

Consultation on cleaner domestic burning of solid fuels and wood

British Lung Foundation response | October 2018



The British Lung Foundation is pleased to submit a response to this consultation.

We are calling for:

- **The NHS 10 Year Plan to be integrated with the air quality plan**, recognising the impact that air pollution has on our lungs.
- **A UK-wide public awareness campaign** on the impact of emissions from residential burning and the health and consumer benefits of burning low-moisture wood and smokeless coal.
- **Greater support and resources for local authorities** to tackle persistent smoke pollution, where people's health is at risk, including introducing a nation-wide Low Smoke Zone prohibiting the marketing, sale and distribution of smoky coal, as in Ireland.
- **The UK to adopt World Health Organisation 'safe' legal limits** on particulate matter as new legal limits.

It is important to note that whilst residential fuel burning is a significant contributor to UK particulate matter, road transport is the single biggest contributor to air pollution in towns and cities across the UK. Road transport contributes around 12% of the UK's PM_{2.5} and PM₁₀ emissions and a third of total NO₂ emissions, and must continue to be tackled alongside fuel burning.

Section 2 - Wood

We welcome the commitment to build on the 'Ready to Burn' standard for dry wood as a means of significantly reducing PM emissions and the risk this poses to those living with chronic lung conditions. We do not however believe that introducing a cut-off point of 2m³ is sufficient.

Burning wood and coal in a stove or on an open fire releases particulate matter, which has shown a range of adverse health impacts, including decreased lung development and function, exacerbation of asthma, allergy, COPD, pulmonary fibrosis, and increased risk of lung cancer.ⁱⁱⁱ It is also linked with increased morbidity and mortality.ⁱⁱⁱ

There is now robust evidence of a clear link between high levels of air pollution and increased numbers of patients with breathing problems presenting at hospitals, and GP surgeries. In a recent study carried out by the University of Dundee, researchers studied nearly 15 years of data for air pollution levels in Dundee, Perth and the surrounding area.

In the first Scottish study of its kind, researchers matched air pollution levels to medical records of 450 patients who suffer from bronchiectasis, a long-term chronic condition which can cause a persistent cough and breathlessness as well as frequent chest infections. They found that on days when air pollution levels spiked there was a large increase in admissions to Ninewells Hospital and Perth Royal Infirmary with breathing problems and visits to GP's with breathing problems, known as exacerbations. The researchers compared people suffering from lung conditions to 'canaries in coalmines', as they are the first and most seriously affected by air pollution and stressed the need to look at effective ways of preventing illness at a time when the NHS is under increasing strain^{iv}.

Therefore, the risk posed by the burning of wet wood to residents and neighbours suggests that **no amount of wet wood should be sold to householders.**

We agree with proposals that the sales of any quantity of wood with a high moisture content (more than 20% moisture) or wet wood should be required to apply to the industry's certification agency or equivalent and provide instruction to their consumers.

This should also be accompanied by a nationwide public awareness campaign based on clear, accurate and robust health information to ensure that people know how to protect themselves. This should provide clarity for consumers on the significant contribution residential burning makes to total emissions levels in the UK and its effects on the nation's and individual health. Any awareness campaign must be accompanied by clear health advice that facilitates behaviour change.

We do not hold an opinion on a transition period or how transition should be managed for smaller retailers however **government should immediately issue guidance to all retailers and consumers on treating wet wood**. We also agree that retailers should be legally required to store wood in such a way that it will not become wet.

Section 3 - Coal

The smoky coal ban, first introduced in Dublin in 1990 before being extended to the next 25 largest urban areas in the country in 2013, resulted in significant falls in respiratory problems and premature deaths. It is estimated that approximately 8,000 premature deaths have been averted in Dublin since the introduction of the smoky coal ban in 1990.^v

We support the phasing out of traditional house coal for domestic combustion. This is supported by the WHO and would result in a significant reduction in the UK's particulate matter emissions. A shift to the burning of smokeless coal would result in a 10% reduction in the UK's PM_{2.5} emissions.^{vi}

The UK Government should follow the Irish Government in rolling out a nationwide Low Smoke Zone, introducing a ban on the marketing, sale and distribution of smoky coal and other prohibited fuels. This will address some local capacity issues in local government with enforcement and provide clarity to householders.

