



# Smoke Alarm Messages for Fire Safety Professionals

## GENERAL CONSUMER MESSAGES

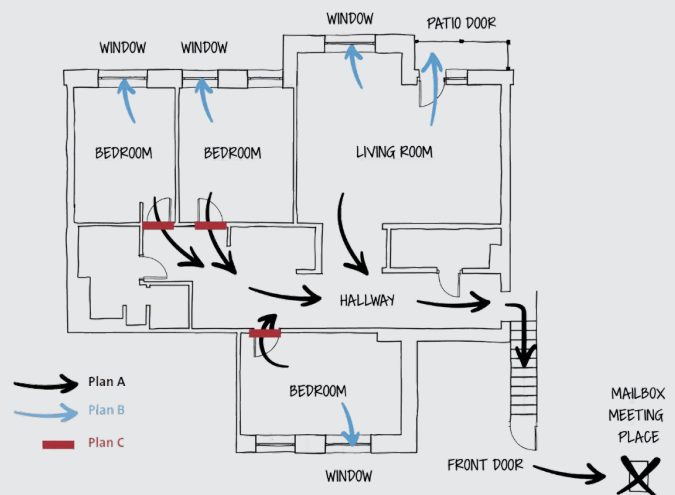
### Having working smoke alarms can save your life.

Working smoke alarms in your home are as important as wearing a seatbelt in your car. It's a necessity that protects you and your loved ones.

- Check your smoke alarms monthly. Press the test button to be sure the alarm is working.
  - Do not disable smoke alarms. In 46% of home fires in which a smoke alarm was present, but did not operate, the smoke alarm had missing or disconnected batteries. (Source: NFPA)
  - The National Fire Protection Association (NFPA) and Consumer Protection Safety Commission (CPSC) cite cooking nuisance alarms as the leading reason for a smoke alarm to be disabled.
- Install smoke alarms on every level of the home, in every sleeping room and outside each separate sleeping area.
  - It's important to install smoke alarms correctly, make sure they are in working order, and check for a label from a third-party lab indicating that they've been tested and certified to meet safety standards. Follow these [helpful tips](#) on installing and maintaining smoke alarms from NFPA.
- Working smoke alarms will continue to provide protection through the end of their 10-year life span. At the end of the 10-year span, install new alarms with enhanced technology, if possible.
- Always [Close Before You Doze](#). A closed door can be an effective barrier against deadly levels of carbon monoxide, smoke, heat and flames, keeping rooms survivable for longer. With smoke alarms outside sleeping areas and a closed door, you and your family will have the most time possible to escape or call for help if escape isn't possible.

### Having an escape plan is more important today than ever.

- Fire moves faster through homes today, meaning you have less time than ever to escape in the event of a fire.
  - Today, you may have less than 3 minutes to escape a fire. However, lithium-ion battery fires spread significantly faster than other types of fire. From the first sign of an issue with a lithium-ion battery, there may be as little as 1 minute or less to escape.
  - In addition, people can help themselves and their family be fire safe by:
    - » Having and practicing an escape plan A, B, and C. Know what to do if you cannot escape.
    - » Having working smoke alarms inside and outside every sleeping area, on every floor of your home, including the basement.
    - » Closing the bedroom door before going to bed (Close Before You Doze). A closed door can be an effective barrier against deadly levels of carbon monoxide, smoke and flames — and may give everyone more time to respond to a smoke alarm.





## Smoke alarms are getting smarter.

- New technology in smoke alarms has made them better at knowing the difference between common steam or smoke from cooking, and an actual, potentially life-threatening fire.
  - Cooking nuisance alarms account for 73% of nuisance alarms, while a low battery chirp and steam account for only 8% and 2%, respectively<sup>1</sup>.
  - While it is difficult to eliminate all nuisance alarms, the new generation of alarms will greatly reduce nuisance alarms due to cooking - the reason many people disable their smoke alarms - while still having increased sensitivity and overall performance.
- Many smoke alarms today are interconnected, meaning that when one smoke alarm sounds, they all sound.
- This can help reassure those concerned about hearing their alarm with a closed door.



<sup>1</sup> Marty Ahrens March 2014 Report, titled "Smoke Alarms in U.S. Home Fires"





## PROFESSIONAL STAKEHOLDER MESSAGES

**New smoke alarms must meet new standards starting in July 2024.**

### What's different?

New smoke alarms are moving to performance-based technology, including:

1. Advanced sensors to distinguish between fire and more common household fumes from cooking to reduce nuisance alarms.
  - Smoke alarms that comply with the new standards may be equipped with more advanced sensors or use several sensors (multi-criteria) and algorithms that will be capable of distinguishing the difference between a smoldering or flaming fire and cooking smoke. This can be accomplished based on the differences in smoke particle size, quantity, gas concentrations and color between fires and cooking aerosols. Advancements in detector sensor design and software algorithms have made this possible.
  - While it is difficult to eliminate all nuisance alarms, it is anticipated that this new generation of products will greatly reduce nuisance alarms due to cooking.
2. Advanced technology to detect smoke characteristics from both smoldering and flaming fires.
  - It is currently common to see two kinds of alarms
    - Ionization smoke alarms are quicker to warn about flaming fires
    - Photoelectric alarms are quicker to warn about smoldering fires.

In the past, the type of alarm you had depended on the type of fire you thought you might have, but there's no way of knowing if a home fire will be smoldering or flaming.

Smoke alarms that meet the new standards will be equipped to detect smoke characteristics between a fast-moving and smoldering polyurethane foam fire, completely eliminating the guesswork.



## KEY SMOKE ALARM DATA FROM 2024 CONSUMER SURVEY

**Most Americans trust their smoke alarms to notify them in the event of a fire and are checking them routinely to ensure they're working.**

**93%**

of Americans have smoke alarms installed in their home

**94%**

of those respondents with smoke alarms say all of their alarms are definitely currently working

**73%**

of families with a child 9 or younger in the household have an escape plan

**42%**

of respondents have tested their smoke alarms in the past month,

**26%**

in the past six months, and

**47%**

have an escape plan but have never practiced it or only practiced it once.







## About FSRI

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Through advanced fire science, rigorous research, extensive outreach and education in collaboration with our international network of partners, we impart stakeholders with the information, tools and resources that enable them to make better, more fire-safe decisions that ultimately save lives and property. To learn more, visit [fsri.org](#) and follow [FSRI](#) on [Twitter](#), [LinkedIn](#), [Instagram](#), [YouTube](#), and [Facebook](#).

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## Additional Resources

[Smokealarms.ul.org](#)

[fsri.org](#)

[Reduce Cooking Nuisance Alarms with UL 217](#)

