

Fire Sprinklers and smoke alarms provide best fire defense

By Alvin D. Benson
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Two years have passed since two three-alarm fires simultaneously swept through much of Downtown Memphis. And while Memphis firefighters did an excellent job on Oct. 6, 2006, preventing what could have been the worst conflagration in recorded Memphis history, I still think about what could have been averted if the First United Methodist Church had been protected by an automatic sprinkler system.

I also think about the injuries, deaths and property loss that could be prevented if all occupied buildings, especially residences, were protected by automatic sprinklers, in addition to smoke alarms.



History has taught us that most fire injuries and deaths occur in residences. The National Fire Protection Association reports that 80 percent of all fire deaths happen in the home. In 2007, that organization reported that a home structure fire occurs every 79 seconds and one civilian fire death occurs every two hours and 33 minutes. These startling statistics should not only shock us, but should galvanize us to insist on additional and better residential fire protection.

For many years, we have relied on smoke alarms to alert us to smoke and fire conditions. These devices, installed in an estimated 93 percent of American homes, increase a person's chances of surviving a fire by 50 percent. Sadly, an estimated 30 percent of these alarms do not work over any given time for various reasons, such as removal of the detector, dead batteries or other maintenance issues. The result is often injury and/or death.

Automatic sprinkler systems raise the bar in fire protection. The National Fire Protection Association maintains that properly installed and maintained automatic sprinkler systems reduce the average property loss per fire by one-half to two-thirds and the chances of dying in a fire by one-half to three-fourths. The association has no record of a fire killing more than two people in a building fully equipped with sprinklers.

Together with smoke alarms, sprinklers cut the risk of dying in a home fire 82 percent, relative to having neither of the devices.

In September the International Code Congress, responsible for developing codes used to construct residential and commercial buildings, approved a resolution amending the International Residential Code to make automatic sprinklers a standard feature in new homes. After many years of failed attempts, the resolution was approved by a strong majority; I supported it, as did other fire department chiefs and firefighters from across the country.

The requirement becomes effective on Jan. 1, 2011, for participating jurisdictions. After it is published, I will propose its immediate, unamended adoption in Memphis.

Would adopting this code requirement be a miracle cure for fire deaths? Not quite. Even with the adoption of a sprinkler-friendly code, it would be many years before a substantial number of Memphis homes are equipped with sprinklers. Nevertheless, we should start now. As the adage goes, "If you want shade in 30 years, plant a tree today."

In the meantime, what can the Memphis Fire Department and Memphis community do to reduce injuries, deaths and property loss? We can partner by supporting codes and ordinances that promote sprinklers and fire prevention; regularly checking our smoke alarms and reminding others to do the same; retrofitting our homes with automatic sprinklers or adding them to our new construction plans; and taking fire prevention seriously and not assuming that fire tragedies only happen to other people.

I was pleased to hear that First United Methodist Church has firm plans to rebuild. Its previous building was constructed in 1893, long before automatic sprinkler installation standards. In fact, the National Fire Protection Association didn't publish codes for automatic sprinkler installation until 1896. Consequently, the church's congregation had few options. Today, they have several and should use them. New systems are safe, cost-effective, and can blend into the decor of any structure.

I am often asked how we can stop people from dying in fires and reduce property loss. My answer? Install a combination of sprinklers and smoke detectors in all residential buildings. Yes, address the contributing factors of apathy, poverty, lack of education and poor family structure. Yes, forge partnerships with various agencies and community stakeholders. And yes, support and visit the Fire Museum of Memphis. But ultimately, sprinklers must become as common as smoke alarms if we are to be serious about preventing fires and saving lives.

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