



# Wood-fired Heaters and Woodsmoke

## What you need to know:

Smoke from wood-fired heaters may cause air pollution and affect your neighbours. Not only is a smoking fire wasting your money, but the air pollution it causes can also affect our health and may be linked to a number of health problems.

Woodsmoke contains a number of noxious gases - including carbon monoxide (CO), oxides of nitrogen, a range of organic compounds, some of which are toxic or carcinogenic - and fine particles, which enter your lungs. The pollutants in woodsmoke can cause breathing difficulties even at relatively low levels and affect our community especially people suffering existing respiratory conditions, such as asthmatics, and for very young children and frail older people.

The impacts of woodsmoke are highest in the winter months where wood-fired heating can produce up to seven times more particulate pollution than cars.

The NSW Environmental Protection Authority advises if you can see continuous or excessive smoke from your wood-fired heater then you may be causing problems for yourself, your family and your neighbours. Smoke quantities will increase at certain times like when starting a fire or adding new fuel to the fire but if in excess there are a number of things you can do to improve this, increase your heaters efficiency and help us all breathe easily.

### Buying a new wood heater

As with other technology changes, new designs with wood-fired heaters are cleaner burning and more efficient than older-style wood heaters and open fires. If

shopping for a new wood-fired heater, choose a heater that is certified to Australian Standard AS4013 with a low emission factor. Also, ensure the heater is the right size for your home – a big heater burning slowly will produce more smoke than a small heater burning fast.

Consider purchasing cleaner alternatives to wood heaters, such as gas, solar and efficient electric heaters.

Remember, to install a wood burning heater you must first seek Council approval. It is highly recommended to contact Council before you purchase any wood burning heater. There may be some exemptions; however, it is best to find out before a wood burning heater is installed.

### Operating your heater to minimise wood smoke

When considering to burn wood for heating purposes it is best to consider the information below:

#### 1. Burn the right wood and store it correctly

- Always burn small logs of aged, dry hardwood—unseasoned wood has more moisture which makes a heater smoke. The logs should make a 'crack' when struck together not a 'dull thud'
- Don't use freshly cut wood, store it for 8–12 months before use
- Never burn rubbish, driftwood or treated or painted wood, which pollute the air and can produce poisonous gases
- Store wood under cover in a dry ventilated area

## 2. Correctly operate your heater

- Keep the flame lively and bright - your fire should only smoke for a few minutes when you first light it or when you add extra fuel
- Open the air controls fully for 5 minutes before and 15–20 minutes after reloading
- Don't let your heater smoulder overnight—keep enough air in the fire to maintain a flame. A well-insulated house will stay warmer for longer
- Stack wood loosely in your firebox so air can circulate—don't cram the firebox full
- Use plenty of dry kindling to establish a good fire quickly when lighting a cold heater
- Check your chimney regularly— if there is smoke coming from the chimney, increase the air supply to your fire

## 3. Correctly maintain your heater

- Keep your heater and flue clean to allow good air flow.
- Have the chimney cleaned every year to prevent creosote build-up.

## 4. Reduce your heating bills

By making your home retain more heat you can greatly reduce your heating costs. Save money by:

- Insulating ceilings, walls and floors.
- Sealing off draughts.
- Covering your windows with heavy curtains, blinds or double glazing.
- Only heating frequently used rooms, close doors to bedrooms, bathrooms etc.
- Choosing an appropriate heating system for your home and using it wisely and efficiently.
- Opening curtains on north-facing windows on sunny winter days.
- Using ceiling fans to evenly distribute the warm air, remember hot air rises.
- Wearing warmer clothes.

## Consider your indoor air quality

It's important to ensure adequate fresh air enters the room to prevent CO build-up. Be alert to symptoms such as drowsiness and or headaches as it may indicate high CO levels are building up.

**All wood-fired heaters must comply with the conditions set out in Part 2 of the Protection of the Environment Operations (Clean Air) Regulation 2010. For further information about these requirements please go to [www.epa.nsw.gov.au/air/poeocleanair.htm](http://www.epa.nsw.gov.au/air/poeocleanair.htm)**

For further information, please contact Council's Environmental Health Officers on 1300 463 954 during business hours.

