 mph. Driving faster than 44 MPH will cause you to lose control.

Now let's say it's raining and the coefficient of friction for this same curve drops to 0.4. This "more slippery" road condition will lower the critical speed to 29 mph. It doesn't matter how long you have been driving, or how good you think you are—if you exceed 29 mph, your vehicle will start to slide off the road. The driver of the vehicle may be left scratching his head wondering why he safely negotiated the curve at 35 mph yesterday and today he slid off into the trees. Why? The rain created a lower coefficient of friction which resulted in a lower critical speed.

Keep in mind that when operating a fire truck with

a high center of gravity, the vehicle will have a tendency to rollover well below the critical speed of a curve. For this reason it is important that drivers are familiar with their districts and slow down WELL IN ADVANCE of an approaching curve. By taking a curve too fast, the center of gravity of the vehicle will shift causing a potential rollover situation.

### **Total Stopping Distance**

Total stopping distance is the total distance that it takes to see a hazard, process the hazard in your brain, apply the brakes, and bring the vehicle to a complete stop. To understand this concept we first have to understand speed in terms of "feet per second" instead of "miles per hour." At 55 mph, your vehicle is actually traveling at 80 feet per second (fps). In just one second, the vehicle will have covered a distance of 80 feet.

Consider that it takes the average person around 1.5 seconds to see, process and react to a hazard. This means that if you are driving down the road at 55 mph (or 80 fps) you will have traveled approximately 120 feet before you were even able to press the brake pedal. This is due to the fact that you had to see the hazard ahead of you, process in your brain that this hazard required evasive action and then send the appropriate signals to your foot to press down on the brake.

Now that you have applied the brakes, it will take time for the vehicle to slow or skid to a complete stop. Skidding to a stop in a fire truck will take around 194 feet. Adding this distance to the 120 foot reaction distance means that it will take around 314 feet to stop a fire truck while traveling 55 mph on dry roads. On a wet day, this distance can be as much as 500 feet! Still want to approach a "stale green" light at 55 mph and just assume that no one will pull out in front of you?

What you must remember is that this total stopping distance was calculated using PROVEN formulas used by crash reconstructionists. These formulas use variables for speed, distance, coefficient of friction and braking efficiency. Nowhere in the formula do we multiply for years of experience or how good



## **DRIVE TO SURVIVE (Continued from Page 4)**

you think you are. In other words, if you've been driving for 40 years and teach advanced EVOC, you'll still need 314 feet to stop your truck...just like the brand new driver in the pumper behind you!

### **Braking Efficiency**

When a commercial vehicle, or large truck equipped with air brakes tries to stop, it can't stop as quickly as a car. There are two major reasons for this. The first is the "lag time" it takes for air brakes to work. In a standard automobile with hydraulic brakes, when you apply pressure to the brake pedal the brakes immediately start to slow the car down. In a vehicle equipped with air brakes, you are actually operating an air valve to start the braking process. It can take one-half to one second for this air to travel through the brake lines, activate the push rods and apply the brakes. At 55 mph, you will have traveled 60 to 80 feet before your brakes even start to slow you down.

Once a large truck begins to skid, it will be at a disadvantage due to the composition of its tires. Truck tires are designed for weight and wear. In exchange for increased durability, traction and braking ability are sacrificed. Essentially, truck tires are more "slippery" against the road surface.

Now, let's imagine that you are traveling in your fire truck behind a small car at 60 mph on a dry asphalt roadway. A deer runs in front of the small car and the driver slams on the brakes. It will take approximately 171 feet for the small car to come to a complete stop. It will take your fire truck 342 feet to skid to a stop on the same roadway. What happens when the small car stops at the 171 foot mark and your fire truck is still skidding for another 171 feet? Your truck will slide into the back of the small car with a tremendous amount of energy and seriously injure the people inside, and possibly you and those riding with you. It is for this reason that apparatus drivers must remember to leave plenty of room between themselves and the vehicle in front of them. You must also remember that you will need twice as much room to stop your fire truck than to stop your own car.

### **Seatbelts**

As emergency responders, we have all gone to crashes in the middle of the night and as we are cutting the deceased occupants out of the wreckage we say to each other, "If they'd just had their seatbelts on..." But what do we do after we put the tools away? We climb in the rigs and drive back to the station without our seatbelts on! But we're firefighters and paramedics, we don't need seatbelts, we are invincible. WRONG! Mother Nature could care less what your occupation is when your fire truck slams into a tree. Or when the truck rolls over and you are flung out the open window to land 75 feet down the road. There really isn't much explaining to do for this particular topic. It all comes down to personal responsibility. Drivers are responsible for ensuring that everyone is restrained, officers are responsible for ensuring everyone is restrained, and the individual firefighters are responsible for ensuring that everyone is restrained. To not wear your seatbelt is just plain dumb. Put it on!!

