



PREVENTION

Highlights

Safety Through Prevention

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PREVENTION Highlights

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Our Mission

The Office of the State Fire Marshal (OSFM) is dedicated to protecting lives and property from the hazards of fire or explosion and will promote prevention, educational and investigative activities to mitigate incidents, promote life safety and deter crimes.

The Fire Prevention Division

The goal of the Fire Prevention Division is to reduce the potential impact of fire and explosion hazards where people live, work and congregate (other than one- or two-family dwellings) through code enforcement, inspections, plans review, licensing, and public education.

Prevention Highlights

Prevention Highlights is published quarterly to provide facility managers and others with information necessary to operate fire-safe facilities.

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Connect with us!



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Edu-Note

by John



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What a year it has been, again.

The hope for a better 2021, after a rough 2020 for many, did not seem to come through. As we begin the New Year, we saw outbreaks of COVID-19 infections, but inspections of all facilities continue here at the Office of the State Fire Marshal.

The importance of fire safety was hammered home just before the new year as fires in apartment complexes in New York City and Philadelphia led to deadly results as fire protection systems failed. There was also a deadly house fire in Topeka during the holiday season. We urge those in apartment complexes with faulty fire alarms or fire suppression systems to file a complaint with our office so we can work on getting an inspector on site and get the facility on the path to correct the issue. It could save lives.

In this edition of Prevention Highlights we have a look at the temporary use of boilers, a historical fire at a nursing home, NFPA gives us tips on "Pet Fire Safety," and the Kansas Legislature is considering several bills that are focused on fire safety.

It has been great to get in contact with groups and give presentations across the state. The presentations have been mostly virtual. It has been great to spread vital information and helping explaining codes that can be tough to completely understand. Often just the language in the code is not enough. Sometimes the example of what a facility is wanting to do can help us determine which code fits the situation.

We hope your family had a great holiday season and are staying warm across the winter landscape. Pay attention to high wind warnings as we may have some warmer days when an outdoor fire might be nice. We just wish you and your family stay safe for any activities you may get into over the winter.

If you have any questions, or if you would like to set up a presentation, please feel free to send me an email at john.sprague@ks.gov.

-John Sprague, Fire Prevention Education Consultant

Welcome to OSFM Prevention...



Karen Chmidling

The Office of the State Fire Marshal is pleased to welcome several new employees to our Prevention Division.

Karen Chmidling is a Fire Prevention Inspector in Topeka. She comes to the OSFM from the Metropolitan Topeka Airport Authority, where she worked as a firefighter, police officer, EMT, HazMat specialist, and aircraft crash rescue firefighter. She brings over 18

years of public service experience to the OSFM.

Karen lives in Topeka with her min-pin/beagle/chihuahua mix, Molly. She enjoys singing and traveling.

"I truly love public service," Karen said. "I came to the Fire Marshal's Office to remain in the fire service and to do my part in helping maintain a safe environment for the citizens of my community."



Amanda Yorkey

Amanda Yorkey returns to OSFM as a Fire Prevention Inspector for Douglas, Franklin and Miami counties. She comes to OSFM from the Seaman School District, where she worked as a special education para-educator for the past five years. She previously worked for OSFM and brings seven years of experience to the Prevention Division.

Amanda lives in Topeka with her husband, two sons, 2 cats and a dog. She enjoys anything related to fitness.

"I left OSFM in 2011 in order to raise my children," Amanda said. "However, I always felt like I had left a big part of who I was behind. It feels really good to have this opportunity to return to something that I truly felt passionate about. And I believe this is a great opportunity for me."



Welcome to OSFM Prevention...



Jarod Gilmore

Jarod Gilmore joins us as a Fire Prevention Inspector for Territory 3, which includes Rush, Barton, Pawnee, Stafford, Edwards, Kiowa, Pratt, Barber, Comanche and Clark counties. He comes to OSFM from the Pratt Police Department. He has over 15 years of experience as a law enforcement officer, firefighter and EMT.

