

Dear Ralph and Members of the Elmbrook Rotary Club,

I hope you; your families and friends have been able to remain healthy during the pandemic and for those who fell ill, have recovered with no long-term side effects. I wish all of you a safe and joyous 2021.

I can't thank you all enough for the Business Person of 2020 recognition, Fire Service Education Scholarship in my Name, and your kind words at the award presentation. Serving the Elmbrook community during my career has been extremely rewarding.

I, probably like many of you, have been masking, distancing and looking forward to receiving the vaccine in hopes normalcy is not too far off.

Here are a few Fire Prevention and other fire related items that I have learned over the years that you might not be aware of that I would like to share.

- Smoke Detectors – operation and alarms
 - o False alarms can be triggered by paint fumes, steam from a shower, carpet cleaners and construction dust. If you have a service monitored system, you may want to notify the company if dust producing construction is taking place at your residence.
 - o There are two types of detectors: photoelectric and ionization, or dual sensing. Photoelectric units have a faster response to detecting smoldering fires, while the ionization units have a faster response to detecting flaming fires.
 - o All the information regarding the detectors is printed in the inserts and on the back of the unit, which also shows the date it was manufactured. Both Smoke and CO detectors have a 7-10-year life span. The alarms are usually comprised of a series of beeps that will tell you if the battery is low, the unit is at its end-of-life, etc. Keep the package insert where you can easily access it when a non-smoke detection alarm is sounding.
 - o Please, do not hesitate to call 911 if you do not have a fire or smell smoke when you cannot determine why the detector is alarming. The fire department will check your detecting system, survey the home with meters/thermal imaging and may leave a loaner smoke detector if it is found your meter has failed, needs replacing, or the system needs servicing.
 - o Test your detectors once per month and replace the batteries in older detectors every 6 months, unless 10-year-life batteries are used.
 - o Smoke detectors should be placed just outside of the kitchen to reduce false alarms, on every floor and outside bedrooms.
- CO Detectors – operation and alarms
 - o CO detectors measure carbon monoxide, which is colorless and odorless, in the atmosphere over time. A malfunctioning gas furnace, fireplace, gas stove, gas water heater produce CO, which over time can be extremely dangerous and deadly. Malfunctioning or improperly vented appliances can cause a build-up of CO in your home. A low-level high efficiency gas furnace exhaust pipe maybe become blocked with drifting or a rising snow level in winter impeding the exhaust causing a back-up into your home.
 - o Combination smoke and CO detectors are available, reducing the need to have separate units.

- Please, do not be hesitant to call 911 if you suspect you have a CO leak. The fire department will use special meters to check your home for CO and may leave a loaner meter if it is found your meter has failed and needs replacing.
- Residential Knox Box Program
 - The Knox Box System allows emergency service personnel access to a home when the residents are gone or may not be able to come to the door due to a fall or being bed-ridden. A Residential Knox Box eliminates the need to make a force entry which may cause damage to your home.
 - Brookfield and Elm Grove Fire Departments support this program. A residential secured Knox Box with a home access key is usually mounted on your home for easy access by the emergency services. The keys to access the Knox Box are securely stowed on the emergency apparatus. A special code is used to release the secured key from Knox Box unit. To learn more about this System you can contact your Fire Department or visit WWW.Knox.com or call Knox at 800-552-5669
- Fire extinguishers
 - Over the years, residents have asked how to dispose of old extinguishers. The small units that are available at hardware stores, can be placed in your trash for disposal. It is a good practice to have at least one, easy access, multi-purpose extinguisher per floor of your home. Once per year, turn the extinguisher upside down and back several times to keep the powder inside in a non-packed state.
 - Keep the instructions with your smoke and CO information and review them for use on an annual basis. If you chose to use an extinguisher, start extinguishing at a distance. Applying the agent too close during a grease fire on the stove can splash the grease out of the pan spreading the fire. FYI.... cooking fires are the number one cause of residential fires. With more people staying at home for meals during the pandemic, it is predicted cooking fires and related injuries will be up this year.
- In the event of a Fire
 - It is advised to call 911 after exiting your home. The dispatcher will ask you a series of questions regarding if everyone is out, the location of the fire, how it may have started etc. The more information you can provide the first responders, the more prepared they will be in taking action when they arrive. If possible, when the fire department arrives, please be available to answer any additional questions they may have. This additional information can assist the crews in making good fire attack decisions, providing the best and safest outcome for life safety and property conservation.
 - In recent years it has been found that doors left open provide a vent path for the fire to rapidly grow in size. Fire will double in size every 30-60 seconds. Leaving a door open allows for a faster fire growth, which may lead to rapid fire spread placing occupants and fire crews in danger of a flashover. A flashover occurs when the heat build-up in a room ignites the furnishings and fuel laden smoke, creating temperatures at the ceiling of up to 1400 F degrees and a few feet off the floor of 300 F degrees. A firefighter in protective gear will need to exit the room within approximately 5 seconds to keep from being seriously burned. Please make sure to close doors behind you as you exit the building.
 - Discuss an exit plan with your family to include a meeting place outside the home.

