



# CAL FIRE

## Office of the State Fire Marshal Webinar Series

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August 6, 2024

**Featuring:**

- ***Smoke and Carbon Monoxide Alarms in California***



# Welcome!

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- ▶ The purpose of this webinar series is to host a live and interactive platform to educate on laws, regulations, and various safety topics to increase the coordination of education and outreach from CAL FIRE - OSFM to the public and stakeholders.
  - If you experience technical difficulties during this presentation, please contact Kara Garrett at (916) 201-5539 or [Kara.Garrett@fire.ca.gov](mailto:Kara.Garrett@fire.ca.gov).





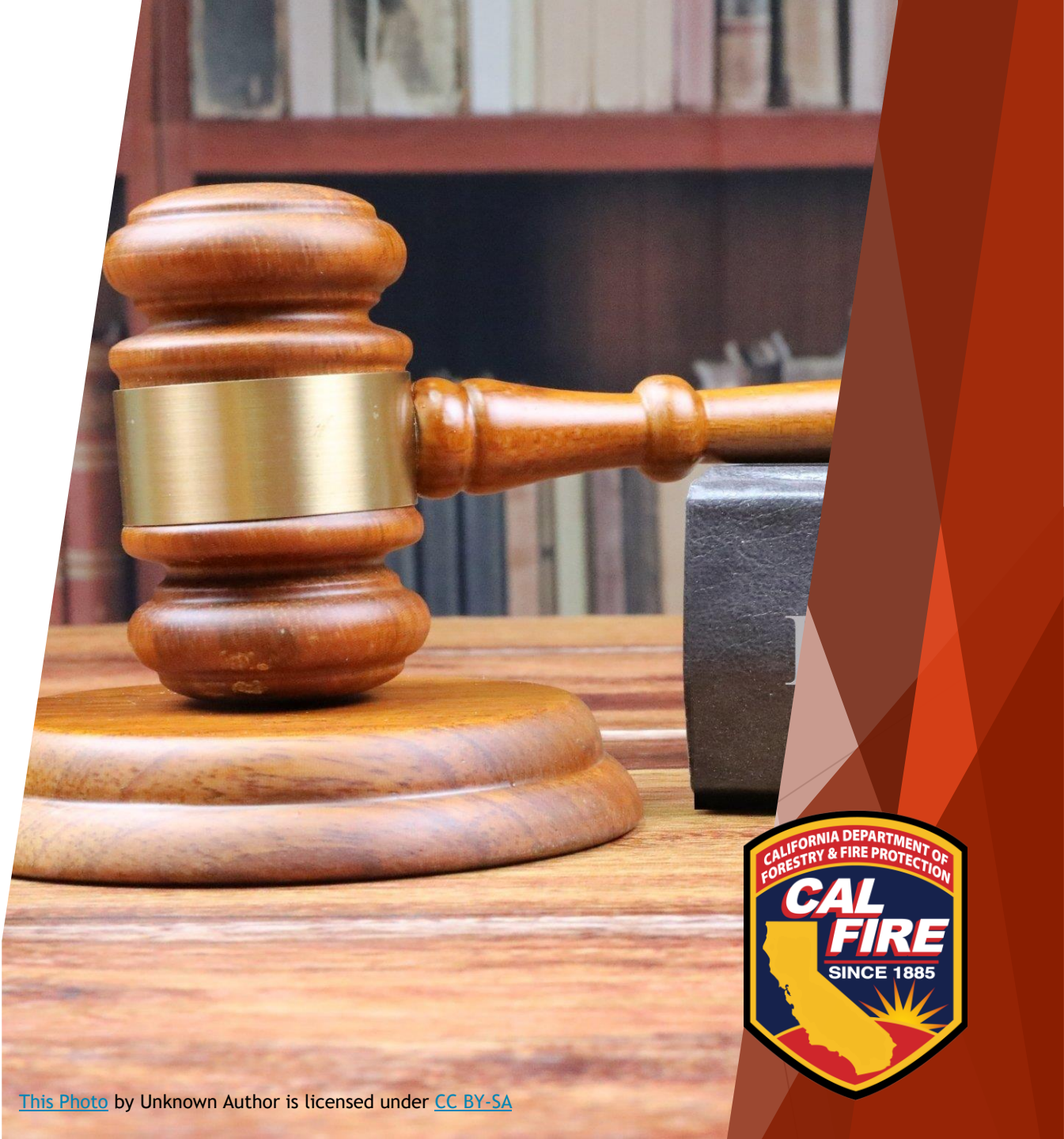
# Smoke Alarms and Carbon Monoxide Alarms in California

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**Deputy State Fire Marshal III (Supervisor)**

**Fire Engineering and Investigations Division**



# Smoke Alarm Safety Tips

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- Smoke alarms play a vital role in reducing fire deaths and injuries if properly installed and maintained.
- Fire spreads fast—working smoke alarms give an early warning so everyone can get outside quickly.