Jarod and his wife live in Pratt with their two daughters, Blakely and Charlotte, and their cat, Molly. He enjoys spending time with his family, hunting, fishing and shooting.

"Fire service has always been one of my biggest passions," he said. "I have experienced multiple traumatic events in my years of emergency services that have given me a major outlook for the safety of human life. The OSFM is an amazing agency with great people and will give me and my family multiple opportunities to move forward. I am looking forward to an extensive career here and continuing my fire knowledge and skills."



Harlan Smith

Harlan Smith will serve as a Fire Prevention Inspector for Lyon, Chase, Greenwood, Wabaunsee, Cowley, Butler, Elk and Chautauqua counties. He comes to OSFM after 18 years of working as a firefighter/AEMT.

Harlan (or Smitty, as friends call him) and his wife, Becky, live in Emporia with their two cats, George and Moose. They have a daughter, Talia, and a son,

Garrison. He enjoys bicycling and disc golf in his spare time.

"I've always heard great things about the OSFM," he said. "So, when it was time for me to make a career change, this was one of the first places I looked. I'm excited and looking forward to getting started!"



Joshua Webb

Joshua Webb joins OSFM as a Fire Prevention Inspector for Ellsworth, Russell, Ellis, Jewell, Smith, Phillips, Rooks, Osbourne, Mitchell and Lincoln counties. He has over six years of experience and most recently worked for ONEOK.

Josh and his wife, Amanda, live in Ellsworth with their son, Remy, and daughter, Brooke. They have 78 black angus and "grass puppies," Hereford and Charolais. In his spare time, he enjoys fishing, traveling, camping and riding his motorcycle.

"This agency looked like an interesting place to continue my career in public service," he said. "I like the small agency environment, as opposed to the larger corporate environment. I also hope to better the state for my children in any way I can."



Matthew Keenan

Matthew Keenan joins OSFM as a Fire Prevention Inspector for Johnson County. He has served in the United States Air Force for over 14 years as a firefighter.

Matt currently lives in Louisburg with his wife, Stephanie and two children, Jaxon and Lillian. He enjoys outdoor activities with his family and bike riding when he is not working. He is planning a move to

Johnson County in the near future.

"I wanted to get into a position still related to the fire service," he said. "I also want to be able to serve the community I live in."

Welcome, Karen, Amanda, Jarod, Harlan, Joshua and Matthew!



For a list of OSFM current job openings visit
[https://firemarshal.ks.gov/](https://firemarshal.ks.gov/Jobs.aspx)
[Jobs.aspx](https://firemarshal.ks.gov/Jobs.aspx)



Kansas Legislature Considering Bills Focused on Fire Safety for 2022

The Kansas Legislature is considering several bills that would affect operations for the Office of the State Fire Marshal.

One such piece of legislation is House Bill No. 2005, also known as the Boiler Safety Act. This bill would repeal and replace KSA 44-915, an act explaining what specific features of boilers and conditions make certain boilers and pressure vessels exempt from the laws that govern them in Kansas.

The major changes are language as in several locations where “which” is replaced by “that,” and some of the language is removed to make the passages more concise.

The new bill also removes the lower limit of 85 gallons in language that says, “85 gallons or 120 gallons for an electrical utility generating plant,” leaving only those boilers with a capacity up to 120 gallons exempt in the law.

The law stays intact other than the changes mentioned above.

Senate Bill No. 181, Elevator Safety Act

The Committee on Federal and State Affairs, in the Kansas House, has recommended passage and has amended the bill, passed by the Kansas Senate in the 2021 session. This would establish a need for elevator inspections on a state level. They are currently mandated by local jurisdictions.

This act would codify the law and establish the need for the Office of the State Fire Marshal to take a hand in elevator inspections and licensing. The bill allows for local jurisdictions to have more restrictive laws and maintain the inspections and licensing.

