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US FIRE FIGHTER FATALITIES-2010

By Richard Schulte

Each year, the National Fire Protection Association (NFPA) publishes a report on fire fighter fatalities in the United States. The following are excerpts from a NFPA report titled "*Firefighter Fatalities in the United States-2010*" authored by Rita Fahy, Paul R. LeBlanc and Joseph L. Molis dated June 2011 (with a revision dated July 2011). The following are excerpts from this report:

> "*In 2010, a total of 72 on-duty firefighter deaths occurred in the U.S.*"
>
> "*Of the 72 firefighters who died while on duty in 2010, 44 were volunteer firefighters, 25 were career firefighters, two were employees of state land management agencies, and one was a member of a prison inmate crew.*"
>
> "*The largest share of deaths occurred while firefighters were operating on the fire ground (21 deaths).*"
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> "*Eighteen firefighters died while responding to or returning from emergency calls.*"
>
> "*Eleven deaths occurred during training activities.*"
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> "*Five firefighters died at non-fire emergencies . . .*"
>
> "*The remaining 17 firefighters died while involved in a variety of non-emergency-related on-duty activities.*"
>
> "*More than half of the deaths resulted from overexertion, stress and related medical issues. Of the 39 deaths in this category, 34 were classified as sudden cardiac deaths (usually heart attacks) and five were due to strokes or brain aneurysm.*"
>
> "*Overall, sudden cardiac death is the number one cause of on-duty firefighter fatalities in the U.S. and almost always accounts for the largest share of deaths in any given year.*"

"*Of the almost 2,000 firefighters tested for body fat in 2005, 44.7 percent were found to be obese (defined as 25 percent or more of body fat for men and 32 percent or more for women).*"

"*Body fat was measured again in 2008, and 41.5 percent of the tested firefighters were found to be at high risk and another 25.1 were found to be overweight.*"

"*The firefighters who died in 2010 ranged in age from 20 to 86, with a median age of 52.5 years.*"

"*In 2010, 11 firefighters died in nine vehicle crashes. In addition to those deaths, four other firefighters were struck and killed by vehicles.*"

"*Two firefighters returning from hazmat training in a personal vehicle were killed in a crash while racing firefighters in another vehicle.*"

"*Of the nine deaths in road vehicles mentioned above, four of the victims were not wearing seatbelts and were ejected, four were wearing seatbelts (one was ejected and three were not ejected), and no information on seatbelt use was available for one of the victims (he was ejected).*"

"*There were 72 on-duty firefighter deaths in 2010; the lowest total since NFPA began this study in 1977. It is also the fifth time in the past 10 years that the total number of deaths has been below 100. The annual average has dropped to 95 deaths per year in the past 10 years.*"

Discussion

The drop in fire fighter fatalities in 2010 represents a dramatic decrease in the number of fatalities from both the previous year and from the 10 year average. While there appears to be no obvious explanation for this decrease, such as a break-through in fire fighting technology, perhaps the explanation for this significant decrease in fatalities is that the efforts to promote fire fighter safety are beginning to pay off.

Certainly, the publication of **NIOSH 2005-132**, *Preventing Injuries and Deaths of Fire Fighters due to Truss System Failures*, and **NIOSH 2010-153**, *Preventing Deaths and Injuries of Fire Fighters using Risk Management Principles at Structure Fires*, represent a significant advancement in the effort to promote fire fighter safety.

According to NFPA, roughly 1,348,500 fires occurred in the United States in 2009. Using this statistic, along with the number of fire fighter fatalities on the fire ground from 2010, one fire fighter fatality occurs for each 64,214 fires.

Another way to look at the fire ground fire fighter fatality statistics is to look at the ratio of fire ground fatalities to the number of fire fighters in the US. There are roughly one million fire fighters in the United States. Given this, the fire ground fire fatality rate is one fatality for roughly each 47,000 fire fighters.

Either way you look at it, fire fighter fatalities on the fire ground are actually very rare events.

Can we reduce the annual number of fire fighter fatalities even further? Without a doubt, the answer to that question is yes, if the fire service continues to implement the recommendations contained in NIOSH 2005-132 and NIOSH 2010-153.

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