There are a number of other aspects of safe driving that we do not have time to address in this article. I would ask that you visit the website [www.drivetosurvive.org](http://www.drivetosurvive.org) and examine the various articles and weblinks that discuss safe driving. Please feel free to contact the site if you have any information or training materials that you would like to share with the fire service community. Remember, buckle up, slow down and DRIVE TO SURVIVE!!

**About the Author:** *Chris Daly is a 17 year veteran of the fire service, currently serving with the Goshen Fire Department in West Chester, PA. After completing his Master's Degree in Safety and Industrial Hygiene at Johns Hopkins University, Baltimore, MD, Chris went on to become a full-time police officer in Chester County, PA. Chris is a member of his police department's serious crash investigation team and specializes in the reconstruction and investigation of serious or fatal vehicle crashes. Chris lectures nationally on the prevention of fire apparatus crashes and also hosts the website [www.drivetosurvive.org](http://www.drivetosurvive.org).*



## **“COURAGE TO BE SAFE” WORKS: A LETTER TO ED MANN PENNSYLVANIA STATE FIRE COMMISSIONER**

Dear Commissioner Mann:

I have a near miss to report last night. At approximately 19:45, three companies were dispatched for a mutual-aid call with Schuylkill Haven Fire department for a working commercial structure fire. West End Fire Company (Ladder 51) was dispatched for fireground operations and Good Intent Fire Company and American Hose Fire Company were dispatched for RIT assignment.

While en route, the three apparatus entered an intersection at the traffic signal located at state routes 183 and 61.

I was the officer in our engine (American Hose). We were the third apparatus to pass through the intersection. A pickup truck entered the intersection from SR 183. The apparatus operator Kevin Sibbett, my 1st lieutenant, maneuvered to avoid a t-bone collision but the vehicles struck, causing minor to moderate damage. There were no injuries. All firefighters were wearing seat belts, emergency warning lights were on, and I was operating the air horns through the intersection. All three apparatus slowed down approaching the intersection (we had the red light).

Seat belts work! Our wearing them is a direct result of the *Courage to be Safe* “Everyone Goes Home” program that our department wrote the SOG requiring that all firefighters wear seat belts. I am living proof and uninjured, and I say “THANK YOU.”

Jim Misstishin, Sr.

## **IS FITNESS FRIVOLOUS?**

By Janet Wilmoth, Editorial Director, *Fire Chief Magazine*  
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Homeland Security Secretary Michael Chertoff addressed the 2006 Office of Grants & Training National Conference in Washington, D.C., late last year. Although I believe that Chertoff is usually pretty straightforward and appears to be a bright spot amid the clouds over the nation’s capital, I was struck in the sternum by one sentence in his keynote address.

Chertoff said there always will be people trying to finagle grant money from the government by stretching the definition of “homeland security” efforts. To that end, DHS would be doing more to track how grant monies are used.

“And that, by the way, gives us a better ability to hold people accountable for the way they actually spend the money,” he said, “so we have fewer of those stories about leather jackets and gym equipment that I think we all remember reading after the first round of grants went out early in the period after 9/11.”

Doesn’t Chertoff see the connection between physical fitness and firefighting? This disconnect isn’t limited to the federal government. A Pennsylvania women’s organization is suing the local fire department for using the organization’s donation to buy fitness equipment rather than hoses or nozzles. The ladies thought the fire department’s purchase was frivolous, declaring that “it was a fire department, not a health club.”

Fitness equipment may be a low priority if a department doesn’t have boots or turnout gear, but it certainly



## **IS FITNESS FRIVOLOUS? (Continued from Page 6)**

should be considered a must-have for departments that are otherwise well-equipped. Perhaps Chertoff and others haven't seen the recently released National Institute of Occupational Safety and Health reports on 2006 line-of-duty deaths:

