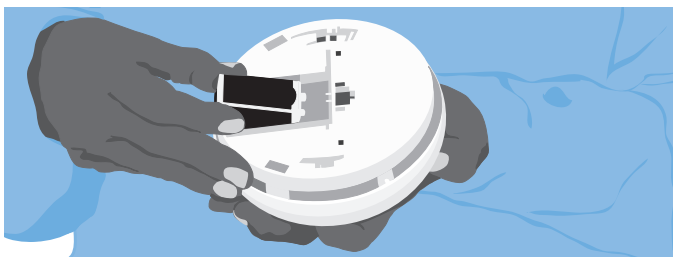


Smoke alarms



INTRODUCTION

This Bush Tech provides general information on the types of smoke alarms available and their suitability to remote places. This information may help you to select the most appropriate smoke alarm for your household. This article also provides tips to help you understand what you need to do to ensure your smoke alarm works properly when there is a fire and what you should do when it goes off.

Smoke alarms can save lives by alerting householders to a fire. It is important that householders choose a smoke alarm that suits their circumstances, install it correctly and know how to keep it working properly. Everyone that lives in or is visiting the house should know what to do if the smoke alarm goes off.

THE LAW

The law and regulations affecting the installation and type of smoke alarms in houses is different for each state and territory. Generally it is mandatory to install smoke alarms in new houses. They are also recommended for older houses. There is a push to require smoke alarms are installed in houses all over Australia to ensure the safety of residents.

HOW SMOKE ALARMS WORK

Smoke alarms work by detecting or picking up that there is smoke from a fire inside a house. When smoke is detected the alarm lets off a high pitched signal that can be heard by people inside and sometimes close to the house. For safety reasons smoke alarms should be placed in each bedroom, in passageways and living areas. Do not install them too close to heaters or cooking areas as the heat may trigger the alarm.

TYPES OF SMOKE ALARMS

There are several different types of smoke alarms. Some types are listed below, and only Australian Standards AS 3786 approved smoke alarms should be used. Check with the law and regulations for your region. There are advantages and disadvantages for different types of alarms as listed in the following table.

Type	Hardwired photoelectric smoke alarms with or without back up battery	Photoelectric smoke alarm with 9 volt battery	Photoelectric smoke alarm with 10 year lithium battery
Advantages	<ul style="list-style-type: none"> Some types don't require back up battery replacement 	Can be installed by resident	<ul style="list-style-type: none"> Can be installed by resident Battery lasts up to 10 years
Disadvantages	<ul style="list-style-type: none"> Are wired into the house electrics and require 24hr power to work Must be installed by registered electrician 	Need to replace battery every year	<ul style="list-style-type: none"> Once battery is flat, alarm must be thrown out Models can be more expensive than other battery types.

MAINTENANCE

Test that smoke alarms work each month by using a broom or long stick to press the test button. A signal will start if they are in working order. Turn off the signal by pressing again with a broom handle or long stick. Keep the smoke alarms clean from dust, insects and debris as these can trigger false alarms which can be annoying. Cleaning can be done by gently using a broom, brush or vacuum to remove any dust or cobwebs. Maintenance is necessary for the alarm to work.

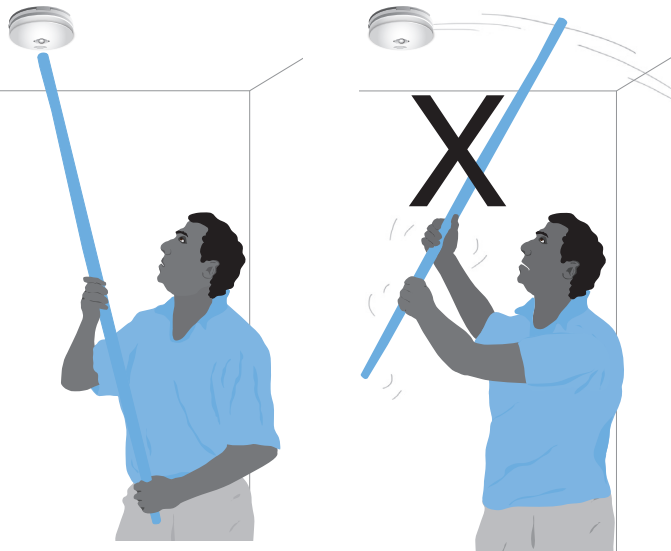
WHAT TO DO IF THE SMOKE ALARM GOES OFF

If the alarm goes off and there is a house fire:

- A smoke detector alarm is a signal to get out of the house with your family.
- You may not see flames but see and/or smell smoke in the house. Get out immediately.
- Practice and plan how you, your family members and visitors will get from where you usually sleep to the outside. Know which windows and doors you can use to escape quickly.
- Have a safe place away from the house where all the family can meet.
- Go to this safe place even if you are sleeping outside when the fire starts.
- In a house fire, smoke can make you confused and you will not be able to see through the smoke – practice walking low to the ground where you can breathe more easily (smoke rises) and make your way out of the house.