Dependent on government plans to mitigate against any impact on those living in fuel poverty, we would call for the sale of traditional household coal to be **phased out nationwide by the end of 2019**. In order to meet wider government commitments relating to air quality, a transition period of one year would be appropriate.

Section 4 - Manufactured solid fuels

We agree with proposals to introduce a standard for all manufactured solid fuels to ensure that all are below 2% sulphur, with the view to reducing this limit to 1% as soon as possible. We further agree with introducing a limit for all manufactured solid fuels nationwide, to protect the greatest possible number of people from the harmful risks of sulphur exposure and to further raise awareness of the risks posted by residential solid fuel burning.

In order to facilitate effective transition and compliance with new limits, a transition period of one year should be suitable, with **a reduction to a 1% limit introduced within 1 year of the initial transition to 2%**.

Clear labelling and information to consumers on the risks of solid fuel burning and that products comply with government regulations would be welcome. In addition, this should include health information to consumers on the risks to those living with respiratory (and other conditions) and how to protect themselves from emissions.

Section 5 - carbon reductions

We do not have any views on minimum biomass content for all manufactured solid fuels.

Section 6 - Exemptions

Government should ensure that those in fuel poverty and reliant on coal or wood burning for residential heating are able to **access energy efficiency and home heating grants or upgrades free of cost, to avoid unintended policy consequences**. This should also include providing additional funds to local authorities or direct government funding to ensure that all homes meet energy efficiency standards, are well insulated, and have access to a safe, clean and reliable heating source.

Government should also follow best practice and **leverage private capital to fund the wide-scale installation of solar thermal and heat pump technologies** with a view to having the first projects underway by 2020 and completed by 2022 for at-risk areas^{vii}.

Section 7 - Implementation

FOIs submitted in 2017 found that many local authorities are struggling to meet local air quality monitoring requirements because of financial challenges.^{viii} These findings were supported by a survey from the Local Government Information Unit who found that three-quarters of local councils had little or no confidence in the sustainability of local government finances and more than one in 10 believed they were in danger of failing to meet legal requirements to deliver core services.^{ix} Overwhelmingly, council leaders stated that social care pressures were their top priority. To ensure that local authorities can prioritise air quality, they must receive adequate funding, resources and expertise.

We believe that local authorities should be given additional powers in order to deal with persistent smoke pollution where there is harm to the local amenity, the health of neighbours and residents in the wider area (particularly those living with a lung condition).

We would argue that any fixed penalty notice should reflect the severity of the issue and fixed penalties relating to other regulated products. Furthermore, any funds received through fixed penalties relating to the sale of domestic burning products should be used to **improve the energy efficiency of homes in the area**. However, as noted above, it is possible that any additional funding levied through fixed penalty notices could be assumed into administrative costs, which government should seek to avoid. In addition, if improved regulation of residential fuel burning is successful, few fixed penalty notices should be issued and therefore very little funding would be raised.

In relation to ensuring a clear and straightforward enforcement policy for local authorities, **government should consider prohibiting the sale of any quantity of wet wood to householders**. This would clarify the situation for consumers, retailers, and enforcement officers. Furthermore, the UK Government should follow the Irish Government in rolling out a nationwide Low Smoke Zone, introducing a ban on the marketing, sale and distribution of smoky coal and other prohibited fuels. This will address some local capacity issues in local government with enforcement.

All of the measures outlined in question 35 regarding the format of advice and guidance to retailers (and consumers) should be pursued by government. This should include behaviour change techniques.

Section 8 - Information

A campaign based on clear, accurate and robust health information will ensure that people know how to protect themselves and support local authorities to take ambitious action on pollution.