- A 54-year-old male career fire apparatus operator died after responding to 12 calls. The death certificate listed "cardiac dysrhythmia due to atherosclerotic coronary artery disease" as the cause of death. The NIOSH investigator concluded the physical stress of responding to 12 calls, including tree limb removal, and the presence of his underlying atherosclerotic cardiovascular disease probably contributed to the operator's sudden cardiac death.
- A 49-year-old Pennsylvania firefighter died after performing overhaul at a fire in a 3-story dwelling. The death certificate listed "arteriosclerotic cardiovascular disease" as the cause of death and "hypertensive cardiomyopathy" as a significant condition. The NIOSH investigator concluded that the physical stress of conducting fire suppression, coupled with the firefighter's underlying cardiovascular disease, contributed to sudden cardiac death.
- A 39-year-old career airport fire apparatus operator in Georgia suffered sudden cardiac death at his station after exercising. The death certificate lists his immediate cause of death as "Acute Respiratory Distress Syndrome due to an acute myocardial infarction." The autopsy revealed a massive myocardial infarction.
- A 47-year-old male career battalion chief suffered sudden cardiac death at his desk. The autopsy revealed an enlarged heart with left ventricular hypertrophy and 50%-75% occlusions of the left anterior descending and right coronary arteries. The death certificate listed "atherosclerotic cardiovascular disease" as the immediate cause of death.
- A 28-year-old male volunteer Kansas firefighter suffered sudden cardiac death 50 minutes after fighting a grass fire. The autopsy stated the cause of death was "probable heritable cardiac arrhythmia (Brugada Syndrome)."

The health benefits of exercise are proven. Some may argue that being physically fit for your job — whatever it may be — is a personal responsibility, but encouraging healthy lifestyles and exercise for a profession that entails physical and mental stress makes sense.

Which is cheaper? Exercise bands and equipment, or payouts for disability and line-of-duty death benefits?

### **IAFF STUDY SHOWS 50% OF LODDS ARE HEALTH-RELATED**

A study released by the International Association of Fire Fighters examining fire service line-of-duty deaths that occurred from 2000 through 2005 finds that more than half of those deaths can be attributed to health-related factors. "This is a stark reminder that many firefighter deaths are preventable," said IAFF General President Harold Schaitberger.

The retrospective study compiled LODD data from the National Fire Protection Association,

the National Institute for Occupational Safety and Health, the U.S. Fire Administration and the International Association of Fire Fighters. For each of the 644 cases with sufficient information to be included in the study, factors contributing to the death were determined from federal investigations and eyewitness reports. The contributing factors then were analyzed for frequency of occurrence and clustering with other factors.



## **TWENTY MINUTES TO A HEALTHY HEART: AND A HEALTHY LIFE**

**By Dr. Charles K. Bens**

Dr. Bens has a doctorate in nutrition and is the President of Healthy At Work, Inc. a wellness consulting and education company based in Sarasota, Florida. He has written eight books and over 200 articles on a variety of topics from organizational excellence to smoking cessation. His most recent books are entitled Healthy At Work: Your Pocket Guide To Good Health and The Healthy Smoker: How To Quit Smoking By Becoming Healthier First. Dr. Bens can be contacted via his web sites [www.behealthyat-work.com](http://www.behealthyat-work.com) and [www.TheHealthySmoker.net](http://www.TheHealthySmoker.net) or at [ckbens@ij.net](mailto:ckbens@ij.net) and 888-737-9617.

Reading this article will take about the same amount of time that it takes to have a heart attack (15-20 minutes). The difference is one can save your life, and the other could take your life. You may think you have already read enough about heart health, but maybe you haven't. This article will cover the following critical healthy heart items you may not have read anywhere else:

1. Tests that are more important than cholesterol tests.
2. The actual cause of heart disease (have you ever heard of endothelial dysfunction?)
3. Why the USDA Food Pyramid is not your best nutrition guide.
4. How exercise impacts insulin receptors on your cells to help prevent heart disease, diabetes and other illnesses.
5. Why it is impossible to get all the nutrients you need from food alone.
6. Why many heart operations and drugs are unnecessary and unsafe. (Statins reduce levels of CoQ10)
7. Which supplements have been proven to prevent and even reverse heart disease. (If you have not heard about the cardio-protective effects of resveratrol, L-carnitine and CoQ10, then you will definitely want to read this article).
8. How to make healthy heart lifestyle changes quickly and easily.

Perhaps one of the biggest benefits of reading this article will be the realization that the healthy heart strategies it contains will also help you to avoid other chronic disorders such as cancer, diabetes, arthritis, depression and many more. That's right . . . one lifestyle strategy can do all of this and we don't just tell you what you should do, we explain why. When you understand how the body works and the impact that everything you do has on your future health, it will be very difficult to resist making the lifestyle changes you may need to make.

**To Read the Full Article Visit Our Website at: <http://www.everyonegoeshome.com/resources/20minutes.pdf>**



## NATIONAL FIREFIGHTER NEAR-MISS REPORTING SYSTEM

Posted on January 17, 2007 by Charlie Dickinson, Acting U.S. Fire Administrator

As most of you know, the National Firefighter Near-Miss Reporting System has been operational for the past 15 months through the efforts of the International Association of Fire Chiefs (IAFC). When I last mentioned this program to you six months ago, it had just passed 500 reports and was already making an early impact on changing practices in the 38 fire departments signed on as pilot departments to test the system. In just a short time, the Near-Miss Reporting System has:

- Passed the 1,100 mark for reports submitted,
- Received numerous correspondence that describes changes of practice and testimonials from departments using the system to raise awareness about safety,
- Established a successful weekly training e-mail (Report of the Week) that is mailed to over 3,000 firefighters who in turn forward it to over 30,000 more, and
- Received two prestigious awards for its concept and practice.

