



EMS calls increase in January and fall to a low point in August. We saw a large jump in fires in December, due to heating fires. False Alarms continue to remain high during the winter.



## HOME FIRE TIMELINE





# **Comparison of Room Furnishings**

Legacy Room

2925





Modern lightweight home construction can rapidly fail in a fire.

An extreme risk to the firefighters responding.

**Robert P. Avsec, Executive Fire Officer** 



## Introduction

Legal doctrine in the U.S. and Canada holds that a "man's home is his castle." Yet, single-family homes are where most fires occur each year. Further, many fire departments do not have jurisdiction or resources to inspect all residential homes in their community.

Preventing fires through fire prevention education is the first line of defense in saving lives and reducing property losses. To fully understand why it is so important, you must first realize that there is a difference between public education, public information, and public relations. The difference is often blurred and before we can answer the question about Public Education, we need to look at the definition of each.

As soon as you put a fire department uniform on, whether it is as a volunteer or career firefighter, you are representing the fire service as a whole. The public has no idea about the different divisions (suppression, prevention, administration, training, etc.); they see a firefighter and they have expectations of that firefighter. Whether you are holding open a door for somebody or driving your personal vehicle to and from work while in uniform you are representing the fire service and that is Public Relations.

Public Information is when your department is informing the public on a specific topic. It could be through social media (Facebook, Twitter or Instagram), a door-to-door campaign with brochures, a display rack of pamphlets in the front entrance of the fire station, or a conversation beside your truck at a community event. It is basically providing information or data to your community on fire safety topics.

Public Education goes one step further; it takes the basic information, adds skill development and life experience to incorporate learning and results in behavioral change. Traditionally we do a good at public relations and are held in high esteem by our communities. We do a good job with public information and through state or provincial Fire Marshal offices, and with the help of NFPA, we have access to good informational materials that are easy to read and factual.

We struggle with education as a whole because there are some old fashioned beliefs and misconception in the fire service about Public Education. Another reason that we struggle is that we don't spend time learning the key messages, or how to educate.

As someone who has been fighting fires before they start for over 25 years it is offensive to hear that anyone can do Public Education and no specialized training is required. In many departments, the person tasked with doing public education is on modified duty, or when a tour or classroom is scheduled falls upon the "junior firefighter".

We would never send an injured firefighter or a junior firefighter into a fully involved structure fire, yet we think nothing of standing them up in front of a group of people, adults or children and telling them to talk. This person might have no experience talking to children or little experience with fire safety presentations, yet they are put front and center. It is not fair to the firefighter being asked to give the presentation and it is definitely not fair to the audience.

This group of people see a firefighter in uniform and expect expert advice and information. They might have gone to see the big red truck, to meet their local firefighters and up until this point, only have the television or movie version of firefighting.

We are doing them a disservice if we do not take the opportunity to educate them and provide them with the life-saving information they need to prevent and survive a fire. Every time someone comes into a fire station, we are provided with a valuable learning opportunity, an opportunity to provide information and change behavior without fear or negative repercussion. To learn from the mistakes of others.

Training Divisions spend hours teaching new recruits how to tie knots, how to handle confined space rescues, auto-extrication, smoke migration etc., but very little time if any is spent on public education, general fire safety and how to teach an audience. We need to make sure that all firefighters have the tools and skills to deliver a good public education program.

There are some great resources available to help departments have an effective fire safety education program. To start, I believe every firefighter should be certified to NFPA 1035, Level I Fire and Life Safety Educator. It takes less than 20 hours to obtain this certification.

It gives you basic fire prevention activities, the foundations of public fire and life safety education, current educational materials, the major causes of unintentional injury, characteristics of learning, evaluation of lesson plans, presentation methods, learning characteristics of high risk groups in your community, effective use of audiovisual aids, successful dealing with the media, recordkeeping, and provincial fire statistics. Twenty hours is not a big time commitment, and it is something that will benefit your fire department and community for years to come.

This is an initiative that we are piloting in the City of Barrie here in Ontario. Fire Chief Boyes has agreed that all front line staff should be certified to this level at a minimum. If Public Education truly is the first line of defense, doesn't it make sense that we commit to providing staff with the tools and skills they need to be successful?

Chief Avsec's weekly blog, *Talking "Shop" 4 Fire and EMS*, has covered many different aspects of educating the public and the fire service and many of these discussions are now available in this e-book. It is a great tool to get you thinking about public education, what you are currently doing and what you could be doing more of. It certainly made me think.

Samantha Hoffmann

Public Fire and Life Safety Officer Barrie Fire and Emergency Services, Barrie, Ontario March 2017

Educating the Public and the Fire Service

# Preface

First of all, Thank You! I believe that your purchase of this book demonstrates: (1) you're a leader in your fire service organization (whether you have a rank or not); (2) you're a person looking to expand your body of knowledge; and (3) you care about your organization's ability to provide leadership and guidance to its people. The fire service needs people like you!

I'm a retired fire department battalion chief. I proudly served with the men and women of the Chesterfield County (Va.) Fire Department for 26-years. All told, I've spent 30+ years in the fire service and EMS.

