



Department of
Environment and Conservation

Halt the Haze

Wood Smoke

Store right
Burn bright
Breathe alright



Halt the Haze Wood Smoke

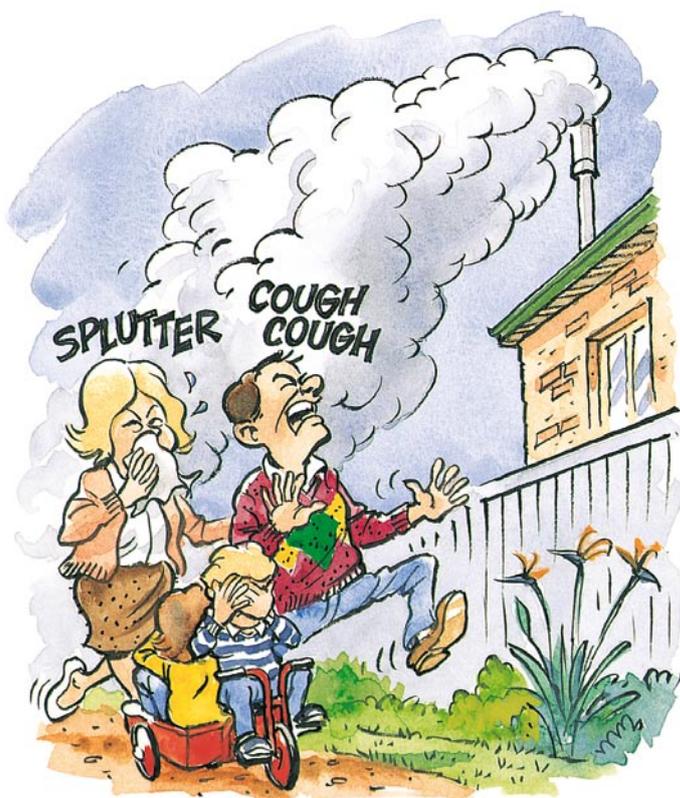


Store right

Wood heaters are a major source of air pollution during winter. Particle emissions from wood heaters (as smoke) are often significant contributors to haze events. Wood heater owners have a responsibility to ensure their wood heater operates correctly and only burn dry, seasoned firewood.

When we breathe in wood smoke, a fraction of the smoke particles are retained in our lungs, impacting on our health. These fine particles are particularly dangerous to people who have existing respiratory problems as well as the very young and the elderly. Even if you are healthy you can still be negatively affected by wood smoke causing you to feel lethargic and generally unwell.

You can reduce the amount of smoke coming from your chimney by burning wood cleanly and efficiently, using these steps.



Dry, well seasoned firewood will save you money! It produces less smoke and gives you more heat for your dollar. Wet or green wood generates 50 per cent less heat and causes your wood heater to smoke excessively.

Here are some simple steps to make sure the firewood you burn is the best for our environment.

- Stockpiling wood in summer is the way to go. You'll have an adequate supply of dry, well seasoned firewood to see you through the winter.
- Choose your firewood carefully. It is illegal for firewood retailers to sell wood with a moisture content of more than 20 per cent. Dry wood should make a hollow, cracking sound when you bang two pieces together. Wet or green wood is heavier, and will make a dull thud when hit together. Ask your firewood retailer to show you how dry the wood is using their moisture meter.
- If you collect your own wood, it is your responsibility to ensure it is dry before you burn it.
- Split logs dry faster than big logs, so split wood into pieces about 10 to 15cm thick before you store it away.
- Store firewood loosely in a place where it is well ventilated and under cover.
- Never burn garbage, painted or treated wood in your wood heater as it can produce poisonous gases.

If you see a chimney smoking too much and polluting our air contact your local council



Burn bright

If you have a wood heater it is important to get the fire burning brightly and as hot as possible before loading on larger logs.

This will ensure the wood burns properly and minimises smoke pollution.

Here are some simple steps to make sure you are not polluting our air.

- Always make sure your fire is burning brightly. Start with dry kindling and newspaper with the air control fully open. Once the fire is well established gradually add larger wood pieces, being careful not to choke the fire by overloading it with logs.
- An efficient fire will have bright swirling flames and red glowing embers with little or no smoke coming from the chimney. It will take practice to get the cleanest burn from your wood heater.
- Use the attached chimney checker to see if your fire is working properly.