# Smoke Alarm Safety Tips

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- According to the National Fire Protection Association, roughly three out of five fire deaths happen in homes with either no smoke alarms or no working smoke alarms.
- More than one-third (38 percent) of home fire deaths result from fires in which no smoke alarms are present.
- The risk of dying in a home fire is cut in half in homes with working smoke alarms.



# Smoke Alarm Safety Tips

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- It is best to use interconnected smoke alarms so that when one smoke alarm sounds, they all sound.
- A closed door may slow the spread of smoke, heat, and fire.
- Working smoke alarms are an important part of a home fire escape plan.

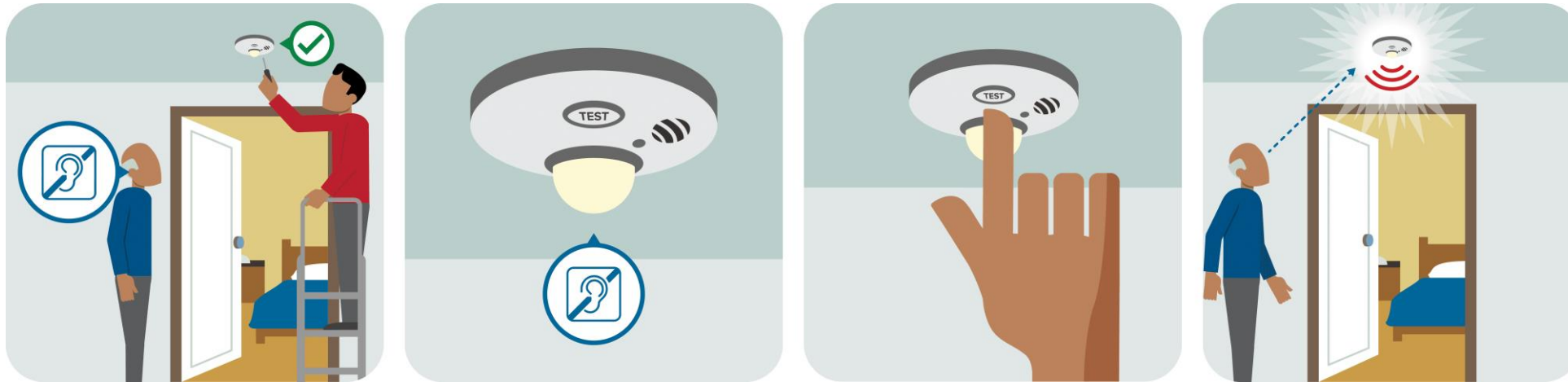


Image Source: US Fire Administration



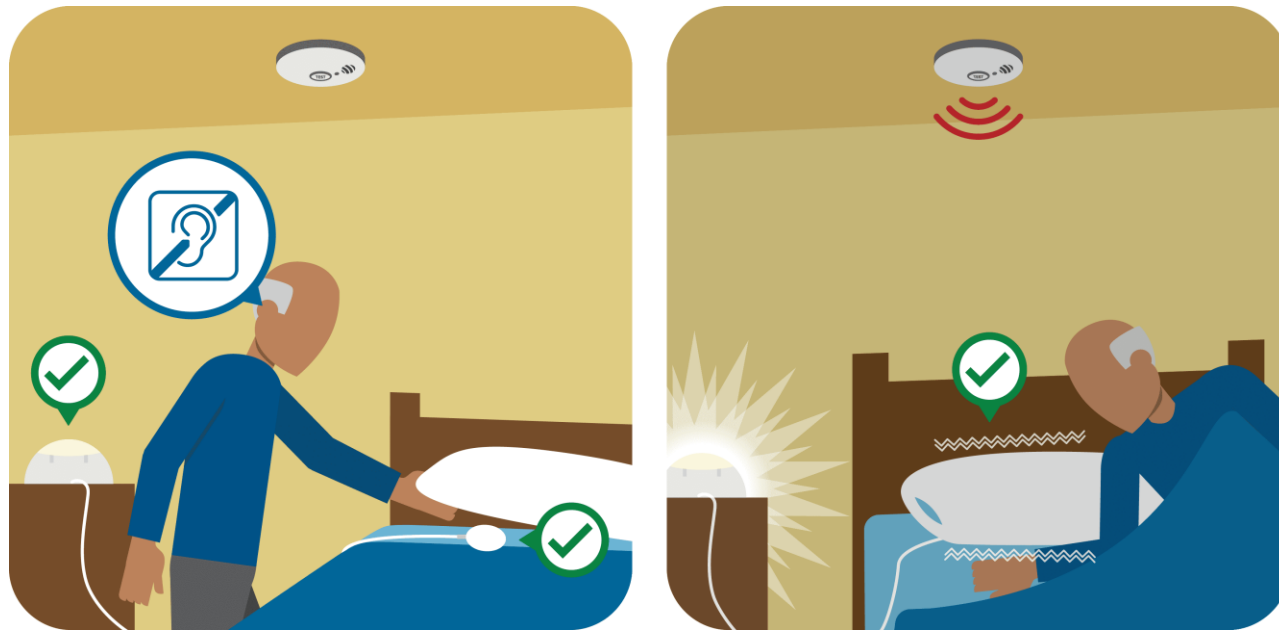
# Smoke Alarm Safety Tips

- If needed, install smoke alarms and alert devices for people who are deaf or hard of hearing.
- Strobe lights flash when the smoke alarm sounds.
- The lights warn people of a possible fire.



# Smoke Alarm Safety Tips

- Use a pillow/bed shaker to wake people who are deaf.
- The shaker is activated by the sound of the alarm.