During that wonderful "1st career", as I rose through the ranks of the department I had many opportunities for personal and professional growth and development. Those opportunities included:

- Serving as an Advanced Life Support Provider, which included a stint as a back-up flight paramedic on a medevac helicopter
- Serving on our Hazardous Materials Response Team, during which I earned my Specialist Certification;
- Serving as the department's EMS Director while a Captain;
- Serving as Co-Manager of our county's Emergency Communications Center (9-1-1) while a Captain;
- Serving as the department's Chief of Training and Safety Division while a Battalion Chief;
- Serving as an Operations Division Battalion Commander during several rotations; and
- Serving as a member of the department's Strategic Planning Steering Committee.

Since my retirement in December 2007, I've worked in several other capacities: Operations Chief for a private sector ambulance service; as a Staff Instructor/Course Developer at the Georgia Fire Academy; and as a management consultant for a private-sector company with management services contracts with the Department of Defense and the Department of Veterans Affairs. All of which allowed me to continue to "broaden my horizons."

Since 2012, I've been plying my trade in my "2nd career" as a freelance writer beginning with the creation of my professional blog, Talking "Shop" 4 Fire and EMS. A couple of years later, I was recruited by Mr. Rick Markley to write articles on a monthly basis for the on-line trade journal, FireRescue1.com.

This book that you've purchased is composed of selected posts from my blog. In addition to my own original content, I've included selections from one of my guest bloggers--and a passionate fire and life-safety advocate--Tanya Bettridge.

Once again, thank you for your purchase. I hope that our words help you to gain a better appreciation for what is necessary to be an effective leader in the fire service.

Robert Avsec

Cross Lanes, WV March 2017

# Children Don't Cause Fires, Adults Do!

### By: Robert Avsec, Executive Fire Officer

The behaviors of adults in the USA account for 78 percent of the preventable residential fires. So why do the vast majority of fire prevention educations that Fire and EMS departments deliver each year target children? *If we're looking to significantly reduce the following types of fires, why don't our programs focus on adult behaviors?* 



November 2013 References are available at www.nfpa.org

Those top five causes of fire add up to **78 percent**. I don't know about you, but I don't see the "fingerprints" of children on these fire causes. Sure there are situations where children are **involved** in the cause of the fire, e.g., the child may be the one cooking or using the heating equipment, but I submit that the base cause is likely one of the following **adult behaviors**:

- An adult was not properly supervising the child while the child was cooking;
- An **adult** had not taken the proper measures to ensure that the child could not gain access to the heating equipment, e.g., putting up a screen around a kerosene-fueled heater; or
- An adult left smoking materials, e.g., a lighter or matches, unsecured and accessible to the child.

When we take a closer look at the causes of fires in the USA, we see that the remaining causes of fires, as listed in the NFPA report include:

- Clothes dryers and washers (4%)
- Candles (3%)
- Playing with a heat source (2%)

How many of these remaining 9 percent of fire causes are in reality caused by the **direct or indirect behaviors of adults?** 

Fire and injury prevention programs delivered by Fire and EMS departments, and allied safety organizations, need to "grow up." *I'm not for one minute suggesting that the programs we've developed to target children need to be eliminated.* I am strongly suggesting that we need to become equally aggressive in developing and delivering fire and injury prevention education that **specifically targets the adult population** if we want to be serious about reducing preventable residential dwelling fires.

### Here's what I think we should be doing in this regard

Every Fire and EMS department needs to collect and analyze the fire cause data that's applicable to their community. In lieu of that—many departments do not have the resources to do that on their own—I suggest that a department contact NFPA and at least get the applicable data for their state. As a final option, I would suggest that they use the most current NFPA national statistics for the years 2007-2011.

Then a department should use its available resources, along with those in their community, to develop programs that target the top five fire causes for their community (or state or nationally). Adults, not their children, should have the knowledge and skills to be the household "leaders" for items such as, but not limited to, the following:

- Ensuring the home has working smoke detectors 24/7/365;
- Developing and practicing E.D.I.T.H. (Exit Drills in the Home) with the entire;
- Safe cooking practices and rules for children cooking;
- Proper storage and use of flammable materials; and
- Proper use of portable space heaters.

Switching gears, another adult fire education tract would be to inform and educate the adults in their community so that they become, to borrow the term from the wildland fire community, "**firewise**." The adults in our communities—who are also the voters in the community—need to become more informed and educated about:

**Basic fire dynamics.** The average adult is largely ignorant of **how quickly** a fire can develop and make a space **untenable for human life**. Those adults have unrealistic expectations about (1) their own ability to safely get them and their family out of a dwelling fire, and (2) the ability of their local fire department to respond and safely, effectively, and efficiently rescue them and protect their property.

Twenty-five years ago, NFPA® created the award winning video – **Fire Power** – which takes a firsthand look at the deadly dynamics of fire from ignition to full room involvement.



**Residential fire sprinkler systems**. If more adults in our communities really understood what residential sprinklers are, what they can do, and how they would *significantly reduce fire, deaths and injuries from fires* in their hometown, they might be more likely to aggressively support legislation and elect public officials who favor residential sprinklers.

But before we go there, we have to do a better job of informing and educating our own people, i.e., firefighters and officers, that residential sprinklers are the future of residential fire protection. Too many firefighters and officers continue to view residential sprinklers as a "threat to their way of life" while they absorb reductions in staffing and equipment and attempt to provide past levels of fire protection. They are doing this in ways that are not safe, effective or efficient.

