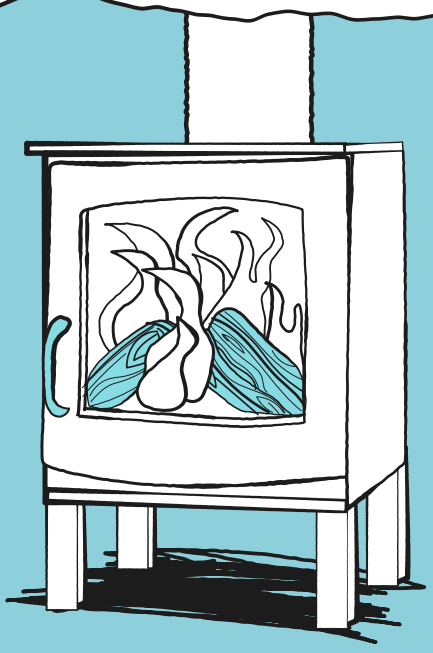
Air pollution from domestic burning

Everything you need to know about:

- Wood-burning stoves
- Open fireplaces
- Garden and allotment bonfires



GREATER MANCHESTER
DOING THINGS DIFFERENTLY

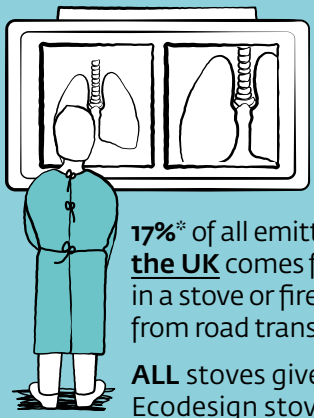
NHS

Effects of burning
health and the environment

Stove and fire smoke contains tiny particulate matter called PM2.5, which has been identified by the **World Health Organisation** as the most **harmful** air pollutant to human health.

Burning solid fuel such as wood leads to **poor air quality** indoors and contributes to outdoor pollution.

This fine particulate matter travels deep into our lungs and **increases the risk** of respiratory infections, asthma, heart disease and lung cancer.



People already suffering with lung and heart problems are **more likely to be affected**, as are older people, pregnant women, unborn babies and very young children.

17%* of all emitted **particulate matter in the UK** comes from people burning wood in a stove or fireplace at home. **13%** comes from road transport.

ALL stoves give out pollution; even new Ecodesign stoves emit equivalent amounts of particulate matter as **six** modern **heavy-goods vehicles**.

Domestic burning **25%**

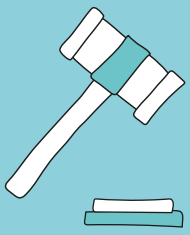
27% **Industrial combustion**

Use of solvents and industrial processes **14%**

*2020 figures

13% **Road transport**

Smoke control legislation
what are the rules?



All **Greater Manchester councils** have **Smoke Control Areas** where substantial smoke should not be emitted from a domestic chimney. Under the **Clean Air Act 1993**, breaking these rules can result in a **fine of up to £300**.

Smoke from domestic chimneys may also cause a statutory nuisance under the **Environmental Protection Act 1990**. If a nuisance is confirmed, an abatement notice will be served and a breach can result in a **potentially unlimited fine**.

Air quality regulations restrict fuel sold for domestic use:

- Firewood in units less than 2m³ and most manufactured solid fuels must be sold with the **Ready to Burn** scheme certification details
- Firewood in units greater than 2m³ must be sold with advice on drying, and with an explanation of the issues on burning wet wood
- Coal merchants must stop selling loose or unsealed bags of bituminous coal to households by 30 April 2023.

Breaking these regulations can result in a £300 fixed penalty notice or a more substantial court fine.

From 2022 **only Ecodesign stoves can be legally sold in the UK**.

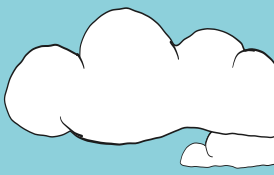
Costs and safety
bang for your buck?

The installation and running costs of a solid-fuel burner may be more than you think:

- The size of a room and current energy-saving measures must be considered when choosing a suitable appliance; for example, a large draughty room is likely to need a bigger stove
- Installation work includes lining the chimney, installing a concrete lintel and laying a hearth
- Poorly installed or maintained stoves can lead to carbon monoxide poisoning; a certified installer must carry out the work, or a competent person has to apply to Building Control and a fee will be charged
- Chimneys and flues need to be swept by a professional – either Guild of Master Sweeps or NACS member – at least once a year or the consequence could be a chimney fire
- Solid fuel is typically more expensive and less efficient than mains gas.

If your appliance is secondary heating and your home is already warm enough, just burn less to reduce your costs and impact on local air pollution and climate change. If you still want the look and feel of a wood burning stove there are plenty of realistic alternative stoves available.

Need to burn?
do it properly



If you're going to burn, follow these good-practice rules:

- Be aware of local **Smoke Control Areas**
- Always read appliance instructions
- Only burn seasoned wood (including Ready to Burn) or manufacturer-recommended fuels
- Sweep chimneys regularly and maintain stoves
- Install a CO monitor to alert you to dangerous fumes.

Don't:

- Burn waste or treated wood – it's toxic to you and the environment
- Allow the top of the chimney to smoke continuously; if you see smoke – adjust the air controls.

Signs of poor burning – causing more pollution and wasting fuel:

- Blackened glass – indicates incomplete combustion
- Constant smoke from the chimney when not lighting or refuelling
- Unburned wood or charcoal left after the fire goes out.

More information on better burning practices can be found at **burnright.co.uk** or **Defra's guide**

Garden and allotment bonfires

Bonfires also contribute to air pollution and can be a nuisance to neighbours.

You should:

- Avoid having a bonfire to burn any waste, even from a garden or allotment
- Never burn items like painted wood, plastics and rubber
- Always dispose of household or garden waste by composting, putting it in your wheelie bin or taking to your local recycling centre. Your council can collect bulky items
- Speak to your neighbour if a bonfire is causing a problem, or contact your council through **cleanairgm.com/DomesticBurning**

Do your bit to clean up our air!

For further information:

Source references for the details provided in this leaflet are available at:
cleanairgm.com/DomesticBurning