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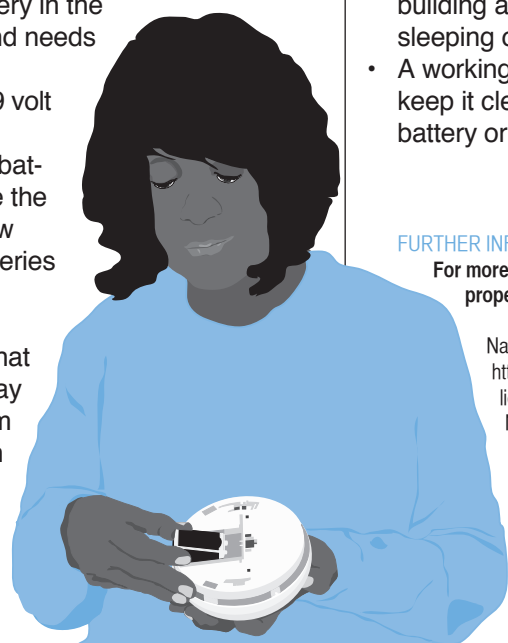
If the alarm goes off and there is no fire – ‘Poke, don’t whack’

- It is important to take any alarm seriously and be certain there is no house fire.
- Smoke alarms can go off from cooking (such as burnt toast), candles, cigarette smoke and wood fired heaters.
- If it is a false alarm, most alarms have a button to stop them.
- Clear the smoke from the room first by opening windows and doors, turning on a ceiling fan or moving air away from the alarm with a towel or similar.
- Gently press the button with a broom handle or similar or use a ladder or stable chair to reach the alarm.
- Gently poke button. Though the alarm is annoying, do not whack it!

If the alarm goes off continuously and there is no fire:

- Often smoke alarms let out a regular ‘cheep’ noise. This noise can be annoying and there’s a reason for it.
- This is a signal that the battery in the smoke alarm has run out and needs to be replaced.
- If you have an alarm with a 9 volt battery, replace the battery.
- If your alarm uses a lithium battery you will need to remove the noisy alarm and install a new one as these longer life batteries cannot be replaced.

Children and those people that are deaf or hard of hearing may sleep through a smoke alarm and will need help from an adult to go to safety. Anyone in the house or nearby who is elderly, sick or has difficulty walking will also need help to go to safety.



CONSIDERATIONS FOR REMOTE AREAS

24 hour power: Homes in remote homelands and communities are supplied power through ‘power card’ prepayment meters, diesel generation and or solar power. Disconnections and/or power outs can occur regularly especially with prepayment meters. Unreliable 24 hour power should be a consideration in choosing a smoke alarm. Hardwired alarms should be avoided unless there is ongoing, reliable 24 hour power. Installation and repair of hardwired smoke alarms by a registered electrician may not be possible or may be too expensive. Battery power smoke alarms may be a better option for remote homes.

Ongoing maintenance: Lithium batteries have the advantage of lasting longer therefore requiring less maintenance over time compared to other smoke alarms that need batteries replaced every year. So this may be a good option for remote places though they can be more expensive and not as readily available in the local store.

Buying smoke alarms and batteries: Smoke alarms are sold in regional and rural towns and centres often in hardware stores and larger supermarkets. Some types of smoke alarms may be available in Community and pastoral stores. Keep this in mind when on a town trip.

POINTS TO REMEMBER ABOUT SMOKE ALARMS

- Hardwired smoke detectors require reliable 24 hour power to work
- Install a smoke alarm to the manufacturer’s instructions
- If the alarm goes off it could be serious, exit the house if you have any doubt or concern there could be a fire.
- If there is a house fire it will be scary and confusing. Your family needs to have an escape plan for what to do if a smoke alarm goes off and there is a fire. You will also need to plan how to help children and those people with a hearing and/or mobility impairment move to a safe place.
- You need to have a plan to leave the area around the building and go to a safe place even if you are already sleeping outside (such as sleeping on the verandah).
- A working smoke alarm can save lives. Remember to keep it clean, test the alarm is working and replace battery or the alarms themselves as needed.

FURTHER INFORMATION

For more information on the law, types of smoke alarms and their proper installation please refer to the following websites:

- National Indigenous Housing Guide Online Part A3 ‘Fire safety’ <http://www.dss.gov.au/our-responsibilities/indigenous-australians/publications-articles/housing/national-indigenous-housing-guide?HTML>
- Northern Territory Fire and Rescue <http://pfes.nt.gov.au/Fire-and-Rescue.aspx>
- Western Australia Department of Fire and Emergency Services <http://www.dfes.wa.gov.au/safetyinformation/fire/fireinthehome/pages/smokealarms.aspx>
- Queensland Fire and Rescue Service <https://www.fire.qld.gov.au/communitysafety/smokealarms/>