So what do you think? Isn't it time for our fire and injury prevention programs to "step it up"?

See Related: Home Fire Sprinkler Coalition

See Related: Why are We Entering Burning Structures with Too Few Firefighters?

# Residential Fire Sprinklers Save Lives--And Firefighters!

### By: Robert Avsec, Executive Fire Officer

Where is our leadership on the issue of having residential fire sprinklers installed in all new single (SFD) and multi-family dwellings (MFD) in the USA? Why hasn't every State Fire Marshal Office in the country produced a video like this one:



Why, when the budgets of fire departments nation-wide are being gutted, firefighters are being laid off, and fire stations are being closed, are we not doing more to get fire sprinklers as a requirement for SFD's and MFD's, the occupancies where the fire deaths and injures are most likely to happen. The same occupancies where the majority of firefighters continue to die and become injured annually.

More importantly, why do we–Yes, WE in the fire service–continue to view residential sprinklers as a "threat to our way of life" rather than as the only true lifesaving weapon in our battle against fire? Why do we keep pursuing better equipment and protective clothing and SCBA to fight fires in dwellings that become more hazardous to our health and safety every year?

"While teaching a building construction class a few years back, I discovered many of the attending fire officers did not have any idea about the dangers associated with lightweight construction (LWC) when involved in fire." Dangers of Lightweight Construction

"To unequivocally state that nothing has changed in buildings, occupancies, fire flow delivery rates and demands for increased proficiencies of our firefighters, company and command officers is absurd, ignorant and dangerous." A Delicate Balance

ELLSWORTH, ME — New research by a Blue Hill scientist shows that during a fire, firefighters are exposed to dangerous levels of toxic, cancer-causing chemicals created when commercial flame retardants burn (Maine Sun Journal). Exposure to flame retardant chemicals means firefighters face higher cancer risk than previously thought

We keep coming up with ways to go in while developers and contractors keep coming up with ways to drive us out. I think we need a new approach.

Residential fire sprinklers are the only "firefighters" that are available, on-scene, and ready to work at the start of a fire event, 24/7/365. Why are we not "trumpeting" these key facts to the public and our own people:

- Residential fire sprinklers increase the "window of time" available to you and your family to safely escape from your home in the event of a fire.
- Residential fire sprinklers increase the length of time before a fire can reach its flashover phase, thus reducing the risk of injury or death to responding firefighters.
- Residential fire sprinklers can reduce the amount of fire damage because the fire cannot grow beyond its point of origin in most cases. (Water damage from fire sprinklers can be substantially reduced by our actions as firefighters).

Lots of questions for sure. So what are you doing to provide the answers in your department?

# Let's Start "Hitting" Fire Where it Lives

## By: Robert Avsec, Executive Fire Officer

My wife—and by proxy me as well—is a huge fan of the crime procedurals that have dominated television in recent years, e.g., NCIS, the entire CSI (and the NY and Miami spin-offs). A common theme I hear every week is one of the characters telling one of their colleagues (who's usually letting some emotion get in the way of logic), "Follow the evidence."

### So, how well are we doing in Fire and EMS at "following the evidence?"

According to a National Fire Protection Association (NFPA) Fact Sheet, U.S. fire departments responded to an estimated average of 371,700 home structure fires per year during 2006-2010. These fires caused an annual average of 2,590 civilian fire deaths, 2,910 civilian fire injuries, and \$7.2 billion in direct damage. 92% of all structure fire deaths resulted from home fires. On average, seven people died in U.S. home fires per day during the period.

### So, what should we do?

For starters, we must realize that we cannot eliminate fires, and the resultant deaths and injuries, completely. Not going to happen. At least not until we identify the "stupid" gene in people that leads them to do incredibly dumb things that cause fire. There, I said it. (To quote one of my favorite comics, Ron White, "You can't fix stupid!"

- Seventy-six percent of all civilian fire injuries occurred as a result of fires in residential buildings.
- Cooking (30 percent) was the primary cause for residential building fires that resulted in injuries.
- Thirty-five percent of civilian fire injuries in residential buildings resulted from **trying to control** a fire followed by **attempting to escape** (26 percent).
- Seventy-nine percent of injuries resulting from residential building fires involved **smoke inhalation** and **thermal burns**.
- The leading human factor contributing to injuries in residential building fires was being **asleep** (55 percent).
- **Bedrooms** (35 percent) were the leading location where civilian injuries occurred in residential building fires.

In the 1960's, our society finally had enough of the deaths and destruction from automobile crashes on the highways and by-ways of America. The United States Congress—which used to do its job in things like this!— enacted the National Traffic and Motor Safety Act in 1966:

The reduction of the rate of death attributable to motor-vehicle crashes in the United States represents the successful public health response to a great technologic advance of the 20th century—the motorization of America.