In the first part the bill defines what will be considered an elevator. It also establishes a board to oversee the elevators across the state. The bill also states the liability that all parties involved in elevators may face.

If passed, the bill would require elevators put into service on or after Jan. 1, 2023, to be licensed by the State of Kansas through the State Fire Marshal’s Office.

The proposed legislation also mandates the state fire marshal to adopt rules and regulations to implement and enforce the provisions by Jan. 1, 2023. Also, the elevator safety fee fund shall be administered by the state fire marshal.

The legislation was passed by the Senate, 32-7, during the 2021 session.

For more information on these bills, or any other legislation in the current sessions you can visit the legislative website at <http://kslegislature.org/li/>



Inspecting Temporary Boilers

A question was posed to one of our inspectors about temporary use of a boiler. Do boilers still need to be inspected if they are temporary?

When our office is notified about a temporary boiler, it is evaluated on a case-by-case basis. If the statutes and regulations are met, we will conduct an inspection and issue operating certificates, provided that any code violations identified have been corrected, and the inspection invoice is paid.

Kansas Administration Regulation (KAR) 49-50-15 can be confusing. OSFM classifies rental or temporary boilers as used or secondhand boilers. The regulation states *the boilers shall be subject to inspection by the chief inspector or deputy inspector and shall meet current safety codes.*

KAR 49-50-12 governs the re-installation of boilers and states *boilers moved/reinstalled shall be brought up to current code and shall be subject to certificates upon re-installation.*

KAR 44-923 (d) allows the inspector to decide if the boiler will or will not need a pressure test. If the inspector decides the boiler needs to have a pressure test to ensure tightness of tubes and assess possible leaks, *the inspection and test shall be done by its owner or user.*

This same Regulation also gives a 60-day grace period for boilers to be inspected. The 60-day grace period conflicts with **KAR 49-50-12** and **KAR 49-50-15** which state *that used, secondhand, or reinstalled boilers shall be subject to immediate certification inspection upon re-installation.* Since temporary boilers are generally installed for periods not exceeding 60 days, our office would not issue certificates of operation. However, if there is any question of mechanical integrity, we can perform an inspection if requested or deemed necessary.

It has been the practice of OSFM inspectors to request internal inspections with proof of hydrostatic tests on any used, secondhand, rental, or temporary boiler. Utilizing these measures may help to avoid catastrophic failures.

If you have any questions regarding temporary boilers, and whether they need to be inspected please email Boiler.Inspection@ks.gov.

Boiler Safety Units: Kansas Administrative Regulations

KSA 44-923 Inspections

- (a) The state fire marshal, the chief inspector or any deputy inspector shall have free access, during reasonable hours, to any premises in the state where boilers and pressure vessels are being operated, repaired, installed or constructed for use in this state, for the purpose of ascertaining whether boilers or pressure vessels have been constructed and installed in accordance with the provisions of this act and the rules and regulations adopted hereunder.
- (b) Each boiler used or proposed to be used within this state, except for boilers exempt under **KSA 44-915**, and amendments thereto, shall be thoroughly inspected as to construction, installation and condition as follows:
 - (1) Power boilers and high pressure, high temperature water boilers shall receive an annual certificate inspection which shall be an internal inspection, where construction permits, or as complete an inspection as possible, where construction does not permit internal inspection. Such boilers shall also be externally inspected while under pressure.
 - (2) All other boilers subject to this section shall receive an annual certificate inspection, with an internal inspection at the discretion of the inspector.
 - (3) A grace period of two months beyond the periods specified in paragraphs (1), (2) and (3) of this subsection may elapse between certificate inspections.
- (c) The inspections herein required shall be made by the chief inspector, by a deputy inspector or by a special inspector provided for in this act.
- (d) If, at the discretion of the inspector, a pressure test shall be deemed necessary, it shall be made by the owner or user of the boiler.



