



Department  
for Environment  
Food & Rural Affairs

# Open fires and wood-burning stoves

## A practical guide

Open fires and wood-burning stoves have risen in popularity over recent years. Smoke from burning causes air pollution which harms the health of millions.

We can work together to improve the quality of the air we breathe.

This leaflet provides simple guidance for those that need to use wood burning stoves or open fires to reduce environmental and health impacts as well as benefiting you directly by:

- Maximising efficiency, meaning you burn less fuel
- Reducing the risk of chimney fires
- Reducing smoke and carbon monoxide which can be harmful to you and your neighbours



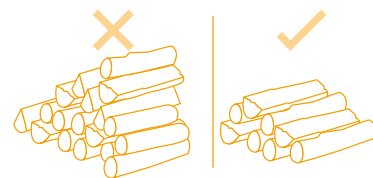
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## Fuel use

### Consider burning less

Think about why you are lighting your fire as well as how much fuel you use. Is it necessary? If your appliance is secondary heating consider burning less. If your house is already warm enough and you don't need to burn, not burning is the simplest way of reducing your costs and minimising your impact.



### Buy 'Ready to Burn' fuel

If you want to burn immediately look for the logo as a guarantee of good quality dry wood.

<http://woodsure.co.uk/firewood-ready-to-burn/>



### Season freshly chopped wood before burning

Wet or unseasoned wood, often sold in nets, is cheaper to buy, but it needs to be seasoned (dried) before burning. Wet wood contains moisture which creates smoke and harmful particulates when burned. This can damage your stove and chimney. It also means you're losing out on heat for your home.



Moisture meters are cheap and easy to use. Why not use one to check the moisture content of your logs before burning.

Dry wood should have 20% moisture or less.

### If you used to burn House coal, use approved solid fuels instead

You can no longer buy traditional house coal. Approved solid fuels produce less smoke compared to house-coal when burned. They can also be more efficient so cost you less money to heat your home. Look for products on the list of Defra approved fuels <https://smokecontrol.defra.gov.uk/fuels.php>

### DO NOT burn treated waste wood (eg old furniture, pallets or fence panels) or household rubbish

Treated waste wood and household rubbish can emit harmful fumes and toxic pollutants, such as arsenic, into your home when burnt.



### Regularly maintain and service your stove (eg annually)

This means it will work better and will generate more heat from what you burn. Always operate your stove in line with the manufacturer's guidance and only burn permitted fuels.

### Get your chimney swept regularly (up to twice a year)

During use soot and tar build up in the chimney reducing the efficiency and increasing the risk of chimney fires. It is better to use a qualified chimney sweep who will be able to advise you on good burning practices for your open fire or stove.



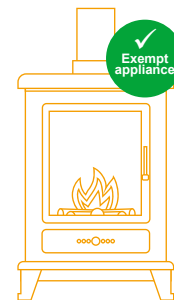
For example: avoid slumbering your stove overnight.

Sticking to these simple rules help you to reduce smoke and carbon monoxide and ensure optimum efficiency and safety.

## Maintain your open fire/stove

## Choose the right appliance

Wood-burning stoves produce much less smoke than open fires. If you are thinking of buying a stove then consider purchasing an Ecodesign stove. These have emission and efficiency set standards and any new stove placed on the market in the UK must now be Ecodesign compliant.



In smoke control areas, you can only burn unauthorised fuels, such as wood, on Defra exempt [appliances](#). These have been rigorously tested and demonstrate low smoke emissions.

You can only burn unauthorised fuels in Ecodesign stoves if they also appear on the list of Defra exempt appliances.

## Know the law in Smoke Control Areas

### Smoke control area rules

A smoke control area is a legally defined area where you cannot emit a substantial amount of smoke from a chimney.



**You can be issued a financial penalty of between £175 to £300 if you break this rule.**

You must not buy an unauthorised fuel for use in a smoke control area unless it is to be used in an exempt appliance.

**You can be fined up to £1,000 if you break this rule.**

To find out which areas of England are designated smoke control areas, please visit the [smoke control area map](#).

Please note, the data on this map is indicative only and you should always contact your local authority to confirm if you live in a smoke control area.

<https://www.gov.uk/find-local-council>

## Outdoor burning

Be considerate towards your neighbours when lighting bonfires, outdoor burners and BBQs and always take care not to cause a smoke nuisance.

Dispose of garden waste through your Local Council's disposal scheme or consider composting it.

Remember most garden waste will not be dry and can emit a lot of smoke.

## Benefits of following these steps

By following these simple steps, you will reduce the harmful effects that are caused to you and your neighbours by inhaling smoke; including breathing problems such as asthma attacks.



## What you can do

### What you can do to help reduce the harmful effects from smoke:

- Think if you have to burn
- Burn seasoned wood (including Ready to Burn) on a low emission appliance
- Maintain stoves and sweep chimneys
- Install a carbon monoxide monitor, this will alert you to dangerous fumes and reduce your risk of carbon monoxide poisoning
- For more good practice tips, check advice on [www.Burnright.co.uk](http://www.Burnright.co.uk) or [www.which.co.uk/reviews/wood-burning-stoves/article/guides](http://www.which.co.uk/reviews/wood-burning-stoves/article/guides)