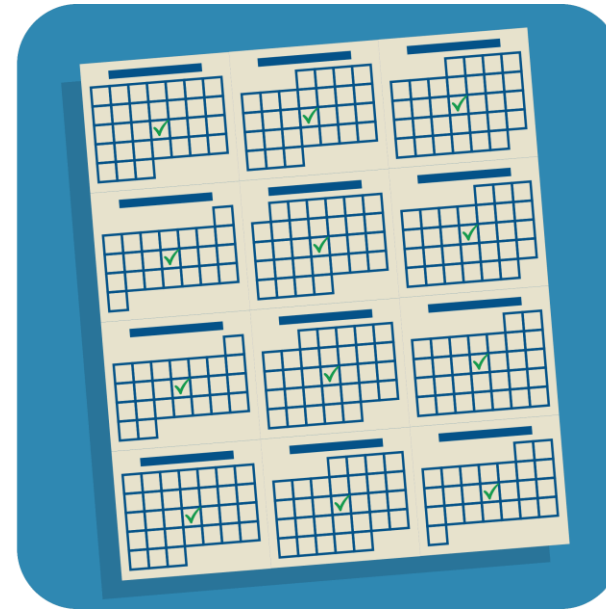




# Testing Smoke Alarms

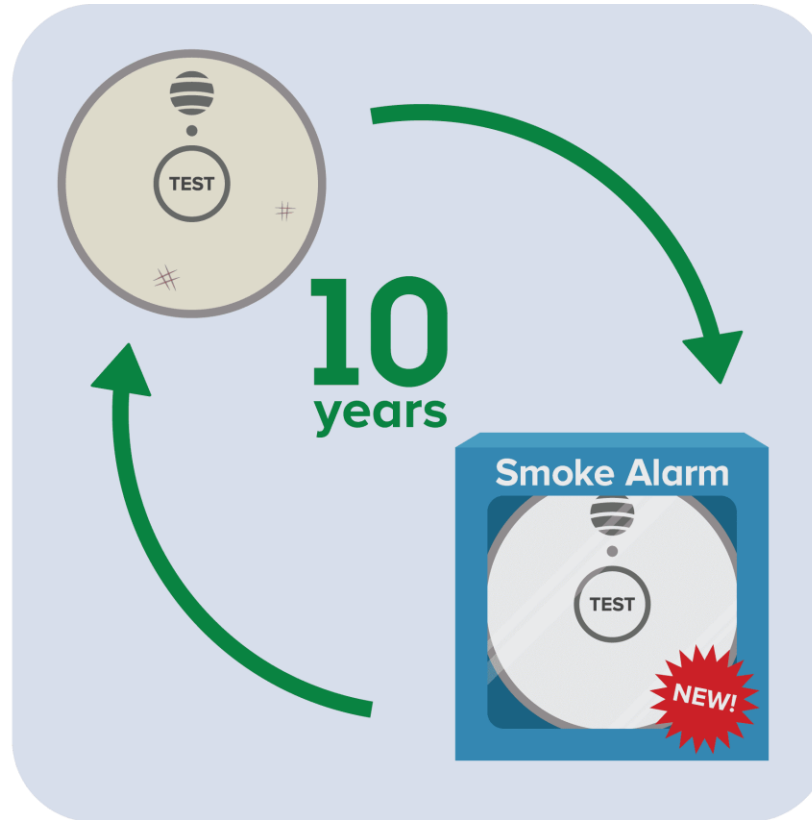
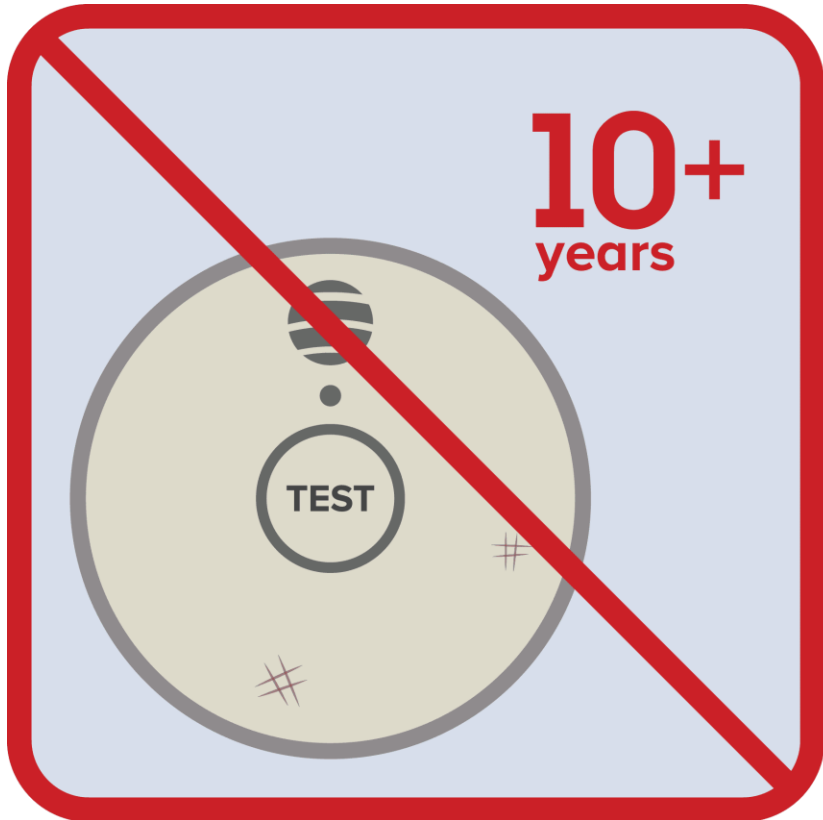
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- Test smoke alarms at least once a month using the test button.



# Replacing Smoke Alarms

- Replace smoke alarms when they are 10 years old.