The USFA is honored to play a role in this ever growing commitment to firefighter safety and the recent success of the National Firefighter Near-Miss Reporting System. I am pleased to share with you the growth of Near-Miss and successful launch of the new Resources page, which contains a report on the findings from the first 1,000 reports. This clearly demonstrates and continues to remind me that firefighters learn best from other firefighters. The IAFC's Near-Miss effort demonstrates an increasingly loyal following of fire service professionals committed to reducing firefighter fatalities and injuries. The Near-Miss Reporting System serves as a significant agent of change for the fire service and all firefighters. I am personally pleased to say that we at the United States Fire Administration fully endorse and support this system. I encourage all firefighters to support this safety effort by submitting reports from your experience and to visit the site frequently to learn from firefighters looking to share their experiences.

The site fulfills a need to capture the experience of our veteran firefighters and “pay that experience forward” to the next generation of firefighters.

As we all begin 2007, it appears that we may be making some headway in reducing firefighter injuries and fatalities. Though the 2006 fatalities may only end up being slightly less than previous years, I am heartened by any reduction in the figures that have been in the triple digits for far too long. I also believe the recent gains in reducing the number of firefighter fatalities is in no small part due to the spirited and dedicated efforts of programs like the IAFC's Near-Miss Reporting System; the IAFC's Safety Stand Down; the National Fallen Firefighters Foundation's Everyone Goes Home 16 Initiatives; the IAFF's multi-pronged approach to, and indefatigable interest in, firefighter safety; the NVFC's Heart Healthy program; Web sites like [www.FireFighterCloseCalls.com](http://www.FireFighterCloseCalls.com); and the dedicated efforts of fire service personnel like Pennsylvania Fire Commissioner Ed Mann and the *Courage to be Safe* program. These organizations throughout the nation continue to pursue the common bond that ties all of us together: reducing the senseless loss of firefighters.

I ask all firefighters of this nation to participate and contribute your efforts in 2007 to join with and continue this all out effort to stop the tragic loss of our nation's firefighters. I urge you to support the use of, and contribute both reports and vital safety practices to, sites such as the National Firefighter Near-Miss Reporting System. Over 40,000 of you have already proven the system works. I would like to encourage the remaining 1,150,000 firefighters to make these systems work to protect all firefighters from injury and death while in service to their communities. What will your contributions be in 2007 to protect our nation's firefighters?

This is the USFA staff's and my wish for you in 2007.



## **BUILDING CODES STAKEHOLDERS MUST GET BACK TO THE “CORE VALUES”**

**By Azarang (Ozzie) Mirkhah, P.E., CBO, EFO, MIFireE**

In 1947, at the President's Conference on Fire Prevention, Walter A. Taylor, Director of the Department of Education and Research of the American Institute of Architects (AIA), stated, “Since the inception of this campaign, our organization has urged the broadest scope and interpretation and an emphasis upon safety for human life as the ultimate criterion of codes and actions.” In those remarks, he committed the AIA's support of “government agencies which are guiding and setting standards for various types of buildings can do a great deal to improve fire safety by strengthening and emphasizing their requirements.”

In these and other statements at that landmark conference, Taylor clearly identified that life safety is the most important design criterion, promoting unity of purpose and cooperation between public safety officials and design professionals to work hand-in-hand in striving for a safer community. Most importantly, he clearly underlined the significance of the codes, and the instrumental role of the code development agencies in strengthening their codes, in setting higher standards for fire and life safety.

Today, however, some in the architectural industry—and the AIA as a whole—oppose measures to strengthen fire and life safety codes designed to protect human life and property. Their opposition to the Nation Institute of Standards and Technology (NIST) recommendations on the World Trade Center Collapse, as well as their opposition to code proposals for other types of occupancies—opposition based on construction costs and architects' design freedom—are a matter of record.

In its August 21, 2006, justification letter to the International Code Council (ICC), titled “Examination of Fire Deaths – Building Occupancy and Type,” AIA stated:

“The point is that the number of fire service personnel killed in a fire is less than the number of citizens

killed in fires by a factor of about 3 or more. However, even looking at the total number of firefighter deaths, it is barely more than 2 deaths per state each year. Obviously, we do not have numerous deaths in fires anywhere in the U.S...”

