

Safety Fact Sheet

Smoke Alarms



What is a Smoke Alarm?

A smoke alarm is a fire protection device that releases a loud alarm when detecting smoke in the air. This alarm alerts those nearby to the danger of a fire.¹

You can obtain more information about the different types of smoke alarms available by visiting the website below:

http://www.nswfb.nsw.gov.au/community/athome/smokealarms/type_detection.php



How may a child be injured?

Burns

- Children may be seriously burnt if trapped in a house fire.

Poisoning

- Children may be poisoned by inhaling harmful gases in smoke. Most buildings contain several materials which produce harmful gases when heated and/or burned. Some of these gases, like carbon monoxide, are colourless and odourless and are fatal in small doses.



Suffocation

- Children may suffocate from the smoke produced in a house fire. Smoke is capable of killing a person long before the flames approach.



How common are these injuries?

Between 1998 and 2002, fires or burns were the eighth leading cause of death (due to injury) in NSW with 180 deaths.² More recently, house fires resulted in the deaths of 144 people in NSW between 2000 and 2005.³ Further, in NSW, building fires led to the hospitalisation of 536 people during the period 1999-2000 to 2003-2004.⁴

There is evidence both in the USA and Australia that there are more than 50% less house fire deaths in homes where working smoke alarms are installed.⁵



Is there a Law or an Australian Standard for Smoke Alarms?

The law, in NSW, states that all residents must have at least one working smoke alarm installed on each level of their home. This includes owner occupied, rental properties, relocatable homes or any other residential building where people sleep. Smoke alarms must comply with the Australian Standard (AS3786), unless installed prior to 1 May 2006.



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Remember:

- Every home should have enough working smoke alarms to successfully detect fires. At least one alarm should be installed on each level of your home. However, it is better to have two or more.
(See <http://www.nswfb.nsw.gov.au/community/athome/smokealarms/installation.php>).
- Every home should have a working fire extinguisher and/or fire blanket, within easy reach, in case of an emergency.
- Smoke alarms should be installed according to the manufacturer's instructions.
- Only a qualified electrician should install hard wired alarms.
- Smoke alarms need to be cleaned and tested regularly.
- Smoke alarms have a limited lifespan and should be replaced according to instructions.
- Smoke alarms are more effective if placed away from corners.
- Avoid placing smoke alarms near an air conditioning or heating unit. Air flow from these units can obstruct the detection of smoke.
- Only use Australian Standard (AS3786) approved smoke alarms.
- Preparing and practicing an escape plan can save the lives of you and your family in the event of a fire.
(see <http://www.nswfb.nsw.gov.au/community/athome/escapeplans/index.php>).
- Smoke alarms which no longer work should be thrown away in the rubbish bin. Only one smoke alarm per rubbish load is allowed due to the small amount of radioactive material in the alarm.

For more information about smoke alarms visit the NSW Fire Brigades Website at:
<http://www.nswfb.nsw.gov.au/community/athome/smokealarms/index.php>



¹ The Australian Radiation Protection and Nuclear Safety Agency.

http://www.arpansa.gov.au/is_smkdt.htm

² Schmertmann, M., Finch, C., and Williamson, A. *NSW Injury profile: A review of injury deaths during 1998–2002*. Sydney: NSW Injury Risk Management Research Centre, 2004

³ NSW Fire Brigades 2006. <http://www.nswfb.nsw.gov.au/community/athome/smokealarms/type.php>

⁴ NSW Injury Risk Management Research Centre 2006, *NSW Injury Profile: A Review of Injury Hospitalisations During 1989-1990 To 2003-2004*, The University of NSW.

⁵ NSW Fire Brigades 2006. <http://www.nswfb.nsw.gov.au/community/athome/smokealarms/>