- Check the manufactured date to find out how old your smoke alarm is.



# Replacing Smoke Alarms

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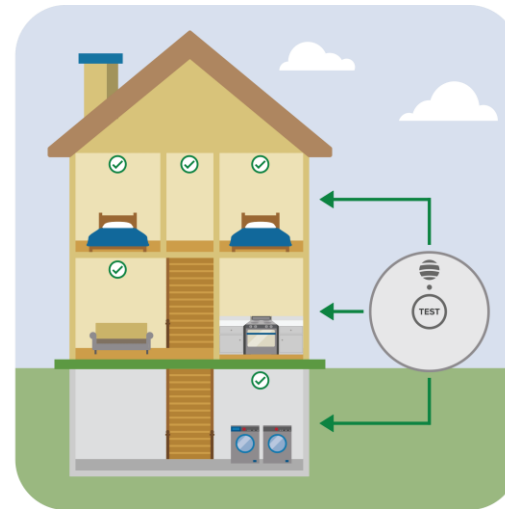
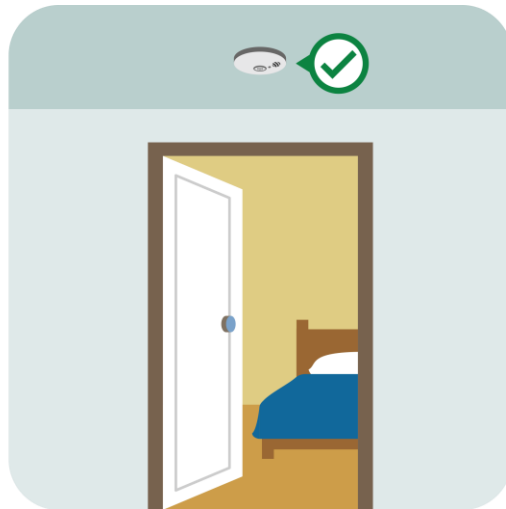
- The packing should have a CSFM Listing Seal.