[We] hope that gives you a clear picture of the issue that we are facing and the lack of any connection between the height and area of a building [and fire deaths]. There is no correlation between even a single class of buildings [and fire deaths] except for single family residences. The data shows that these changes will cost literally billions in wasted construction with no discernable difference in life safety....”

“We do not have a fire problem in the US - except in single family dwellings.”

I agree full-heartedly with the AIA that the crux of the fire problem in America are residential dwellings, and single-family dwellings, in particular. But even though fire loss statistics referenced by AIA are accurate, I am not particularly enthused about the cavalier approach in analyzing them, and even less the view that characterizes firefighter losses as acceptable or expected collateral losses.

Their views about firefighter fatalities are vastly different than ours in the fire service. But instead of responding emotionally, we must seek partnerships and work together as and where we can, out of duty and moral obligation. The AIA opposes strengthened codes for certain occupancies based on cost, but public safety officials are not insensitive to cost issues—we have to work to achieve a reasonable balance, whereby life safety is not sacrificed summarily to cost. I believe the AIA must join us in our fight to address the fire problem in America, and by doing so, reduce both civilian and firefighter fatalities due to fire. I believe it's their obligation, just as it's ours. The Firefighter Life Safety Initiatives #15 states “Advocacy must be strengthened for the enforcement of codes and installation of home fire sprinklers.” I



## **BUILDING CODES STAKEHOLDERS MUST GET BACK TO THE “CORE VALUES” (Continued from Page 10)**

believe that for us to succeed, we need the support of the AIA and all other design professionals. They could and should be our allies, not our enemies.

Application of the law of diminishing return would indicate that with the investment of capital, reduction in risks and death rates would occur. But then, after a certain point, continued investment would not result in any further reduction of risk and death rates. In reality, that very exact point, the point of diminishing return, is the delicate balance between artistic creativity and safety features, between “cost” and “safety.” As public safety officials and design professionals alike, we must recognize and continually evaluate that balance, and through our continued participation in the national code development process, enlist our code development agencies to set those high standards in construc-

tion and safety codes.

As public safety officials, we are concerned about “cost” as a very important factor in the economic vitality and development of our communities. But on the other hand, architects and the design professionals must fully embrace “fire and life safety” as their most important design criterion, just as was indicated 60 years ago. It is time that we all, public safety officials, design professionals, and the code development agencies, focus more on our common core values, and our professional obligation to fulfill the commitment so eloquently outlined by the AIA back in 1947, “safety for human life as the ultimate criterion of codes and actions.”

*Azrang “Ozzie” Mirkhah is the Fire Protection Engineer (FPE) for the City of Las Vegas Department of Fire & Rescue and is a registered professional engineer with more than 25 years of work experience in the field of fire protection engineering. Prior to joining Las Vegas Fire & Rescue 12 years ago, Mr. Mirkhah worked as a consultant designing fire protection systems for some of the most internationally recognized fire protection consulting firms.*

*He holds a Bachelor of Science degree in Mechanical Engineering (BSME), and a Masters degree in Public Administration (MPA). Mr. Mirkhah is a 1999 graduate of the National Fire Academy’s Executive Fire Officer Program. Mr. Mirkhah is a Certified Building Official, Certified Fire Inspector, Certified Mechanical Inspector, and Certified Plans Examiner through the International Code Council (ICC).*

*Mr. Mirkhah is a member of the National Fire Protection Association (NFPA) and serves on the national NFPA 13 Technical Committee for Sprinkler System Discharge Design Criteria. Mr. Mirkhah is a member of the Society of Fire Protection Engineers (SFPE) a member of the Institution of Fire Engineers (IFE) - USA Branch. Mr. Mirkhah is also a member of the International Association of Fire Chiefs (IAFC). You can contact Mr. Mirkhah at: [amirkhah@lasvegas-nevada.gov](mailto:amirkhah@lasvegas-nevada.gov).*



# Meet the Advocates



**Fire Chief, Pasadena Fire Department (Ret.)  
Regional Advocate, Region IX**

## **Ernie Mitchell Regional Advocate, Region IX**

Ernie Mitchell is a retired fire chief that last served as Chief of the Pasadena, CA Fire Department. He also served as IAFC President in 2003-2004. Most recently he has worked on DHS projects to benefit the fire service, as the Director of the National Firefighter Technology Resource Center (NFTRC), a division of CTC, Inc. Ernie retired as Fire Chief and Assistant Director of Disaster Emergency Services in Pasadena after 33 years in the fire service. Prior to becoming Chief in Pasadena, he was the Fire Chief in the City of Monrovia, CA and started his career with the City of Compton, CA, where he promoted through the ranks from firefighter to battalion chief during his 20 years there.