How did it happen? We took a systematic approach to solving the problem that resulted in changes such as:

- Birth of the modern trauma care and the Emergency Medical Services in the United States;
- Engineering changes to automobiles to protect occupants: lap/shoulder belt restraint systems; air bag restraint systems; energy-absorbing steering columns; vehicle chassis construction that dissipates crash energy to protect vehicle occupants;
- Improved road construction design that included: guard rails to prevent vehicles from striking stationary objects, e.g., bridge embutments, and vehicles from leaving the road, e.g., tight curves, and crossing into on-coming traffic.

#### So, why aren't we taking a similar approach to preventable fires?

Figure 1 below where homes include one- or two-family homes, manufactured homes, as well as apartments or other multi-family housing. In general, any fire that occurs in or in a structure is considered a structure fire, even if the fire was limited to contents and the building itself was not damaged. The predominant causes of residential fires in the United States for the period are Cooking Equipment and Heating Equipment. Other fires include: Intentional (8%); Electrical Distribution and Lighting (6%); Smoking (5%); Clothes washers and dryers (4%); Exposures (3%); Candles (3%); and Playing with fire (2%).



Figure 2 below shows that the Kitchen/Cooking Area accounts for the highest percentage of both fires and fire injuries. Though they only account for a combined 11% of all fires, the Bedroom and Living Areas (Living room, Family Room, or Den) are where 49% of fire deaths occur.

## Leading Areas of Fire Origin in Home Structure Fires, 2006-2010



If we took the same approach to reducing the number of fires and their impact on our society we'd push for changes like these:

**Action Item:** All residential cooking equipment manufactured and installed in homes would come equipped with a fire suppression system installed, e.g., a hood suppression system. That system would also shut down the fuel supply to the equipment upon activation of the system.

**Impact:** The greatest source of fires, in the most frequent location of origin (42%), would be "stopped in its tracks": (1) in its incipient stage before it could spread; and (2) occupant's would not be injured (37% of fire injuries) attempting to extinguish the fire or attempting to remove a burning pot from the stove.

**Action Item:** Require the installation of partial residential sprinkler coverage in all living areas (living room, family room, and den) and in all bedrooms.

**Impact:** Fires would be controlled in their incipient stage in the residential areas that account for the greatest percentage of civilian fire deaths (combined 49%) and second leading area for civilian fire injuries (combined 33%).

These are just two that immediately come to mind when looking at the stats in Figures 1 and 2 above. But if we could be successful in doing this, in a generation or two we could have a substantial positive impact on:

- The Number of Fires (53% that occur in kitchen/cooking areas and living areas);
- The Number of Civilian Fire Deaths (64% that occur in kitchen/cooking areas and living areas); and
- The Number of Civilian Fire Injuries (68% that occur in kitchen/cooking areas and living areas.

Sound rather harsh? Sound unrealistic? Consider for a moment what has happened since 9/11 to fight the "war on terror" — creation of DHS and TSA, hundreds of billions of dollars spent, laws adopted and changed, new training, new equipment, and new ways to do our jobs. With all that and more, we've not suffered a single terrorist-related death or injury on United States soil since that day. We have, however, lost a "city" of 30,966 people (total U.S. fire deaths for 2002-2011) in that same period.

Something to think about, no?

# A New Direction for Fire Protection in the USA

### By: Robert Avsec, Executive Fire Officer

Pick up just about any fire services trade journal, or visit such websites, and you'll see that leaders in the USA fire services are saying pretty much the same thing: there's a "new normal" coming out of the *Great Recession of 2008–?*. I'm having a harder time, however, finding anyone discussing some specific aspects of what the "new normal" will look like. So here's my "two cents worth"...

The United States has known it's had a fire problem since at least 1948, when President Harry S. Truman received the Report of the Continuing Committee of the President's Conference on Fire Prevention and Education. Our 33rd president responded to the report by stating:

The serious losses in life and property resulting annually from fires cause me deep concern. I am sure that such unnecessary waste can be reduced. The substantial progress made in the science of fire prevention and fire protection in this country during the past forty years convinces me that the means are available for limiting this unnecessary destruction.

The authors of that report, along with the participants at the five Wingspread symposiums since — *Wingspread Conference on Fire Service Administration, Education and Research* (1966), Wingspread II (1976), III (1986), IV (1996), and V (2003) — have all said the same thing when it comes to addressing the fire problem in America:

Fire prevention and accident prevention employ same technique. – Over the years, the approaches to the accident problem have been popularly designated as the Three E's of Safety – Engineering, Enforcement, and Education. These 'Three E's' are equally applicable to fire prevention and protection.

Providing fire protection as we currently know it is for the most part a very people, equipment, and facility intensive operation. Those firefighters, fire apparatus, and fire stations-and support facilities such as training centers and administrative buildings-are also represent a very significant fiscal outlay for most communities and that "bill" grows larger every year.

It's also primarily a reactive service: firefighters and equipment waiting in a stationary location for notification of a fire. When that alarm comes in and those firefighters respond-racing through the streets like the horse-drawn steam engines of old-we also know that an entirely new set of risks come into the picture. Vehicle accidents involving fire apparatus, firefighters being injured and killed during the response, while fighting the fire, and even while returning to the fire station.

