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GOOD NEWS AND BAD NEWS: FIRE SAFETY STATISTICS-2009

By Richard Schulte

Each year the National Fire Protection Association (NFPA) publishes fire safety statistics for the United States for the previous year. The NFPA report titled "**Fire Loss in the United States-2009**" written by Michael Karter, Jr. and dated August 2010 contains the following statistics:

- An estimated **480,500 structure fires** occurred.
- **78.4 percent** of the structure fires (377,000) occurred in residential occupancies.
- An estimated **3,010 fatalities** occurred, including fire fatalities due to vehicle fires.
- An estimated **2,695 fatalities** occurred as a result of structure fires.
- An estimated **2,565 fatalities** occurred in residential occupancies.
- An estimated **105 fatalities** occurred in non-residential occupancies.
- The estimated property damage due to structure fires was **\$10.842 billion**.
- The estimated property damage due to fires in residential buildings was **\$7.796 billion**.
- In **1977**, an estimated **1,098,000** structures fires occurred.
- In **1977**, an estimated **5,865** fatalities occurred in residential occupancies.

Given the above statistics, the following information regarding the statistics can be determined:

- **21.6 percent** of the structure fires (103,500 fires) occurred in non-residential buildings.

- **95.1 percent** of the fatalities which occurred in structure fires occurred in residential occupancies.
- **3.9 percent** of the fatalities which occurred in structure fires occurred in non-residential occupancies.
- **71.9 percent** of the property damage which occurred in structure fires occurred in residential occupancies.
- There has been a **56.2 percent** reduction in the number of structure fires which occurred between 1977 and 2009.
- There has been a **56.2 percent** reduction in the number of fatalities which occurred in residential occupancies between 1977 and 2009.

There is no doubt about it, the US fire statistics for 2009 are very good news. We've made substantial progress in our battle against fire since 1977, but the reductions in the number of structure fires and the number of fire fatalities since 1977 are even more dramatic than the raw data indicates given the increase in population of the US.

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In 1977, the population of the United States was roughly 219.76 million, while the population of the US on January 1, 2009 was approximately 305.53 million. In other words, while the population of the United States has increased by 39 percent since 1977, the number of fire fatalities fell by 56.2 percent. Congratulations are in order, but there's some bad news too.

What's the bad news? Well, the bad news is that nobody knows about the good news. If you go to a building code development hearing and listen to the proposals and the testimony, you would come away with the distinct impression that Americans are dying like flies after the first frost due to fire. You would think that cities all across America are burning.

What's the bad news? Well, the bad news is that nobody knows about the good news.

Is America really burning? In my mind, there is no doubt about it-the answer to that question is no. America has never been safer from fire than it is today. Given this, do we really need more and more restrictive fire safety requirements for buildings?

Is America really burning?

Rather than more restrictive regulations, what we need to do is go through our building and fire codes and start to get rid of provisions which are costly, but not particularly effective in providing fire safety. Based upon the statistics above, it's probably time to reverse the trend of eliminating "sprinkler trade-offs" and start to expand the number of "trade-offs" included in the codes.

We know that sprinkler protection is the most effective means of providing fire safety for both building occupants and fire fighters. Given that, we need to do everything possible to encourage the installation of sprinkler protection in buildings.

"Sprinkler trade-offs" make sense. Eliminating "sprinkler trade-offs" as has been proposed over the last decade makes absolutely no sense. The public deserves both effective and cost-efficient fire protection and sprinkler protection is the most highly effective and cost-effective means of protecting the public (and fire fighters) provided that "sprinkler trade-offs" are in place.

Eliminating "sprinkler trade-offs" as has been proposed over the last decade makes absolutely no sense.

Without "sprinkler trade-offs" in place, the economics of providing sprinklers in buildings changes. Let's not go backward in our thinking and substantially increase the cost of providing sprinkler protection by eliminating "sprinkler trade-offs" in our construction codes.

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