Ernie has an associate degree in fire science; and bachelor and master of public administration degrees. He is a Certificated Chief Officer in the State of California; a former adjunct instructor at the National Fire Academy and has held numerous positions in local, state and national professional associations, non-profit agencies and as a technical advisor for homeland security programs. He still resides in southern California, is married and has two adult children. Ernie strongly supported efforts to elevate the emphasis on fire fighter safety as IAFC President and remains committed to reducing fire fatalities in his retirement.

Ernie says, "I volunteered to become an Advocate because I totally support the vision of the Everyone Goes Home project and Firefighter Life Safety Initiatives. To paraphrase the quote – when it comes to cultural change, if you're not part of the solution you may be part of the problem – and I believe this role provides me with the best possible opportunity to make a personal and direct contribution to reducing fire fighter fatalities in the United States. That's a goal that I'm sincerely committed to so I'm working where the action is and the primary effort is to make sure that everyone goes home."



## GEORGIA CELEBRATES THE SUCCESS OF ITS FIRST *COURAGE TO BE SAFE TRAIN-THE-TRAINER*

By Leigh Taylor, Safety Compliance Officer, Georgia State Fire Marshal's Office

On January 9, 2007, the Georgia Fire Academy and the Metro Atlanta Fire Chiefs Association hosted 58 fire service professionals for the first Everyone Goes Home-*Courage To Be Safe* Train-the-Trainer in Georgia, and it was a huge success!

Every student left with the knowledge and tools that they needed to take the *Courage To Be Safe* Program back to their respective departments. Additionally, on a suggestion that was made at one of the informational meetings, the National Fallen Firefighters Foundation's Emergency Contact Notification Form was used at the beginning of the class to set the tone. It proved to be very effective and hopefully help dismiss the "it would never happen to me" attitude. Certainly with the recent death of a City of Atlanta firefighter weighing heavily on the hearts of firefighters across Georgia, a sense of urgency was placed on delivering this very important message.

Furthermore, not only are these new trainers able to deliver the four-hour *Courage To Be Safe* program, the students were also encouraged to incorporate the Life Safety Initiatives Program's Firefighter Life Safety Training Resource Kit as an additional means of continuing education hours. This was made possible by working closely with the Georgia Firefighter Standards and Training Council. In Georgia, certified firefighters are annually required to have 24 hours of training in addition to meeting the firefighter core competencies. By offering hours for each section of the training program included in the Kit, Georgia firefighters can meet their entire annual requirement by training at their own pace on each individual firefighter safety topic.

The success we have encountered has been greatly attributed to the Georgia Fire Academy and director David M. Wall & staff. In the future, the *Courage To Be Safe* program will be offered in the course catalog and soon will be implemented into the Basic Firefighter and Chief Fire Officer Development courses.

As mentioned in the December Newsletter, there are many opportunities coming up in the next few months for the Georgia Everyone Goes Home Campaign. In February, a Train-the-Trainer will be hosted by the Southwest Georgia Chiefs Association for instructors in that area, as well as, many *Courage To Be Safe* courses throughout the state by the new instructors. The *Courage to Be Safe* and Taking Care of Our Own courses will both be offered at the Georgia Fire Academy State Weekend and the Georgia Association of Fire Chiefs Executive Leadership Conference in March. Our goal is to contact all levels of the fire service with the LODD prevention message.

We don't want to miss the opportunity to remind everyone that Georgia is counting down to a very exciting August and the hosting of Fire Rescue International 07. The *Courage To Be Safe* will be taught there and will hopefully continue to peak the interest of the officers who will ultimately have the power to make a difference.

While we are just getting started, we feel we have made great strides in our efforts. If there are other ideas that you may have, or if you would like additional information on what we have implemented, please feel free to contact us. We look forward to seeing you in Novato!

Leigh S. Taylor is a Fire Safety Compliance Officer with the Georgia Insurance and Safety Fire Commissioner's State Fire Marshal's Office. Previously, Mrs. Taylor was a Fire Prevention Officer with Athens-Clarke County Fire and Emergency Services. She attended Georgia College and State University and currently holds the position of Firefighter/EMT as a volunteer with the Newton County Fire Service. She is an adjunct instructor for the Georgia Fire Academy and a member of several Georgia and International Fire Service Organizations. Leigh serves as *Everyone Goes Home* state advocate for Georgia.



## **A CASE STUDY: A TALE OF SAFETY**

**By E. Scott Geller, Ph.D. & Safety Performance Solutions**

**Note: This article concerns behavioral safety in the industrial workplace. We ask you to ask yourself the question, “How could I/we apply this to my fire department?”**

This is a story about people who changed their work life in dramatic and simple ways. It didn't happen by luck or chance and these people are little different from you and me. This story is being repeated in different ways in dozens of companies across this country.