Why do we continue to "hold on to" a fire protection model that is "overloaded" with risk and expensive to operate? There is a better way, but it's a way that requires a fundamental shift in responsibility in our society: the individual is responsible for not having a fire, rather than the locality is responsible for putting out a fire when it occurs. Fire service leaders and local political leaders need to "re-engineer" the fire protection model for their communities using those "Three E's":

### Engineering

- Require residential sprinklers in all newly constructed one-and two-family homes. Period.
- Change building codes so that all building materials must pass fire resistance performance standards, not just "gravity-defiance" standards.
- Change building codes in the wildland-urban interface to prohibit the use of combustible building materials. Mandate the use of block, concrete, stucco and other non-combustible materials.
- Mandate fire-safe cigarettes.

### Education

- Require that all residential property in a locality rental and occupant-owned has a copy of the locality's fire-prevention code do's and don'ts, written in plain English and other applicable languages for the community.
- Require fire departments and school systems to jointly deliver a standard fire prevention curriculum in elementary, middle, and high schools every two years.
- Require completion of fire prevention course of study as prerequisite for obtaining a residential lease or buying a home.
- Require insurance companies to inspect rental and occupant-owned residential properties before insuring the property. Require policy-holders to submit an affidavit to their insurance company stating that they comply with the fire prevention provisions of their policy and their locality every year as a condition to renew their coverage.

### Enforcement

- Investigate all fires and issue a court summons to the building occupant if a fire is determined to have been caused by their negligence. (Just like a traffic accident: if you're at fault, you pay the price.)
- Bill the occupant for the cost of fire suppression services when a fire is determined to have been the result of occupant negligence.
- Fine builders and contractors when a fire investigation reveals that improper building materials or building practices (a) started the fire or (b) contributed to the spread of the fire.
- Fine rental-property owners who do not maintain their rental properties and whose properties are not in compliance with the locality's fire prevention code.
- Incorporate a locality's level of fire protection and history of fire loss into the financial processes that financial institutions use to determine a locality's bond rating.

Sound rather harsh? Sound unrealistic? So does closing fire stations and laying off firefighters. So does continuing to expose firefighters to increasing levels of risk of injury or death because of negligence on the part of building occupants, developers, and builders. So does continuing to increase the fiscal burden to local taxpayers to pay for an antiquated fire protection model that is reactive rather than proactive.

Fire service leaders keep saying that we need to "think outside of the box" and make better use of technology, but more increasingly expensive technology that supports the "wrong" model is not the answer. I believe that the only way to change the outcome is to change the culture.

What are we waiting for?

# Residential Fire Sprinklers: The Power of Words

By: Robert Avsec, Executive Fire Officer

A disappointing outcome for sure. But another story that should bolster our resolve to continue fighting the special interest groups who continue to put profits over life safety for citizens and the firefighters in communities across the USA.

MINNEAPOLIS, Oct. 19, 2015–The Minnesota Court of Appeals rendered a decision this past week on a legal challenge brought by the Builders Association of the Twin Cities. The decision overturns Minnesota Department of Labor and Industry requirement for enhanced fire & life safety protection with fire sprinklers in homes greater than 4500 square feet. The court said this 4500 square foot provision was an arbitrary figure while the energy code was upheld because it applies across the board.

Personally, I think that we need to change our strategic approach to the pubic message about residential fire sprinklers. Our typical message goes something like this: "A residential fire sprinkler system can save your life" or "Fire sprinklers save lives." Both of those statements and most of the others that we use when writing and speaking about residential fire sprinklers are written in the passive voice.

You remember passive voice and active voice from grammar class in school, right? In the passive voice the "actor" is at the end of the action; in active voice the "actor" is up front in the sentence.

I prefer the M.A.D.D. (Mothers Against Drunk Drivers) approach—and more recently that of the organization Moms Demand Action for Gun Sense in America—of a more active voice to our message. Try these on for size:

"Do your children go to sleep in a home without a fire sprinkler system? Why? Would you put them in the trunk of your car to take them to school?"

"People who live in a home protected by a residential fire sprinkler system 24/7/365 never worry about going to bed and never waking up because of a fire. How do you sleep at night in a home without one?"

"People who live in a home protected by a residential fire sprinkler system 24/7/365 never worry about losing a loved one to a preventable fire or spending years getting medical treatment for burns or living out of a hotel room for 6 months while their home is rebuilt."

We've got to stop ignoring the "elephant in the room" when it comes to fires in the United States, particularly in residential properties: we live in a culture that accepts that fires happen, fires kill and injure people, and fires destroy property.

These fires are not accidental and unforeseen events. Fires are preventable as upward of 75 percent of those fires (in homes) are caused by improper adult human behavior. Builders, developers, and government officials who continue to defy common sense by resisting any efforts to get a residential sprinkler system in every new home built are displaying a similar improper behavior, a behavior that does nothing but support our culture's acceptance of fire and its devastating consequences.

So what can we do to get the elephant out of the room and out of the house?

## Residential Fire Sprinklers: What Do You Know?

### By: Robert Avsec, Executive Fire Officer

Increasingly, firefighters are responding to situations where the residential fire sprinkler system (RFSS) has done its job: early activation for quick extinguishment or substantial control of a fire in its incipient stage. These systems are becoming more prevalent in the multi-family dwellings across the United States, but hopefully the fire service will become more successful in getting more of these systems installed in single-family dwellings.