Boiler Safety Units: Kansas Administrative Regulations

KAR 49-50-6 Hydrostatic Pressure Tests and Inspection

(a) When there is doubt as to the extent of a defect or deterioration found in a pressure vessel, a pressure test may be required by the inspector. A pressure test shall not be required as part of a normal periodic inspection. A test shall be required when either of the following conditions is met:

- (1) Forms of deterioration are found that could affect the safety of a vessel,
- (2) Major repairs have been completed

KAR 49-50-9 Notification of Inspection Requirements

(a) A certificate inspection shall be carried out before the expiration date of the certificate. Each owner or user shall ensure that the boiler or pressure vessel is inspected on or before the date on which the inspection is due. Internal certificate inspections shall be scheduled in advance by the inspector. External inspections may be performed by the inspector during normal business hours without prior notification to the owner or user.

(b) An internal inspection, appropriate pressure test, or both may be requested by the inspector when an external inspection or determination by other objective means indicates that continued operation of the boiler constitutes a menace to public safety. In these instances, the owner or user shall prepare the boiler for the inspections, tests, or both as the inspector designates.

(c) All boilers and pressure vessels that are not exempted by the act and that are subject to regular inspections shall be prepared for inspection as required in subsection (d).

(d) The owner or user shall prepare each boiler for inspection. The owner or user shall prepare for and apply a hydrostatic pressure test on the date arranged by the inspector. The date shall not be fewer than seven days after the date of notification. The owner or user shall prepare a boiler for internal inspection in the following manner:

- (1) Water shall be drawn off, and the boiler shall be washed thoroughly.
- (2) The manhole and hand-hole plates, washout plugs, and inspection plugs in water column connections shall be removed as required by the inspector. The furnace and combustion chambers shall be cooled and thoroughly cleaned.
- (3) All grates of internally fired boilers shall be removed.
- (4) The insulation or brickwork shall be removed as required by the inspector in order to determine the condition of the boiler, headers, furnace, supports, or other parts.
- (5) The pressure gauge shall be removed for testing, as required by the inspector.
- (6) The leakage of steam or hot water into the boiler shall be prevented by disconnecting the pipe or

valve at the most convenient point or by any other appropriate means approved by the inspector.

(7) The non-return and steam stop valves shall be closed, tagged, and preferably padlocked, and the valves drained or the cocks between the two valves opened. Before opening the manhole or hand-hole covers and entering any part of the steam-generating unit connected to a common header with other boilers, the feed valves shall be closed, tagged, and preferably padlocked, and the valves drained or the cocks located between the two valves opened. After draining the boiler, the blow-off valves shall be closed, tagged and preferably padlocked. Blow-off lines, where practicable, shall be disconnected between pressure parts and valves. All drains and vent lines shall be opened.

(e) If a boiler has not been properly prepared for an internal inspection or if the owner or user has failed to comply with the requirements for a pressure test as specified in these regulations, the inspection or test may be postponed, and the inspection certificate shall be withheld or the right to operate revoked until the owner or user complies with the requirements.

(f) If the boiler is jacketed so that the longitudinal seams of shells, drums, or domes cannot be seen, sufficient jacketing, setting wall, or other form of casting or housing shall be removed to permit reasonable inspection of the seams and other areas necessary to determine the condition and safety of the boiler, if this information cannot be determined by other means.

(g) If a lap seam crack is discovered along a longitudinal riveted joint in the shell or drum of a boiler, the use of that shell or drum shall be immediately discontinued. Patching shall be prohibited.

(h) All lock-out, tag-out, and confined space entry procedures shall be observed.

KAR 49-50-12 Reinstalled Boiler or Pressure Vessel

When a stationary boiler or pressure vessel is moved and reinstalled, it shall be brought up to code and shall be subject to immediate certification inspection upon re-installation. The owner, user, or installer shall notify the chief inspector of the re-installation. However, a pressure vessel shall not require inspection if moved to a different location or reinstalled by the same owner.