What these employees did and are continuing to do is improve safety performance by actively influencing both the behaviors and attitudes of co-workers. Safety clearly is not the only beneficiary. These employees also affected union-management relations, workplace morale, employee self-esteem, and team cohesiveness in exciting and rewarding ways.

The story begins with a small group of employees with a particular interest in safety. Some were already involved in a site-wide safety committee for their chemical processing plant. Others were informal leaders in their work groups. The plant safety committee's focus was on the equipment side of safety but they recognized there was more they could do. They looked for and secured some help to make a broader impact on safety through a behavior-based and person-based approach.

The essence of their process for “Steering Toward an Injury-Free Workplace” is employee involvement in identifying and solving safety concerns. These concerns focus on behavior or the way employees perform their jobs but also encompasses equipment, training, and procedures. For example, the list of outcomes work groups credit to their observation-based problem solving process involves behavior changes, new training, greater responsiveness, and more accurate procedures.

### **SAMPLE OBSERVATION PROCESS OUTCOMES**

- “Fork truck operators regularly use horns at intersections”
- “Co-workers bring it to your attention if you are working at-risk”
- “Changes in the lock-out/tag-out procedure implemented”
- “Faster responses to safety work orders”

Each work group is charged with selecting their targeted behaviors for observation, determining their own interventions, and choosing their own means of recognizing and rewarding group members. Some groups narrowly focused their attention on specific observations of chlorine bottle changing, lock out, or fork truck operation. Other groups concentrated on types of behavior including personal protective equipment use or housekeeping.

The key is each group making its own decisions with the guidance of a representative from the Behavioral Leadership Team. After each round of observations, the groups work through a problem solving process to improve the behaviors targeted. Observations are voluntary but strongly encouraged. In two years, the facility has achieved 85% participation in the peer observation process.

The Behavioral Leadership Team, dominated by hourly employees, is led by the plant safety manager and safety champion, an hourly worker selected by the team. The team continues to meet bi-weekly to communicate lessons learned, share successes, and plan future behavioral safety efforts. At first, the “Champ” took a lot of ribbing from his co-workers as he took on this new role. He found his own work practices were



## **A CASE STUDY: A TALE OF SAFETY (Continued from Page 14)**

watched closely by others, many hoping to “catch” him working at-risk. Today, he finds people more willing to come to him to discuss safety concerns or ideas.

One of the most rewarding side benefits of this employee participative safety effort is improved union-management relations. This 50+ year-old facility experienced some frosty periods including a strike/lock-out. The local union president has been a strong advocate for participation in the peer observation process as has the plant manager. In fact, they both signed formal announcement when peer observation and coaching training began stating their support of the process and their commitment to keeping it voluntary and non-punitive.

From 17 recordable injuries in 1995, the facility of approximately 200 has successfully managed that number to 10 in 1996 and to 7 in 1997. Additionally, the plant just celebrated 1,000,000 hours without a day-away-from-work injury. While these numbers are impressive, they only tell the outcome of the story. The safety process itself is being measured in new and progressive ways. These measures are upstream indicators of the safety process and are largely in the control of employees. All employees participate in a quarterly incentive program based on these measures.

### **1997-98 Plant Safety Measures**

Safety meetings/training per employee

Safety inspections/audits/drills

Behavioral observations

Safety concerns identified

Incidents reported/investigated

Behavioral process participation

Incident-to-Injury ratio

DO IT processes completed

Safety work orders completed

“10 Most Wanted” (equipment repairs) completion rate

Will this story have a happy ending? Have these employees achieved Utopia in northeastern Missouri? Are they resting on their laurels? Certainly not. But they are on the path of continuous improvement “Steering Toward an Injury-Free Workplace” and they understand it is a journey not a destination.



## NEWS FROM THE NFPA: CALIFORNIA FIRE-SAFE CIGARETTE MANDATE TAKES EFFECT JANUARY 1

### Law requires tobacco companies to make and sell only reduced fire risk cigarettes state-wide

December 20, 2006 — Only fire-safe cigarettes will be manufactured and sold in California starting January 1, 2007.

Fire-safe cigarettes, which are less likely to burn and cause fires when left unattended, were mandated by AB178, the California Cigarette Safety and Firefighter Protection Act, included in a child protection package signed by Governor Schwarzenegger in October 2005.

“Many hundreds of lives are lost, thousands are injured, and millions of dollars in damage is sustained in fires caused by cigarettes each year,” said James M. Shannon, President of the National Fire Protection Association (NFPA). “California’s mandate, which protects more than one out of ten U.S. residents, certainly increases the pressure on tobacco companies to make all of their cigarettes fire-safe.”