- 1. Providing a larger "window of escapability," more time for occupants to evacuate the dwelling and
- 2. Keeping fire from reaching the point of flashover, thereby protecting firefighters.

As the number RFSS in the country continue to grow, fire service leaders need to ensure that our fire officers and firefighters have the necessary knowledge, skills and abilities to work with these systems to effectively ensure extinguishment of the fire **and** effectively address **property conservation**, the third incident priority.

Most departments emphasize the first two incident priorities, life safety and incident stabilization, much more than property conservation. We remove heat, smoke and standing water following suppression activities, and then we cover window and door openings and return the building to its owner.

The fire service needs to adopt a new paradigm regarding property conservation. The lightweight building materials used in today's family dwellings are very susceptible to water damage, especially from prolonged water exposure. When the fire occurs on an upper floor, gravity is a powerful force that exposes more interior exposures to water. We need to become more proactive in addressing the third incident priority, especially when sprinkler systems have been activated.

How can we meet this challenge? We need to focus some of our training and drilling efforts toward developing the salvage-technician skills of our fire officers and firefighters. Most of what we know we learned in entry-level firefighter training, and for many that training was a long time ago. Even for our newer folks, the amount of time allocated to the development of salvage skills is very limited; entry-level training programs tend to focus on development of fire suppression KSAs.

What should our training and drilling focus on? Here a couple of key objectives:

- Learn the location of all the occupancies in your district with installed RFSS. Become familiar with the location of fire department connections and the control valves for those systems.
- Be aggressive in assigning responsibility for control of the system to a fire officer so that the system can be shut down as soon as fire control is achieved.
- Make an aggressive interior fire attack to get a fire stream to the seat of the fire and ensure complete extinguishment of the fire. Communicate to the incident commander as soon as possible when the system can be shut down. Continue to size-up the fire area for hot spots.
- Make aggressive water removal a key objective of the incident action plan. Tasks should include the use of water vacuum equipment as well as the covering of property and floors below the fire.
- Prompt homeowners and property managers to obtain the services of a professional disaster restoration company as soon as possible. Most of the water-removal equipment that we carry on our apparatus provides a good first step in water removal, but it isn't as effective and efficient as the water extraction equipment used by professional disaster restoration companies in minimizing water damage after the fire.

As RFSS become more commonplace in our communities, our knowledge and skills as salvage control technicians will become more commonly in our efforts to conserve property following a fire.

Many people, especially those outside the fire service, believe that residential sprinkler systems cause more damage than the fire because we continue to let the builders and developers control the residential sprinkler agenda. Those same people do not know that sprinkler systems keep the fire from rapidly growing to the point that it can trap occupants or inflict substantial damage on the structure.

By becoming more skilled and practiced in salvage operations at these types of calls, we will have a positive influence on their perceptions. If we can do that, we'll increase public support for the installation of residential fire sprinkler systems in our communities.

## Insights to Improve Your Department's External Communications

**Note from Chief Avsec:** Tanya Bettridge, a Public Educator/Administrator with the Perth East (ON) Fire Department in Canada, is one of my newest LinkedIn connections and she's a brilliant essayist when it comes to public fire and life safety education.

Her latest post on LinkedIn, Pub Ed Lessons from the US Election, is another outstanding piece of prose that's applicable, not just to fire and life safety education, but to overall communications between a fire and EMS organization and the public it serves. Here is her blog, reprinted with her permission.

## By: Tanya Bettridge, Guest Blogger

For the purpose of this article, agreement with the outcome of the US Presidential election is irrelevant; we can all take away from it a few tips. Whether it's voting for a candidate or testing a smoke alarm, it all requires someone to communicate, and another someone to receive the communication in a way that prompts an action.

In the spirit of post-election analysis, I'll break it down by candidate.

## **Tips from Hillary's Loss**

- **Sometimes, you lose.** It's important to keep fighting for what you believe. Like having working smoke alarms on every storey and outside all sleeping areas.
- Use the loss to rally the troops. Hillary has more active support now than she did before the loss. When you have a "loss" in your community, use it to inspire people to act like go door to door after a fire and plead with families to create/practice a home escape plan.
- Work on your image. Fire Departments are usually pretty rosy-looking in the public eye. If, for whatever reason, you're not well-received, spend the time and effort to find out why and correct it before you attempt the next campaign.
- Know your demographics and appeal to them. Hillary didn't have near the female support she should of had. Likely because the modern woman doesn't easily identify with someone who put up with extramarital affair(s). As much as she focused on the "middle class" her manner of speaking was incredibly formal with the use of high level language and acronyms. For FDs, who lives in your community? What's their household income, age, occupation, cultural & religious background, what language do they speak, and what's their marital/family status? How old are their homes? Do they live and work in the same community, or do they commute? (FYI: All these are answered thanks to Stats Canada)
- Thinking something can't/won't happen negates action. Clinton's campaign and the legions of supporters did not even think a Trump victory was possible. The polls had Clinton leading; the sanity of society couldn't fathom any other outcome. Perhaps this removed the motivation for many to cast a ballot, thinking the outcome was inevitable. Think about how fewer fires there are nowadays, or how "safe" houses are built. People think they will not have a fire, so they don't take fire seriously. "You don't think a fire will happen in your home? The world didn't think Trump would win. Fires happen. Be prepared."