Remember all wood heaters tend to smoke when first lit, so open the flue and leave the air control on full to allow proper air flow. After 15 to 20 minutes of starting or refuelling your fire check the chimney. If your wood heater is working properly your chimney should be almost clear of smoke. If it is smoking too much, open the air flow a little more.

- Do not close the air intake control overnight as this also causes smoke pollution. Let the fire burn out completely overnight - an insulated house will hold in enough heat to keep your house warm until morning.
- Clean your chimney every year. A build-up of soot in your chimney will reduce the fire's efficiency and can cause chimney fires. Check the yellow pages for your local chimney sweep.
- If you are still having trouble with smoke from your wood heater you can possibly solve the problem by increasing the height of your flue.



Breathe alright

Less smoke means cleaner air! Wood heater smoke contains fine particles and toxic chemicals including cancer causing compounds.

Any material floating about in the air can be breathed into our bodies. While some of the particles are exhaled, a fraction is retained and these can have adverse impacts on our health. Most at risk are the young, the elderly or those people who sufferer from bronchitis, emphysema, asthma, and other lung or heart diseases.

There is also evidence that fine particle matter can lead to premature deaths. Especially at risk are elderly people who suffer from chronic respiratory problems.

Everybody has a responsibility to help keep our air clean. If you can see or smell smoke then you are causing a problem for yourself, your family and your neighbours.



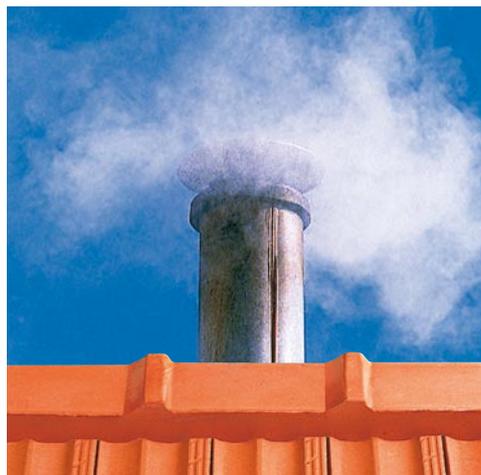
Dull Fire



Moderate Fire



Bright Fire



What is haze?

Haze is made up of tiny airborne particles of smoke, dust, emissions from motor vehicles and sea salt and is usually evident on cold, calm winter mornings.

Haze appears as a brown smudge in the sky.

Things you need to know about wood heaters

Simple steps to reducing wood smoke

You can reduce the amount of smoke pollution from your chimney by:

- Keeping woodpiles under cover
- Never burning green, wet or treated firewood
- Checking your chimney for smoke
- Starting your fire with dry kindling and with the wood heater air control fully open and
- Keep the fire burning brightly.

Buying a wood heater

If you are going to buy a wood heater ensure it complies with the latest Australian and New Zealand Standard.

Choose a heater that is the right size for your home. A heater that is too big produces too much heat and you will need to close the air control to reduce the heat output. This produces excessive smoke pollution. For further information on the heating efficiency of a range of heaters see the Sustainable Energy Development Office website, www.sedo.energy.wa.gov.au

Haze Alerts

Haze events occur in Perth on cold, calm nights. As our population grows and continues to use wood heaters, it is likely that there will be an increase in air particulate levels in winter and an increase in haze events. This in turn will magnify health impacts.

When haze events are predicted, Haze Alerts are issued by the Bureau of Meteorology and broadcast in the news.

At these times please refrain from using your wood heater and use an alternative heating source. If you do not have an alternative heating source and must light your wood heater, please ensure that you burn the wood cleanly and efficiently using the steps given in this pamphlet. This will minimise the wood smoke pollution produced.



For more information on wood heaters and winter haze visit the Department of Environment and Conservation's website at www.dec.wa.gov.au or the Department of Environment and Heritage at www.deh.gov.au/woodsmoke



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Check your chimney

Do you want to see how environmentally friendly your woodheater is?

Use this handy chimney checker to test how well your woodheater is operating.

When you have your fire going, brave the cold and go outside to look at the smoke coming from your chimney.

Looking up at your chimney stand about 50 metres away from your house and hold the chimney checker scale on the other side of this card up to eye level.

Compare the smoke from your chimney with the scale.

If the smoke looks like the picture on the right - congratulations! - you are operating your heater in an environmentally friendly way.

If it looks like the two pictures on the left, your heater is producing extra smoke that is making our haze problem worse and affecting our health.

Have another look at your brochure and see the simple things you can do to reduce smoke from your woodheater.



Help us halt the haze