- Types of fires and other emergencies (many of the listed situations below were actual fires or calls we responded to)
 - Leaf or brush burning – when burning leave, brush etc., do not use an accelerant, i.e., gasoline. Depending on the wind, humidity and temperature, gasoline, like LP is heavier than air and the vapors will stay low to the ground with no wind and high humidity. These vapors can saturate your clothes and when the leaf pile is lit, the vapors will ignite, flash on the ground and in or under your clothing depending on the saturation time, causing serious life-threatening burns.
 - Gas and charcoal grills – should not be used under eaves, balconies etc. in case there is a flare-up or broken/leaking fitting or hose on a gas grill. Be careful using a charcoal grill on a wood deck. If the bottom vents are left open after grilling, embers can drop onto the deck and start a fire. An early morning walker reported the fire, the home was saved.
 - Vehicle fires – if you are driving, pull over, exit the vehicle and move far away and out of traffic. Many people have been hit when trying to cross a road or highway. It is extremely hard to judge how fast traffic is moving and what looks like a short distance across the road is not. Also, during a car fire, there are a number of pressurized components that can rupture and become projectiles when exposed to fire.
 - Natural gas leaks – natural gas is odorless and colorless. The natural gas smell is from an added odorant called mercaptan. If the gas pipe leading into your home ruptures at a distance from where it enters your home, the soil can leach the odorant out of the gas, reducing the gas smell if it enters your home along the pipe through cracks in the basement wall entry point. If you suspect a gas leak in your home, and that you cannot shut off quickly, i.e., burner on the stove, leave the home and do not turn any light switches on or off. Natural gas has a lower and upper explosive limit range. If the air to gas mixture is too lean or too rich it will not ignite. If it is in the explosive limit range a small spark caused by a light switch or static electricity can cause a catastrophic event. Several years back, a home in my neighborhood exploded due to a natural gas leak. On my way to the scene, I thought I saw a number of birds flying in the air, which I thought was due to the explosion startling them. What I was witnessing was debris from the home, over 100 ft. in the air, raining down from the sky. Upon arrival, all that was left was a large hole in the ground. The occupant was found deceased in the rubble the next day. Both natural gas and CO are extremely dangerous and need to be respected.
 - Garage/Shed fires – Over the years there have been numerous garage fires caused by the following: remnants of shot off 4th of July fireworks placed in a plastic garbage can, hot lawnmowers, stored rags in a bucket that were used in refinishing furniture with linseed oil, lawnmower batteries being charged, and cars that had been recently serviced.
 - Fast moving water – Water, being non-compressible, has extreme force when flowing. The power of flowing water needs to be respected. Walking or driving through moving water, depending on the speed and depth, can quickly sweep you off your feet and float a vehicle downstream.
 - Candles/fireplace ashes – many of us use candles for special occasions, i.e., the holidays or for everyday use. Over the years we have responded to numerous fires, large and

small from candles that were left burning unattended. Cold ashes from the fireplace and luminaries should be placed outside in a metal covered container to make sure everything has been extinguished. Using plastic containers with hot ashes, placed in a garage, can melt and ignite causing a full-blown garage fire.

- Power outages – many times a power outage is due to downed powerlines. Depending on the type of line the voltage can vary. If you see a downed line, stay a far distance away. When energized, a line can spark, arc and jump around. A line can move/jump up to one half the distance from the two poles it was attached to. You may identify that the line down is a cable line. Cable lines are not high voltage, but, if someplace up line it is in contact with a powerline, it could be energized and extremely dangerous. Sometimes a cable line connected to your home could become energized if a powerline is resting on it, causing a potential feed of power to your home through the cable causing a fire where the cable enters your home. The fire department has several voltage meters that are used to locate and identify downed live powerlines. Prior to having these meters, on a rainy night, I was investigating and searching for downed power lines. As the engine approached me at night in pouring rain, I directed the engine to a location to park. In doing so, I did not see the power line across the road at head height behind me. Luckily, the Officer on the engine saw the line and told me to stop backing up.
- Train derailments – the Village has had two major train derailments over the years. In the event of a derailment the Dispatch Center has the ability to mass-call residents with a reverse 911 type program within a designated area to advise them of the incident and to either evacuate or shelter in place. During a freight train derailment, tank cars may develop a leak. Depending on the product carried, a plume of non-visible gas may be released. During the latest derailment, a couple of our firefighters were exposed to a released gas and had to be hospitalized. Luckily, the product did not cause and permanent damage or chronic health issues.
- Lightning strikes – lightning strikes can hit structures, trees, power poles etc. When striking a home, it may hit the chimney or roof ridge. Call 911 if this occurs even though you may not see any smoke or flames outside or in the attic. A strike may energize electrical conduit or other metal objects under the attic insulation in contact with a combustible or wood structural member, which may smolder for some time before being detected and becoming an attic fire. A strike to the power pole that provides power to your home may energize the entry point to the house or electrical panel in the basement.

As mentioned, I hope you and your loved ones are well and have a safe enjoyable 2021.

Thank you for your recognition....I am truly honored. The attached photo shows the plaque presented to me prominently displayed with my fire service memorabilia.

Bill