KAR 49-50-15 Installation of Used or Secondhand Boilers or Pressure Vessels

A used or secondhand boiler or pressure vessel may be shipped for installation in this state only following an inspection by an inspector qualified by an examination equal to that required by this state or by an inspector holding a national board commission, at the location where originally installed. Data submitted by the inspector shall be filed by the owner, user, or installer of the boiler with the chief inspector of this state for the chief inspector's approval. The boilers or pressure vessels, when installed in the state, shall be subject to inspection by the chief inspector or deputy inspector and shall meet current safety codes as set forth in these regulations.





Since 2014, the Office of the State Fire Marshal has been providing free smoke alarms to Kansas fire departments participating in our **Get Alarmed Kansas** program.

Our Goal: All Kansans protected by working smoke alarms in their homes

Simple Steps Toward a Safer Kansas

1.
 - A. **Kansas residents**, contact your local Kansas fire department to find out how to obtain free smoke/carbon monoxide combo alarms and have them installed in your home.
 - B. It varies by department how to proceed. Some departments will arrange the installation by phone, email or an online form. Some departments may not be a regular participant in the program but may be able to fill your specific request.

2.
 - A. Any Kansas homeowner is eligible to receive a smoke alarm at **no cost**, if they have **NO** alarm present, **NO** working alarm or have a smoke alarm with a manufacturing date that is **10 years old** or older.
 - B. Renters or landlords are not eligible (landlords are required by Kansas statute to provide working smoke alarms for their tenants). ***An exception to this rule is for Kansans who are deaf or hard-of-hearing requesting specialized alarms.*** To locate the order form for these alarms, visit www.GetAlarmedKS.org under the “For Homeowners” section or “For Renters” section.

3.
 - A. The fire department will make arrangements to deliver and install the smoke alarms at the resident’s home.
 - B. Together, the installer and resident will complete the required Installation Form, which the fire department will provide. Installers will test the smoke alarm to ensure it is functioning properly.



Proper Installation of Patio Grills

Although there seems to be plenty of cold weather left in this winter, hopefully, it won't be too long before we can get outside to fire up those grills for a good home-cooked meal.

For many, grilling can be a key part of their identity and fun family activities.

We urge you to watch for high-wind warnings as the season changes from winter to spring and can bring potentially dangerous winds.

Recently, in Lenexa, there was an issue with an outdoor patio area with a built-in grill that was wired improperly and caused a fire. Investigation of the incident revealed that the contractor did not follow the installation instructions.

If you have a grill installed, make sure it is done by a licensed plumber or electrician and that all manufacturer's instructions are followed.

Be safe and make some great memories, and good food, for your family and friends this upcoming grilling season.



Visit GetAlarmedKS.org
to learn about our *FREE*
Smoke Alarm
Installation Program

Smoke alarms available:

- Smoke & CO combination alarms
- Smoke alarm devices for residents who are deaf or hard-of-hearing