The Coalition for Fire-Safe Cigarettes, coordinated by NFPA, is spearheading efforts across the country to pass statewide fire-safe cigarette laws. The Coalition includes fire service members, consumer and safety groups, medical and public health practitioners, the hospitality and insurance industries, and others.

California is one of six states that have adopted fire-safe cigarette laws, and is the third – after New York and Vermont – to have the law take effect. The other states are: Illinois, New Hampshire, and Massachusetts. A similar law is progressing in New Jersey’s legislature. Several additional states are expected to file similar legislation for the 2007 session.

“More than a quarter of Americans live in states that have passed fire-safe cigarette laws” said Shannon. “All indications are that 2007 is going to be another big year. There will be a point at which the tobacco companies will feel compelled to manufacture and sell only reduced ignition propensity cigarettes nationwide. The question is, how many more lives will be lost before that happens?”

According to NFPA, 700-900 people die per year in a cigarette related fire.

“In the meantime, we encourage the state legislatures to implement similar requirements to prevent the needless loss of life,” said Shannon.

California Assemblymember Paul Koretz (D-West Hollywood) was the primary sponsor of AB178. Governor Schwarzenegger joined the bill with other child safety initiatives in recognition of the fact that one in four cigarette fire victims is someone other than the smoker.

The Coalition for Fire-Safe Cigarettes includes the National Fire Protection Association, AARP, American Burn Association, American College of Emergency Physicians, American Fire Sprinkler Association, American Health Care Association, AMERIND Risk Management Corporation, Asian American Hotel Owners Association, ASTM International, Automatic Fire Alarm Association, Inc., Boston Society of Vulcans, Business and Institutional Furniture Manufacturer’s Association, Center for Campus Fire Safety, Center for Social Gerontology, Congressional Fire Services Institute, Firemen’s Association of New York, Florida Association of Fire & Life Safety Educators, Home Safety Council, Illinois Fire Inspectors Association, International Association of Arson Investigators, International Association of Black Professional Fire Fighters, International Association of Fire Chiefs, International Association of Fire Fighters, International Association of Hispanic Firefighters, International Code Council, International Fire Marshals Association, Massachusetts Call/Volunteer Firefighters Associations, Massachusetts Coalition for Fire-Safe Cigarettes, Metropolitan Fire Chiefs, National Association of Emergency Medical Technicians, National Association of Hispanic Firefighters, National Association of State Fire Marshals,



## **NEWS FROM THE NFPA: CALIFORNIA FIRE-SAFE CIGARETTE MANDATE TAKES EFFECT JANUARY 1 (Continued from Page 16)**

National Center for Assisted Living, National Fallen Firefighters Foundation, National Fire Sprinkler Association, National Native American Fire Chiefs Association, National Safety Council, National

Volunteer Fire Council, Phoenix Society for Burn Survivors, Polyurethane Foam Association, Property Casualty Insurers Association of America, Public Citizen, Safe Kids Worldwide, Trauma

Foundation, Uniform Fire Code Association, Washington State Association of Fire Chiefs, and Western Fire Chiefs Association.

## **FIREFIGHTER SAFETY AND HEALTH RESOURCES**



### **WESTERN CHIEFS DEVELOP SAFETY DRILLS**

The Western Fire Chiefs Association, a division of the International Association of Fire Chiefs, has produced a series of five-minute safety drills for all fire departments, called "Take 5 For Safety." The downloadable drills are based on safety research and national accident data and are a good resource for maintaining mentally fit and ready firefighters who think "safety." To date, WFCA has published four sets of five-minute drills on a wide variety of subjects. See <http://wfca.com/default.asp?pageid=401&depid=1>



## **Firefighter Life Safety Events**

**February 10, 2007**

### ***Courage To Be Safe Train-the-Trainer***

Arizona Department of Fire, Building and Life Safety and the Arizona Fire Chiefs Association (Co-Sponsor) - Avondale, AZ

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**February 25 – March 1, 2007**

### ***Firehouse World***

San Diego Convention Center (San Diego, CA)

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**March 3-4, 2007**

### ***Second National Line-of-Duty Death Prevention Summit***

Fireman's Fund Insurance Company Headquarters (Novato, CA)

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**March 10, 2007**

### ***Courage to Be Safe***

Georgia Association of Fire Chiefs (Spring Leadership Conference) - St. Simons, GA

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**March 24, 2007**

### ***Courage to Be Safe/Taking Care of Our Own®***

Georgia State Firefighter Weekend - Forsyth, GA

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**For More Firefighter Life Safety Events Visit:  
[www.everyonegoeshome.com/events](http://www.everyonegoeshome.com/events)**