# Smoke Alarm Locations

- Install smoke alarms:
  - In every sleeping room.
  - Outside each separated sleeping area in the immediate vicinity of bedrooms.
  - On each additional story, including basements, habitable attics, and split levels.
  - 40 degrees to 100 degrees.
  - Never near a heat source, put smoke alarms at least 10 feet from a cooking appliance.



# Do you rent or live in an apartment?

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- Look up to make sure you have smoke alarms in every sleeping room and outside each separate sleeping area.
- If you don't have them, ask your landlord or rental agent to install them.



Image Source: US Fire Administration



# Smoke Alarm Laws and Regulations

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- Required in all new construction intended for human occupancy since 1992
- Alterations, repairs, and additions to a structure can trigger updated requirements





# Smoke Alarm Laws and Regulations

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- Pursuant to Health and Safety Code Section 13114:
  - For smoke alarm manufacturers:
    - As of July 1, 2014, in order to be listed by Office of the State Fire Marshal (OSFM), new smoke alarms that are solely battery powered must have a nonreplaceable, nonremovable battery that is capable of powering the smoke alarm for at least 10 years.
    - Solely battery powered smoke alarms which have been approved and listed by OSFM prior to July 1, 2014 and which have been ordered by, or are in the inventory of, an owner, managing agent, contractor, wholesaler, or retailer on or before July 1, 2014 are exempted from the 10 year battery requirement until July 1, 2015.



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# Smoke Alarm Laws and Regulations

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- Pursuant to Health and Safety Code Section 13114:

Beginning January 1, 2015, in order to be listed by OSFM, all smoke alarms shall display:

- (a) The date of manufacture on the device,
- (b) provide a place on the device where the date of installation can be written,
- (c) and incorporate a hush feature.



# Smoke Alarm Laws and Regulations

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- Pursuant to Health and Safety Code  
Section 13114:

The following devices are exempted from all of the above requirements:

- (a) Smoke detectors intended to be used with a fire alarm or household fire alarm control unit.
- (b) Smoke alarms that send a supervision and battery depletion signal to a fire alarm or household fire alarm control unit via a low-power radio frequency wireless communication signal.
- (c) Smoke alarms that use low-power radio frequency wireless communication signal for interconnection.

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# Smoke Alarm Laws and Regulations

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- Pursuant to Health and Safety Code Section 13114:

For current smoke alarm listings, please visit our website at:

<https://osfm.fire.ca.gov/what-we-do/fire-engineering-and-investigations/building-materials-listing>



# Smoke Alarm Laws and Regulations

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- Pursuant to Health and Safety Code Section 13114:
  - For Consumers/End Users:
    - Existing installed operable/in working condition smoke alarms are NOT required to be replaced.
    - For all dwelling units intended for human occupancy for which a building permit is issued on or after January 1, 2014, for alterations, repairs, or additions exceeding one thousand dollars (\$1,000), the permit issuer shall not sign off on the completion of work until the permittee demonstrates that all smoke alarms required for the dwelling unit are devices approved and listed by OSFM.





# Smoke Alarm Laws and Regulations

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- Pursuant to Health and Safety Code Section 13114:
  - By January 1, 2016, owners of a dwelling unit intended for human occupancy in which one or more units is rented or leased shall install additional smoke alarms, as needed, to ensure that smoke alarms are located in compliance with current building standards. Existing alarms installed need not be replaced unless the alarm is inoperable.
  - For other questions relating to this new law or the placement of the devices, please contact your local enforcing agencies.
  - For more information, please visit our website at: <https://osfm.fire.ca.gov/>.





# Carbon Monoxide (CO) Alarms

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Which of these kills more people in the U.S. each year?

- A. Shark Attacks
- B. Lightning Strikes
- C. CO Poisoning



# Carbon Monoxide (CO) Alarms

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The answer is: **C! CO poisoning**

- The Centers for Disease Control and Prevention (CDC) reports that more than 400 people die each year, in the US, from unintentional CO poisoning from different products and motor vehicles.
- For the other statistics:
  - Shark attacks (about 1 each year in the US) Source: Oceana
  - Lightning strikes (about 32 each year in the US) Source: National Weather Service, NOAA



# Carbon Monoxide (CO) Alarms

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- CO enters the body through breathing.
- CO poisoning can be confused with flu symptoms, food poisoning and other illnesses.
- Some symptoms include shortness of breath, nausea, dizziness, light headedness or headaches.
- High levels of CO can be fatal, causing death within minutes.