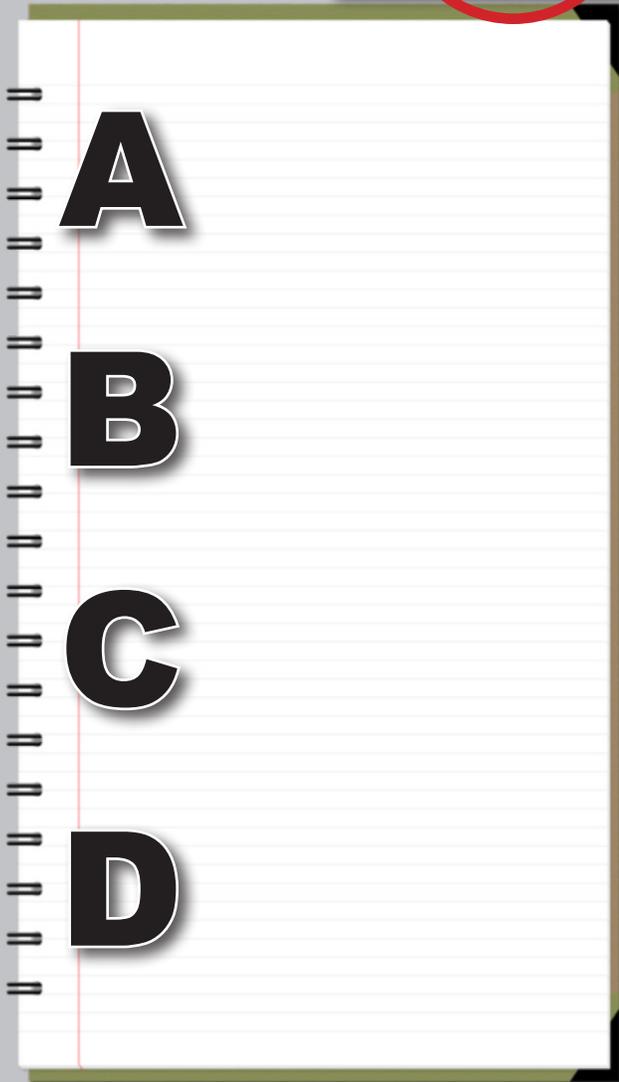
SPOT the violations



A



B



C



D



Answers on Page 11



Historical Fires...

Golden Age Nursing Home November 23, 1963

Even though the Life Safety Code had been created 50 years prior, a lack of, or failure to comply with, several basic safety requirements led to disastrous results at the Golden Age Nursing Home in Fitchville, Ohio on Nov. 23, 1963.

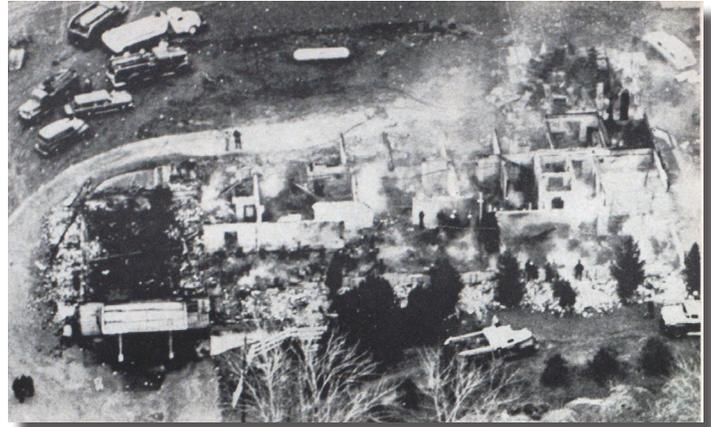
The Golden Age Nursing Home was a rambling building with several additions and alterations of both the building and its electrical system, none of which had been through any sort of approval process. The building originally had been a factory and was converted to a nursing home in 1953. There was no sprinkler or fire detection system, nor any local manual alarms. Much of the construction and interior finish were combustible materials and windows were three-pane awning-type and were about 4 feet above floor level. After encountering burned out switches, smoking fuse boxes and blown fuses, employees had warned the building owners that there were electrical issues. The building was also located in a rural area with no water source, since a reservoir that had originally been excavated in front of the building for fire fighting had been filled in for resident safety reasons.



In the early morning hours of Nov. 23, staff plugged in kitchen equipment to begin breakfast preparations. They reported hearing popping and crackling noises in the ceiling, that sounded like heavy electrical shorting. A nurse's aid heard the noises in the lobby and noticed a

light outside. When she stepped outside to investigate, she found the roof above the electrical service entrance on fire. Investigation later found that the electrical shorting had caused several small fires which converged into one large fire.

