Preventing Electrical Fires - Vigilance & Cooperation Key to Future Risk Reduction

Technology in the electrical and construction industries has come far in improving overall safety and helping prevent electrical house fires, shocking incidents, and electrocutions. Statistics indicate that ongoing safety efforts to protect and inform consumers have saved countless lives and helped prevent electrical burn or related injuries to the public, firefighters, and many others. While this is great news, all industries must continue to use and advance the technology and tools necessary to ensure we improve safety moving forward.

Most recently, the National Fire Protection Association (NFPA) reported that over a four-year period (2015-2019), electrical-related house fires had dropped 40% from levels that topped 75,000 during a similar period in 1980. Fire deaths were 9% lower and home fire injuries were 18% lower.

Credit can be given to a variety of fire safety technologies that have been introduced and required by the National Electrical Code (NEC®) over the last two decades like Arc Fault Circuit Interrupters (AFCIs), required in new home building and renovation. AFCIs detect dangerous arcing in damaged wiring behind walls and stop fires before they can start. Additionally, Ground Fault Circuit Interrupters (GFCIs) prevent shocking and electrocution in outlets near areas with moisture. Other devices introduced into residential and commercial construction to warn of danger include advanced smoke detectors and smoke alarms, digital devices.smart home technology and fire sprinklers. Meanwhile, organizations like the International Association of Fire Chiefs, U.S. Fire Administration, NFPA and Electrical Safety Foundation International (ESFI) have worked hard over the years to help educate the public on household hazards to prevent electrical accidents.

It’s encouraging to see that these efforts are working to help reduce injury and deaths among impacted residents, fire services personnel and first responders. But, as good as all of this is, we cannot become complacent and more needs to be done.

Today, nearly half a million Americans continue to survive burn injuries annually from accidental electrical shocks, electrocution, or electrical fires. While the majority of these incidents occur in homes, the U.S. Bureau of Labor Statistics indicates on average more than 2,000 non-fatal electrical injuries occur in workplaces every year.

Even one preventable electrical burn injury or death is too many, and what this tells us is building, construction, risk reduction and electrical industries need to continue to push the
boundaries of research and development to prevent these accidents from happening. Our mission is to eliminate this hazard, yet we know that cannot happen unless all industries come together to make sure the threat is reduced as much as possible each year.

Additionally, local, state, and federal governments have a role to play in using NEC® requirements that ensure homes are being built and/or renovated using the most current electrical safety codes. Sadly, some have sought to weaken these requirements to increase profit margins, forgoing protection to the consumer.

Seeking profit in business is important, but it should never replace safety at any level. Compare spending a few hundred dollars on AFCIs to protect a 2,000 sq. ft. home from electrical fires versus a lifetime of costs and emotional pain incurred by an injured burn survivor and their family. Even more devastating, losing a family member to such an electrical fire.

Ultimately, all those who are touched by electrical house fires, electrical incidents and electrical burn injuries must continue to make their voices heard. As an electrical burn survivor, myself, I join them. We urge the electrical, construction and safety industries to continue to work hard to do the right thing. We must work together to improve the situation in the future. We should acknowledge and celebrate our safety achievements overall, but that must be tempered in the reality that further vigilance and commitment is needed to continue that protection in the years to come.

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