## CARBON MONOXIDE (CO) POISONING



CAN'T BE  
SEEN



CAN'T BE  
SMELLED



CAN'T BE  
HEARD



CAN BE  
STOPPED





# Carbon Monoxide (CO) Safety Tips

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- Follow the manufacturer's instructions for placement and mounting height.
- Choose a CO alarm that has the label of a recognized testing laboratory.
- Call your local fire department's non-emergency number to find out what number to call if the CO alarm sounds.



# Carbon Monoxide (CO) Safety Tips

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- If the audible trouble signal sounds, check for low batteries. If the battery is low, replace it. If it still sounds, call the fire department.
- If the CO alarm sounds, immediately move to a fresh air location outdoors or by an open window or door.
  - Make sure everyone inside the home is accounted for.
  - Call for help from a fresh air location and stay there until emergency personnel.



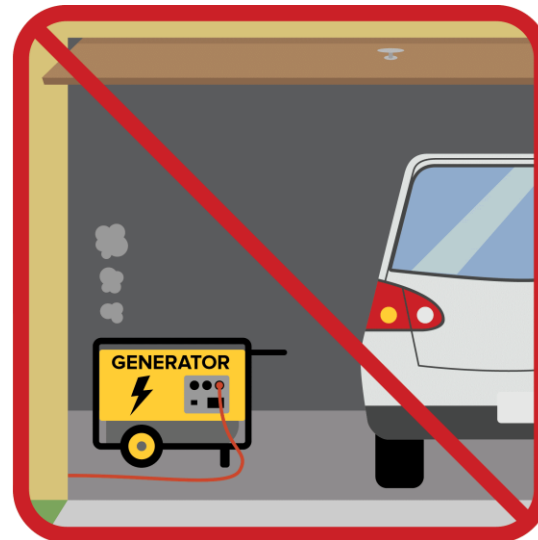
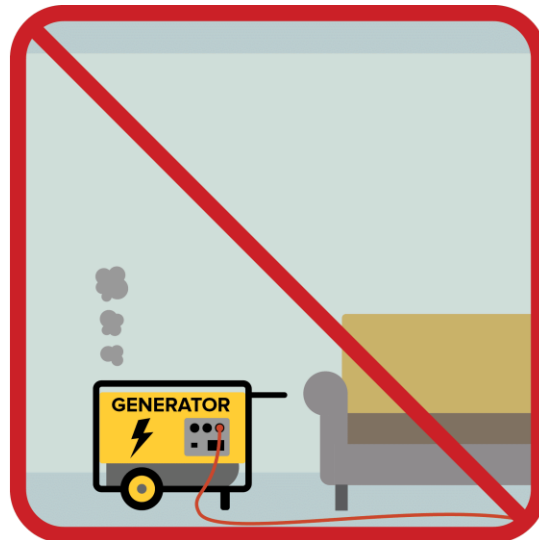
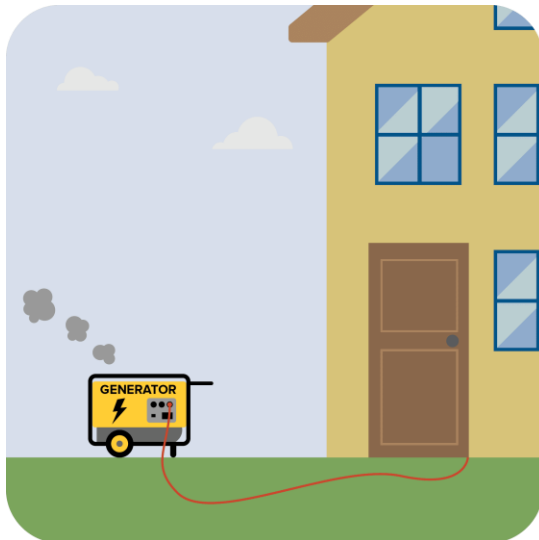
Image Source: US Fire Administration



# Carbon Monoxide (CO) Safety Tips

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- If you need to warm a vehicle, remove it from the garage immediately after starting it.
  - Do not run a vehicle or other fueled engine or motor indoors, even if garage doors are open.
  - Make sure the exhaust pipe of a running vehicle is not covered with snow.





# Carbon Monoxide (CO) Safety Tips

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- During and after a snowstorm, make sure vents for the dryer, furnace, stove, and fireplace are clear of snow build-up.
- A generator should be used in a well-ventilated location outdoors away from windows, doors and vent openings.
- Gas or charcoal grills can produce CO – only use outside.