There must also be a **nationwide campaign targeting consumers about the health implications of residential burning, garden fires, and bonfires**. This should emphasise the health and consumer benefits of burning wood with a low moisture content and smokeless coal. This information should provide clarity for consumers on the significant contribution residential burning makes to total emissions levels in the UK and its effects on the nation's and individual health.

Studies have shown that providing the public with clear, concise and meaningful data and information on air pollution significantly helps raise awareness of the problem. However, if this data is not accompanied with clear ways in which people can reduce their exposure people often report feeling “powerless” and unable to protect themselves.^x Any awareness campaign must be accompanied by clear health advice that facilitates behaviour change.

Section 9 - Additional suggestions

We need to change legal limits for particulate matter to safe limits

The two sizes of PM normally monitored are PM₁₀ and PM_{2.5} - both considerably thinner than a human hair.^{xi xii} Harmful smaller particles, such as PM₁ and PM_{0.1} also exist, but there is no legal requirement to monitor them. These tiny particles are some of the most toxic for our health, with evidence showing they can pass through our lungs into our bloodstream and cause damage across our bodies.

Our legal limits for particulate matter are over twice as high as those recommended by the World Health Organisation.^{xiii xiv} It's important to remember that the WHO state there is no real “safe” level of pollution and that any level of exposure is harmful to human health. The UK's plans should be striving to go beyond our current legal limits to lower all pollutants to “safe” WHO levels. We want the UK to adopt WHO limits on particulate matter as new legal limits.

Data recording

We want government to improve data recording and research in order to map those areas and individuals which are most at-risk from harmful emissions and would be affected by any policies which shift fuel usage. This should also include improving government and sector understanding of the use of solid fuels as primary or secondary heating sources and any regional differences, in providing transitional arrangements for those consumers likely to be impacted by regulatory changes.

About the British Lung Foundation

The BLF is the only UK charity looking after the nation's lungs. We offer hope, help and a voice. Our research finds new treatments and cures. We help people who struggle to breathe to take control of their lives. And together, we're campaigning for better lung health. With your support, we'll make sure that one day everyone breathes clean air with healthy lungs.

We are happy for our response to be made publicly available.

For further information, please contact:

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ⁱⁱ Zhang, J (2007) Household air pollution from coal and biomass fuels in China: measurements, health impacts, and interventions, *Environmental Health Perspective*, 115:848-855

ⁱⁱⁱ Bolling et al (2009) Health effects of residential wood smoke particles: the importance of combustion conditions and physiochemical particle properties, *Particle and Fibre Toxicology*

^{iv} University of Dundee. Air pollution levels linked to 'spikes' in hospital and GP visits. July 2018. Available at: <https://www.dundee.ac.uk/news/2018/air-pollution-levels-linked-to-spikes-in-hospital-and-gp-visits.php>

^v <https://www.dcae.gov.ie/en-ie/environment/topics/air-quality/smoky-coal-ban/Pages/default.aspx>

^{vi} CPL Industries, The Potential for Smokeless Residential Burning in the UK (2017)

^{vii} IPPR (2018) Domestic heating & the air pollution challenge

viii Desmog (2017) <https://www.desmog.uk/2017/05/19/local-authority-air-pollution-reporting-failures>

ix LGIU (2017) <http://www.lgiu.org.uk/briefing/lgiu-2017-state-of-local-government-finance-survey/>

x Christian Oltra & Roser Sala & Àlex Boso & Sergi López Asensio (2017) Public engagement on urban air pollution: an exploratory study of two interventions, *Environ Monit Assess* (2017) 189:296

xi National Audit Office (2012) *Air pollution and its impact on people's health and well-being*

xii Royal College of Physicians (2016) *Every breath we take: the lifelong impact of air pollution*. London: RCP p.18

xiii World Health Organisation (2016) Ambient (outdoor) air quality and health: Factsheet number 313

xiv European Commission (2016) Air quality standards