Homes Burn Faster than Ever

A flashover is the nearly simultaneous ignition of most of the directly exposed combustible material in an enclosed area. When certain organic materials are heated, they undergo thermal decomposition and release flammable gases. Flashover occurs when the majority of the exposed surfaces in a space are heated to their autoignition temperature and emit flammable gases.

According to the National Institute of Standards and Technology, a house fire today can become uncontrollable (reach flashover) in less than three minutes. In 1975, a home fire would burn an average of 17 minutes before reaching flashover. Room temperatures at flashover are in excess of 1,000°F. Let’s put this into perspective. At 162°F -- human skin is instantly destroyed.

The reason that homes burn faster can be attributed to several factors:

- Upholstered furniture contains flammable polyurethane foam.
- Newer homes tend to have a more “open” floor plan - allowing fire to spread room to room rapidly.
- TVs, computers, toys and a range of household goods made with plastics burn twice as fast as fast as wood.

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- Fire prevention is the best means to ensure that your home is protected from fire.
- Unattended cooking is the leading cause of home fires.
- Most fire fatalities are a result of the improper use of smoking materials.
- Poor housekeeping contributes to the spread of fire.
- Smoke detectors will not prevent a fire. Smoke detectors will provide early detection in order to escape.
- Smoke detectors should be cleaned and maintained on an annual basis. Smoke detectors should be replaced every 10 years.

Signal Hill Fire Department 2011 Activities

Signal Hill Volunteer Firefighters responded to 137 emergency incidents in 2011 - a decrease of 11.5% from 2010.

Emergency responses were categorized:

- Fires.........................21%
- Good Intent ..................28%
- False Alarms..................20%
- Hazardous Conditions.....19%
- Rescue.........................6%
- Service Calls...............7%

Volunteer firefighters spent 2360 hours on drills/training and 1140 hours on emergency responses. Using the Independent Sector national average of $21.36 per hour, the 3500 hours contributed by your volunteer first responders is valued at $74,760.

There were six structure fires in the fire district in 2011. The total value of these structures is $2,129,000. The dollar value saved versus the loss shows that damages were limited to only 11% of the value. Early detection, emergency services notification and quick professional actions by volunteer firefighters often limits the property damage.

59% of all responses were to residential occupancies. 33% were outside properties with businesses, manufacturing, educational and public assembly making up the balance of the responses.

Over the past several years, Signal Hill has responded to assist drivers who have driven into flooded roadways. Unfortunately, urban flooding is becoming more frequent in our area. It takes less than 18 inches of water to make a vehicle buoyant and trap occupants.

Many people think that their 3000 pound vehicle will stay in contact with the roadway and won’t float. Think about this - an aircraft carrier weighs 97,000 tons and it floats.
At its Annual Appreciation Dinner on March 3, the Signal Hill volunteer firefighters and associate members were recognized for their dedication and service to improve the quality of life in our community.

Firefighter Mark Bagby earned certification in Confined Space Rescue Operations, Rescue Specialist - Confined Space and Fire Service Instructor I. Mark also has been assigned additional Departmental responsibilities to assist with firefighter educational opportunities and training drills.

Firefighter Ann Ellis earned her Emergency Medical Technician - Basic.

Firefighter Jace Wilderman earned Hazardous Materials Operations certification. Jace was also promoted to Duty Team Captain on January 1st.

Years of Service Pins were presented to:

- Associate Member Lee Ann Bassler: 1 year
- Volunteer Firefighter Kevin Downard: 1 year
- Volunteer Firefighter Gabriel Toennies: 1 year
- Trustee Garret Hoerner: 1 year
- Associate Member Pat Griffin: 5 years
- Associate Member Stephanie Griffin: 5 years
- Volunteer Firefighter Darrell Papproth: 5 years
- Volunteer Fire Captain Jace Wilderman: 10 years
- Associate Member Stan Van Sant: 15 years
- Associate Member Scott Lougeay: 25 years
- Fire Chief Greg Render: 40 years

Welcome New Member - Volunteer Firefighter Joe Sustar

Firefighter Michelle “Shelley” Hudson was recognized as the Department’s 2011 Firefighter of the Year. A volunteer firefighter since 2007. She is a Certified as a CPR/AED provider, Firefighter II, Hazardous Materials Awareness, Tech Rescue Awareness, Fire Apparatus Engineer, and Fire Service Vehicle Operator. She is a Registered Nurse and holds a Bachelors of Science in Health Arts.

Shelley remarked, “I am truly blessed to be a part of the Signal Hill Fire Department. It is a honor to work side-by-side with a group of people who continually give of their time and talents, even when life provides adversity in their own lives. I am humbled by this recognition, for the work brings me great joy. I say thank you to my colleagues in the Department for this honor.”

Individuals recognized as Firefighter of the Year possess a variety of qualities and attributes, such as family, safety, dedication, commitment and a desire to serve others. If you are a firefighter, no explanation is needed to understand the pride and honor we feel about who we are and what we stand for.
On January 29 - Signal Hill assisted the Northwest Fire Department on an attic fire. The fire appears to have been caused by a piece of plywood placed on top of the ceiling joists in the attic that was being used as a platform for additional household storage. The plywood was sitting directly on the electrical wiring, which ran over the top of the joist. Over time, the weight of the plywood (and the storage of items) and the natural vibrations that occur in a home, damaged the wiring causing it to overheat, igniting wood structural members and the contents of the attic.

Adequate clearance should be provided around all wiring. Never run extension cords or wiring under carpets, furniture, or floor runners. Exposed wiring in structural areas should be protected from damage.

If you are ever in doubt about your home wiring, have a licensed electrician inspect your home.