# Carbon Monoxide (CO) Alarm Locations

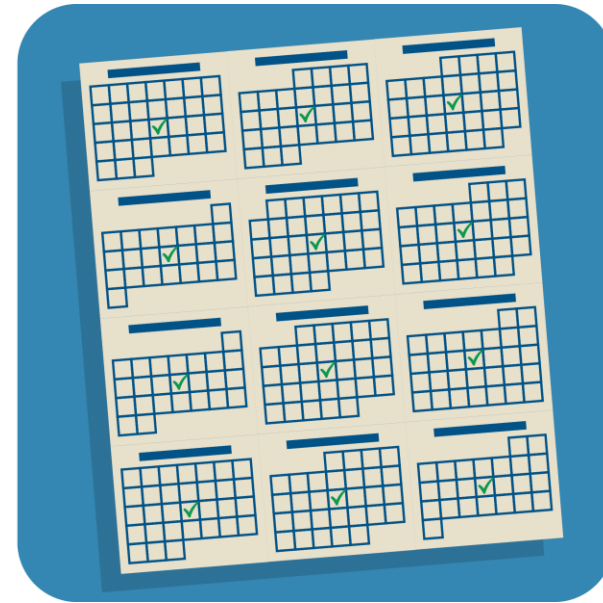
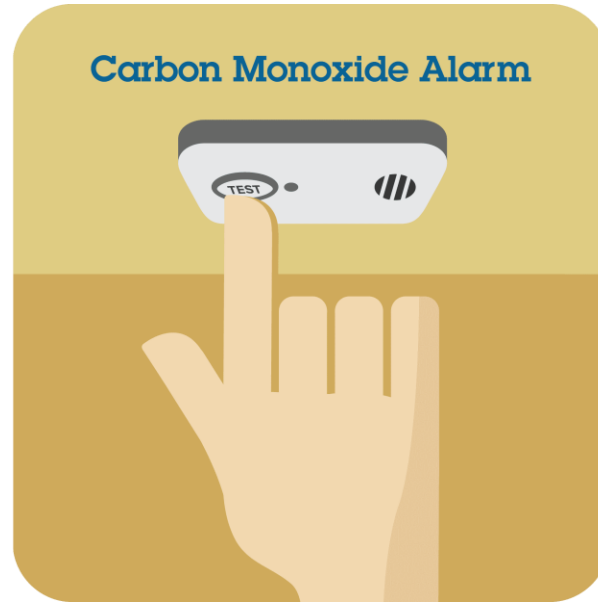
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- CO alarms should be installed in a central location outside each sleeping area and on every level of the home and in other locations where required by applicable laws, codes or standards.
- For the best protection, interconnect all CO alarms throughout the home.



# Testing CO Alarms

- Test CO alarms at least once a month; replace them according to the manufacturer's instruction.





# Carbon Monoxide Laws and Regulations

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## Pursuant to California's Carbon Monoxide Poisoning Prevention Act of 2010:

- The State Fire Marshal shall develop a certification and decertification process to approve and list carbon monoxide devices and to disapprove and delist previously approved devices, if necessary.
- The certification and decertification process shall include consideration of effectiveness and reliability of the devices, including, but not limited to, their propensity to record false alarms.



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# Carbon Monoxide Laws and Regulations

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## Pursuant to California's Carbon Monoxide Poisoning Prevention Act of 2010:

- The certification and decertification process shall include a review of the manufacturer's instructions and shall ensure their consistency with building standards applicable to new construction for the relevant type of occupancy with respect to number and placement.
  - (2) The State Fire Marshal shall charge an appropriate fee to the manufacturer of a carbon monoxide device to cover his or her costs associated with the approval and listing of carbon monoxide devices.
    - (b) A person shall not market, distribute, offer for sale, or sell any carbon monoxide device in this state unless the device and the instructions have been approved and listed by the State Fire Marshal.

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# Carbon Monoxide Laws and Regulations

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## Pursuant to California's Carbon Monoxide Poisoning Prevention Act of 2010:

- Information specific to the Act is found in the California Health and Safety Code Sections [13260 through 13263](#).
- Information specific to property owners and property management responsibility and disclosure requirements are found in California Health and Safety Code sections [17926](#), [17926.1](#), and [17926.2](#).