### Tips from Donald's Win

- Create a clever message and repeat it. Trump used his "Make America Great Again" slogan over and over. It was on hats, banners, t-shirts... it was easy to repeat, joke about and repeat some more. "Make Your Home Safe Again" could very well be the next "Stop, drop & roll". Keep your messages short, catchy and something people can easily repeat.
- Do what it takes to get their attention. Trump really proved that there's "no such thing as bad press". Whatever shocking sentence came out of his mouth, the media and voters gobbled it up. Obviously the fire service has to maintain a certain level of professionalism and public statements/messages must be accurate. However, there are ways to operate at that level and still get people's attention.
- **Be different.** "Wanting a change" is the most-cited reason people gave for supporting Trump. They were sick of the "establishment". Know how many "safety" themed messages are out there? Know how many cite "the law"? People have tuned them out over time. In order for your message to get through, it's going to have to be different and stand out. In a mailbox of newspapers and flyers, maybe yours is a pop-up book style rack card. Or maybe it's bright orange, or glow in the dark. Maybe it's a game or contest.
- Focus where it's needed most. Trump focused heavily on those most likely to vote, in places where electoral votes were imperative. He did that in person. He had a physical presence and made sure his supporters rallied in his absence. What areas of the community are most at risk for fires or fatalities? How can you garner support to make changes? If you're worried about a poor neighbourhood, get some corporate support and roll up your sleeves. Go door to door. Attend community gatherings. Invest in their interests and ask them to return it with their investment in fire safety.

I'm sure there are a lot more lessons – genuine or sarcastic – we can learn from such historic events as this year's US election. But, as both candidates will tell you, it's not enough that we talk about it. We actually have to find what works and DO it. We have to act. If you have any post-election tips, please comment and share.

### Make North America Safe Again!

# What Fire Departments can Learn from Beer Ads - PART I

### By: Tanya Bettridge, Public Educator/Administrator, Perth East (ON) Fire Department

Editor's Note from Chief Avsec: Tanya Bettridge has graciously given me permission to share her post, a post that originally appeared on LinkedIn. I've edited her original post into two shorter posts (no content deleted) for easier reading, especially on mobile devices.

There are simple things in life, that caused one reaction a few decades ago, that cause almost a polar opposite reaction today.

20 years ago, the doorbell or a knock on the door of your home was exciting. Could it be company? Could it be a special delivery? Maybe it's Ed McMahon! Honey, turn on the light! Kids.... someone's at the door!

Today, an unexpected knock at the door is practically dreaded. Goodness... it's someone selling something. Turn the TV off... maybe they'll go away. If it's that church group, I swear... honey, whatever it is, tell them we're not interested.

The same mindset applies to fire & life safety. Decades ago, if the fire department wanted people to do something, they did it... happily. Without hesitation or debate. We were given the assumption of care. If the fire department is telling us this, it's because they care about our safety.

Nowadays, the reaction is quite different. When the fire department says, "We want you to have working smoke alarms," the request is met with indifference and it's tuned out.

Or met with suspicion, "They just want to enter my home to see what else they can nab me for.

Or defiance, "It's just a bloody cash grab... money, money, money..." (Like the fire department somehow profits from your working smoke alarms).

### Mistake #1: Basing a Message on What the Fire Department Wants

Understanding the mistake. I've often cited Simon Sinek's philosophy and book, "Start With Why". It's SO true. In his book and in his TEDTalk, he enlightens the audience with "people don't buy what you do; they buy why you do it".

When you link that philosophy with the "Stages of Change" model, (introduced in the 70's by James Prochaska and Carlo DiClemente who were researching ways to help people quit smoking) the fire service's struggle, (to change societal behaviors) suddenly makes sense.

The six stages of the model are:

- Pre-contemplation (Not Ready) People are not intending to take action in the foreseeable future, and can be unaware that their behavior is problematic.
- Contemplation (Getting Ready)- People are beginning to recognize that their behavior is problematic, and start to look at the pros and cons of their continued actions
- **Preparation (Ready)**-People are intending to take action in the immediate future, and may begin taking small steps toward behavior change
- Action People have made specific overt modifications in modifying their problem behavior or in acquiring new healthy behaviors
- **Maintenance** People have been able to sustain action for at least six months and are working to prevent relapse
- **Termination** Individuals have zero temptation and they are sure they will not return to their old unhealthy habit as a way of coping

See Related: Six Stages Model

People lounge in the "Pre-contemplation" phase for one or more of four reasons:

- Reluctance (lack of knowledge, impact of the problem has not become fully conscious)
- Rebellion (are resistant to being told what to do)
- Resignation (given up hope about the possibility of change or overwhelmed by the problem)
- Rationalization (have reasons why it's not a problem or why it's a problem for others but not them)

Yes... I'm getting to the beer part...be patient, geez.

We THINK our public education programs are geared toward people in those first two stages, (precontemplation and contemplation) however, in reality, most of the industry messaging is really geared toward those in the Preparation phase. We often provide instructions (using verbs like install & maintain) and try to reinforce the instructions with reasons (it's the law). This approach only works with those already in the Preparation phase and who just need that little reminder.