An attempt to call emergency services was made, but the fire, fanned by 35-mph winds, had spread through the attic, destroying the phone lines. Passing motorists stopped to offer assistance, with one driving to the nearest house to call the fire department, and the remainder attempting to rescue residents and fight the fire with the three facility fire extinguishers. Rescue efforts were hampered by a lack of emergency lighting and any type of emergency plan. By the time the first fire fighters arrived, the fire had been burning for 25 minutes, and entry into the building was impossible. The tar on the roof had begun boiling and was falling onto the ground near rescuers. Only 21 residents could be



Aerial view of the aftermath of the November 23, 1963 fire at the Golden Age Nursing Home in Fitchville, Ohio.

evacuated from the building before the building became structurally unsafe.

Many of the residents suffered from dementia and did not fully understand the dire nature of the fire. They became confused and ran to their beds instead of out of the building. Some residents were found still restrained to the burned beds in the horrific post fire scene. Others had been trapped in wheelchairs that were too wide to fit through the doorways. In all, 63 residents perished in the fire.

Because of the appalling loss of life, Ohio Governor James A. Rhodes directed that a more intensive than usual investigation be conducted under the control of the State Fire Marshal. The investigation required more than 3,300 man-hours. A total of 100 persons were questioned, including 39 fire fighters and police officers. Findings underlined the fact that the existence of a documented evacuation plan and familiarity with the plan by aides on duty would have saved more lives.

Examination of wiring at the nursing home and main fuse box disclosed evidence of shorting or an overload, and that the 220-volt line experienced extensive electrical arcing throughout the building, particularly in the junction boxes. Copper and brass contacts in the 220-volt boxes were melted and fused together, and individual conductors had disintegrated.

It is tragic events like Golden Age that have spurred changes in the fire code, resulting in better protection for all. One of the key lessons from this horrific fire was that thorough inspections and adherence to established fire and electrical codes are critical to keeping people safe. Also, sprinklers, fire alarms and a well-executed emergency plan are vital for the safety the vulnerable populations of nursing homes.

Answers to Spot the Violations (page 10)

A. STRIKE PLATE COVERED SO FIRE DOOR CANNOT LATCH. B. WIRE RUNNING THROUGH WALL AND INTO STAIRS. C. OUT OF DATE FUSE BOXES; D. IMPROPER PROPANE CABINET





Pets give us comfort, friendship, and unconditional love. Our connection to them can be among the strongest relationships in our lives. But pets can cause fires. We need to be careful with pets in the home.

SAFETY TIPS

- Pets are curious. They may bump into, turn on, or knock over cooking equipment. Keep pets away from stoves and countertops.
- Keep pets away from candles, lamps, and space heaters.
- Always use a metal or heat-tempered glass screen on a fireplace and keep it in place.
- Keep pets away from a chimney's outside vents. Have a "pet-free zone" of at least 3 feet (1 meter) away from the fireplace. Glass doors and screens can stay dangerously hot for several hours after the fire goes out.
- Consider battery-operated, flameless candles. They can look and smell like real candles.
- Some pets are chewers. Watch pets to make sure they don't chew through electrical cords. Have any problems checked by a professional.

SMOKE ALARMS

- Have working smoke alarms on every level of the home. Test your smoke alarms at least once a month.
- If the smoke alarm sounds, get out and stay out.
- Never go back inside for pets in a fire. Tell firefighters if your pet is trapped.

Pets and Wildfires

Make sure pets are included in your family's wildfire evacuation plan. Build an evacuation kit for each pet in your household. Ensure each kit is a size and weight that can be quickly and easily loaded into a vehicle when packing to evacuate.



FACT

Pets or wild animals have a part in starting about 750 home fires per year. These involve cooking equipment, fireplaces and chimneys, space heaters, lamps, bulbs, wiring, and candles.



NATIONAL FIRE PROTECTION ASSOCIATION

The leading information and knowledge resource on fire, electrical and related hazards