October 2011 - Signal Hill Volunteer Firefighters refine their skills with flammable gas fires. This training exercise was conducted in cooperation with the Illinois Fire Service Institute, Thompson Gas, Inc. and the Missionary Oblates of Mary Immaculate. Northwest, Villa Hills and Fairview also participated in the training.

The training prop is fueled by propane gas. Teams of firefighter were required to use two 1.75” hose lines to approach the fire and simulate turning a valve and thus shutting off the fuel flow. Another team of firefighters stood-by with a larger 2.50” hose line as a backup/safety line.

Prior to the “hands-on” portion of the training exercise, firefighters attended an educational session to discuss dangers associated with flammable gas fires and the tactics required to control them.

While flammable gas fires do not occur on a regular basis, the possibility of this type of incident presents many hazardous to first responders.

It is through specialized education and training, such as this drill that prepares your volunteer firefighters to respond safely to these types of incidents.

Nearly 500 gallons of propane were consumed. The Illinois Propane Gas Association provided an in-kind donation of the propane gas that were used in this drill.
Spring is arriving!
Here are some tips that will keep your family and home safe this season.

Clear leaves, debris and other yard waste from around the home, garage and storage shed. Dispose of it in an environmentally safe manner.

Have a qualified professional perform proper maintenance on lawn equipment such as mowers, trimmers and leaf blowers.

Responsibly store flammable liquids and home chemicals; properly discard old containers of paint and solvents.

Fuels for lawn and garden equipment, tools and vehicles should be stored in approved containers.

Check for frayed or damaged electrical cords and wires, and have them repaired by a qualified professional.

Air conditioning units and outdoor electrical receptacles should be checked.

Barbeque gas grills, including gas hoses, gas grill lines, and propane tanks, should be inspected prior to use.

Remove any combustibles from around water heaters, clothes dryers & vents, and any heating equipment.

Remove any lint buildup from clothes dryers and vent duct.

Take stacks of newspapers and magazines to recycling centers.

Get rid of oily rags and cloths used to wipe up spills of flammable liquids.

Clean up work areas by putting away dangerous tools, adhesives, matches and other items that should not be accessible to children.

Windows should be checked to make sure they open and close properly, in case they are needed as exits.

Review your family’s Fire Escape Plan.

Smoke detector and carbon monoxide alarm batteries should be checked and replaced.

Smoke detectors older than 10 years should be replaced.

Make sure that your address numbers are clearly visible to first responders from the street.

Fire Safety Begins with You!
In addition to Joplin, tornadoes also caused destruction in Alabama and other locations (including St. Louis County on Good Friday) in the spring of 2011. Already in 2012, several tornado warnings were issued right here in Belleville. As *Hot Flashes* is going to press, tornadoes have struck Harrisburg, Il, Indiana and Kentucky.

Why did so many people die in Joplin, Tuscaloosa, and other locales? The National Weather Service, the National Oceanic and Atmospheric Administration, the Federal Emergency Management Agency and others have concluded that many more could have survived had they taken appropriate actions when tornado warnings were issued.  (In Joplin, tornado warnings were issued over 20 minutes prior to the storm striking.)

Weather forecasters have achieved considerable accuracy with the ability to predict where and when severe weather can strike. The Signal Hill Fire Department encourages you and your family to heed the warnings.

Knowing how to prepare and react when severe thunderstorms or tornadoes strike can literally make the difference between life and death for you and your family. Investing in a WEATHER RADIO (available at most electronic stores) or having your cell phone enabled to receive weather alerts can keep you up to date regarding warnings or watches that have been issued by the National Weather Service.

**Tornado WATCHES** indicate that weather elements are developing that may result in the formation of a tornado. Listen to radio or watch television broadcasts to track storms in or near St. Clair County. Doppler radar links via the internet, on smart phones or home computers can also be used to follow a storm’s path. Be prepared to move quickly.

**Tornado WARNINGS** mean a tornado has been sighted or indicated by weather radar. *Immediate actions* should be taken - move to a safe refuge. Take a portable radio, flashlight and your home family safety supplies with you.

**Outdoor Warning Sirens** are activated by the St. Clair County Emergency Management Agency based upon **WARNINGS** issued by the National Weather Service. Sirens will sound for 3 minutes.

The Signal Hill Fire Department owns and maintains three outdoor warning sirens within the Fire Protection District. Sirens are scheduled to be tested on the first Tuesday of each month at 10:00 a.m.


The 2011 Joplin tornado was a catastrophic EF5 multiple-vortex tornado that struck Joplin, Missouri in the late afternoon on Sunday, May 22, 2011. It was part of a larger late-May tornado outbreak sequence and reached a maximum width of in excess of 1 mile during its path through the southern part of the city. As of December 2011, the official death toll from the tornado is 160 deaths directly linked to the tornado, including two people who died from injuries in September. The toll was up to 161 in September, until it was discovered that one added later died of other causes. 990 people were injured.
This job is hot.

Think you can stand the heat?

Join the Signal Hill Fire Department
Since 1989 the Signal Hill Volunteer Firefighters have been hosting their RIBS & RAFFLE DAY. This is the Volunteer Firefighters only annual fundraising event.

By supporting Ribs & Raffle Day, you are helping the women and men who are your first responders. On call 24 hours a day, 7 days a week, your volunteer firefighters are working hard to educate and inform you about the perils of a hostile fire. In addition to public education, your volunteer firefighters train to respond to a variety of incidents. Regardless of the type of emergency, your volunteer firefighters will be there for you!

The 2012 RIBS & RAFFLE DAY will be held on June 24th. Watch your mailbox