# Where to Find Resources

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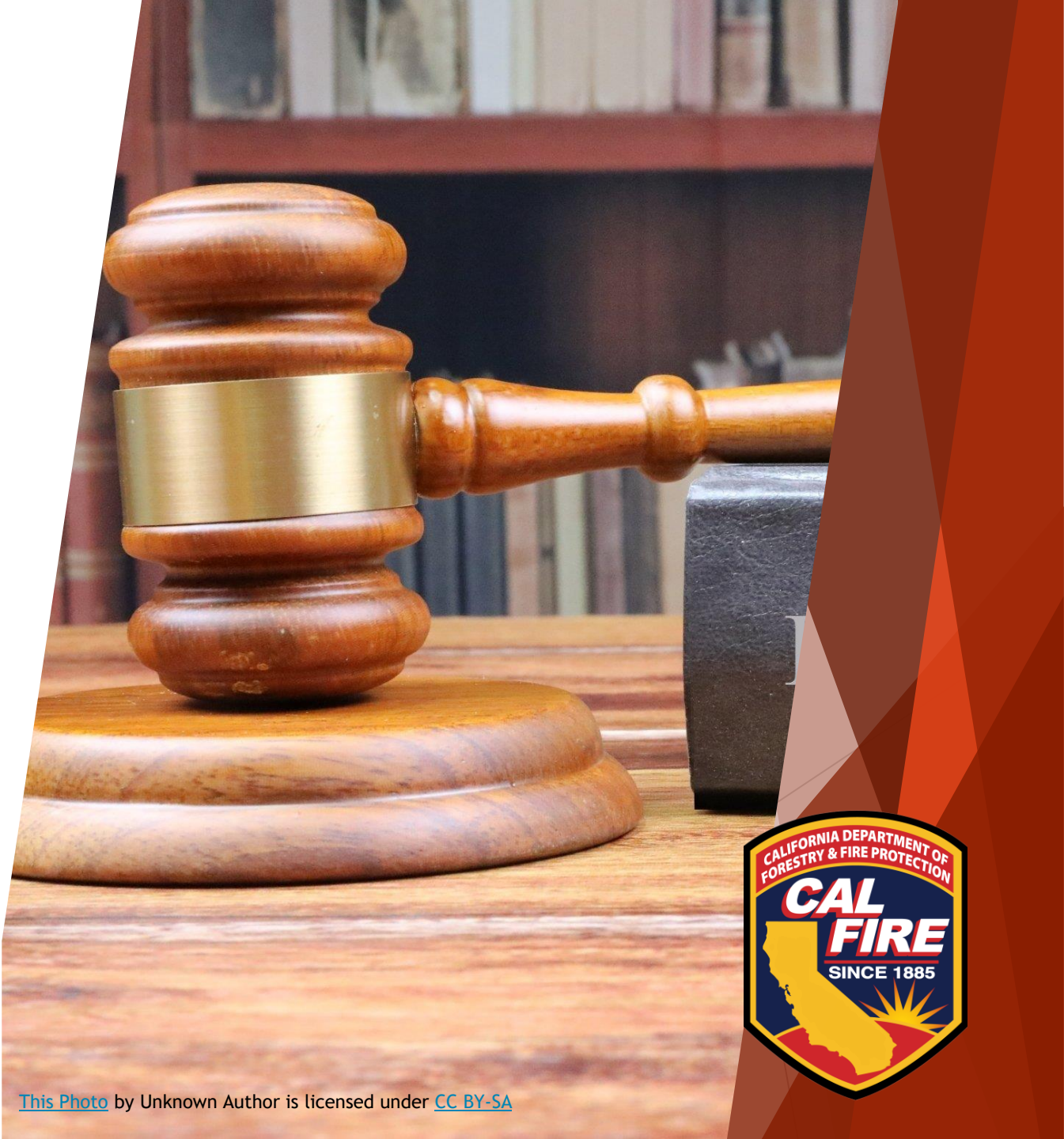
- OSFM Building Materials Listing Website:
  - <https://osfm.fire.ca.gov/what-we-do/fire-engineering-and-investigations/building-materials-listing>
- California Legislative Information Website:
  - <https://leginfo.legislature.ca.gov/faces/home.xhtml>



# Where to Find Resources

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- Smoke Alarms:
  - [www.nfpa.org/education-and-research/home-fire-safety/smoke-alarms](http://www.nfpa.org/education-and-research/home-fire-safety/smoke-alarms)
  - <https://www.usfa.fema.gov/prevention/home-fires/prepare-for-fire/smoke-alarms/>
- CO Alarms:
  - <https://www.nfpa.org/education-and-research/home-fire-safety/carbon-monoxide#carbon-monoxide-facts>
  - <https://www.usfa.fema.gov/prevention/life-safety-hazards/carbon-monoxide/>





# Questions?

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- We will now be opening it up for questions.
- If you have a question, please use the “**raise hand**” feature and we will unmute you.





# Subscribe!

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- ▶ Subscribe for updates on all Office of the State Fire Marshal updates, including the CAL FIRE - OSFM Webinar Series at:
  - <https://osfm.fire.ca.gov/resources/osfm-subscription-page>



Thank you!

