Wake up!
Get a smoke alarm
Every year the fire brigade is called out to over 600,000 fires which result in over 800 deaths and over 17,000 injuries. 60,000 of these fires are in the home, killing nearly 500 people and injuring over 11,000.

Many of these deaths and injuries could be prevented if people had early warning and were able to get out in time. Buying and fitting smoke alarms could help save your home and the lives of your family.

This leaflet tells you about smoke alarms - what they are, what they do, where you should fit them and how to look after them. If you want more information, get in touch with your local fire brigade.

What is a smoke alarm?
Smoke alarms are self contained devices that incorporate a means of detecting a fire (smoke detector) and giving a warning (alarm). They are about the size of a hand and are normally fitted to the ceiling. They can detect fires in their earliest stages and sound a loud warning alarm. This alarm can give you those precious few minutes for you and your family to get out safely.

What types of smoke alarm are there?
There are two types of smoke alarm currently on the market: ionisation and optical (also described as photoelectric or photoelectronic).

- **Ionisation**: These are the cheapest and can cost from under £5. They are very sensitive to small particles of smoke produced by flaming fires, such as chip pan, and will detect this type of fire before the smoke gets too thick. They are marginally less sensitive to slow burning and smouldering fires which give off larger quantities of smoke before flaming occurs.

- **Optical**: These are more expensive but more effective at detecting larger particles of smoke produced by slow burning fires, such as smouldering foam-filled upholstery and overheated PVC wiring. They are marginally less sensitive to free burning flaming fires. Each type looks similar and is powered either by a battery, or mains electricity or a combination of both. Some are interconnected so that any smoke detected at one point can raise the alarm at all the others. Some have additional features such as emergency lights and silence buttons, for use where false alarms can be a nuisance e.g. when cooking.

How many smoke alarms should I fit?
The number of smoke alarms to fit in your home depends on your particular circumstances. Fires can start anywhere, so the more that are fitted, the higher the level of protection.

For maximum protection an alarm should be fitted in every room (except kitchen, bathroom and garage). You should choose the type most suited to the risk in each room (see above). For minimum protection the number to be fitted will depend on the type of home you live in:

- If your home is on one floor, one smoke alarm, preferably of the optical type, may be enough to provide you with early warning of a fire.
- If your home has more than one floor, at least one alarm should be fitted on each level. In this case a combination of optical and ionisation alarms, preferably interconnected, will give the best protection.

Do not fit an alarm in the kitchen or bathroom, as cooking fumes or steam may trigger the alarm. Similarly, do not fit an alarm in a garage where exhaust fumes are likely to set it off. Cigarette smoke will not normally set off an alarm.

Where do I fit my smoke alarm(s)?
Smoke alarms are simply screwed into the ceiling and should normally be fitted at least 30 centimetres (12 inches) away from any wall or light fitting and as close to the centre of the room, hallway or landing ceiling as possible. (Always read the manufacturers' instructions before fitting.)

If your home is on one level, for minimum protection you should fit an alarm in the hallway between the living and sleeping areas.
If your home has more than one floor, for minimum protection one alarm should be fitted at the bottom of the staircase with further alarms fitted on each upstairs landing.

If you choose to fit a single alarm in a home on more than one level, care should be taken to ensure that it is fitted where it can be heard throughout your home - particularly when you are asleep. Normally this would be at the top of the stairs. Although ionisation and optical alarms are equally effective, optical alarms may be preferred in this particular situation as they are especially good at detecting slow-burning or smouldering fires.

Important: The manufacturers' instructions should be followed at all times, particularly where mains powered alarms are to be installed.

How do I look after my smoke alarm?

Follow the manufacturers' instructions - smoke alarms need very little maintenance. A few minutes of your time during the year will ensure that your alarm is working and could help save your life and the lives of your family.

You should:

Once a month

Check the alarm by pressing the test button.

You can also test the detector by using one of the testing sources currently on the market for this purpose.

Once a year

Change the battery in the alarm.

Vacuum and wipe the casing and slots to ensure that dust isn't blocking the sensor chamber. (For mains wired alarms, switch off first.)

REMEMBER:

Buying and fitting smoke alarms, and ensuring they are carefully and properly maintained, could give you those precious few extra minutes in which to make your escape safely.

Plan an escape from your home in advance and talk about it with your family. If a fire occurs you may have to get out in dark and difficult conditions. Escaping will be a lot easier if everyone knows where to go. Make sure your route(s) remain free of any obstructions and that there are no loose floor coverings that could trip you.

Always check the battery regularly, replacing it when necessary, and never remove it for other purposes. Should you encounter nuisance/false alarms you may need to site the alarm away from the source of fumes (usually from cooking) or you may consider buying a model that has a built-in silence facility which enables the audible signal to be cancelled temporarily.

False alarms may also be caused by poor maintenance leading to a build up of dust and dirt.