The reality is, those aren't really the people we're after. We're after those that don't have any working smoke or CO alarms, have kids but no home escape plan, or just don't care/lack the knowledge about fire safety. We're after those people, because they present the greatest and most imminent risk.

#### Next up is the solution part.

#### About the Author

Tanya Bettridge is a Public Educator/Administrative Assistant for the Township of Perth East, Ontario, Canada where her duties include: administrative support and public education for the Fire Department; website maintenance/administration: municipal street addressing; fire safety/public education; author/editor for newsletter and e-news; customer service; and emergency management roles. She also currently serves as the Director for Communications for the Ontario Fire & Life Safety Educators.

# What Fire Departments can Learn from Beer Ads – PART II

By: Tanya Bettridge, Public Educator/Administrator, Perth East (ON) Fire Department

So, where do we go wrong—with our fire and life safety messages—and how do we correct it? The first thing we have to learn is what makes people transition from the Pre-contemplation phase to the Action phase. Clearly, that is no longer, "the fire department wants you to..." People today have to be reached from another angle.

Enter the beer analogy (after all, who doesn't love a comparison to beer?) and YouTube homework. Search for beer commercials. How many start with "Budweiser wants you to buy our beer"? Or "Only our brand of beer tastes good; drink a reasonable and legal amount." Doesn't that sound silly?

Yet, that's precisely what we try to do with fire and life safety messages. "The fire department wants you to be safe. Install a CO alarm today." "Remember, only working smoke alarms save lives. It's the law."

So why are people motivated, upon seeing a beer commercial, to buy beer... but not motivated to replace or test their smoke alarms after seeing our message?

### The answer is...in the Why?

Marketing-schools.org spelled it out perfectly, "While humor might be one of the easiest ways to reel in new consumers (with advertising across multiple industries investing as much as \$43 billion annually on humorous ads alone) the messaging behind those ads is what truly drives repeat customers. Psychologically, humans feel the need to belong to a group or community."

Which makes sense. How many beer commercials do you know of, that consist of one person drinking beer, by themselves? Whether it's a lively part of all the pretty people, or a group of dudes separately watching football from their homes, but calling each other to say "Wasssuppp?", or one gender seemingly more successful with the other gender as a result of drinking X brand of beer, it's all about that sense of belonging.

The folks at 602communications.com zeroed in on the emotions of beer. "Beer commercials are mostly targeted for male audiences, and they are constantly positioning a brand to succeed with that demographic."

Notice that when I'm talking about positioning a brand, I don't care about what the product is, but rather who the customer is. The best alcohol advertisements and beer commercials get this. Beer and alcohol is just a thing, what is really important in positioning a brand with emotional marketing is to hone in on the feelings and emotions of the customer. This is the best way to truly make great alcohol advertisements and beer commercials using emotional marketing.

Beer companies do just that. Marc Wayshak, founder of Sales Strategy Academy, wrote this in his article about the lessons to be learned from Budweiser's "PuppyLove" commercial.

"Humans are emotional buyers. They buy something because they feel a certain way, and then later justify the decision with logic. Budweiser's commercial is all about eliciting an emotional response. The psychology behind this marketing strategy is simple: A potential customer will view the "Puppy Love" commercial and have a positive emotional reaction to it, which will inform his or her beer-buying decisions in the future — either subconsciously or consciously."

Alright... you get the point. In order to prompt someone to do something, like buy beer, we have to connect with them on an emotional level. Bad news: while there are tons of articles about how companies emotionally connect their customers with their beer, finding resources – about connecting people with working smoke alarms – is difficult at best. Good news... this article is one of those rare resources.

#### Hit 'em in the "feels"

You want someone in that pre-contemplation stage to suddenly go out and purchase four smoke alarms? You're going to have to find ways to proverbially rip their heart out... go for the gut... make 'em cry... get them laughing... none of which is accomplished by "it's the law" or "your fire department wants you to..."

What we can do, is learn from the best. Your messaging should stick its hand out and squeeze either their heart or their funny bone – or both. Cutsie, wutsie ,adorable children. Puppies. Kittens. Look at that face... look at it!! Use anything cute, cuddly and something that just screams "protect me!" Those are the heart-wretchers, no?

Ever watch a humane society show, (those eyes... those sad, sad eyes peering at you from behind those cage bars) or a show filmed in a third world country pleading, for just pennies a day, to feed this poor, starving child!?



Strike the funny bone with wit, sex, and memes. Use pop culture, especially TV shows, movies and world events. Remember, fire safety is OUR world, not theirs, so we need to weave the two worlds together.

Right now, Game of Thrones, vintage 80s references, Deadpool, Trump jokes and more, make up their world. Epic fail video compilations. Or cat videos. Or epic fail cat video compilations. (Please don't search YouTube for those until you're done reading. You might not come back!).



As you look to change the behavior of people in your community, start with WHY. Why should people care about what you're saying? Why, as a fire department, are you telling them? (Hint: it's because we care that they live).

Connect with them emotionally. Pull them from their Pre-contemplation phase by their heartstrings or funny bone, and then nudge them out of the Contemplation phase by showing them the benefits of changing that behavior.

Once you've dragged them from those first two phases, logic will take it from there and your work is done.

As always... have fun with it!

### About the Author

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