



British Lung Foundation representation for the Spring Budget

The British Lung Foundation is pleased to submit evidence to inform the development of the Treasury's Spring Budget. We have previously submitted evidence for the 2016 Autumn Statement on the economic costs of lung disease and as our work in this area develops we would like to keep the Treasury informed as to the outcomes. The British Lung Foundation have also endorsed the submission from Action on Smoking and Health on tobacco control measures.

This submission will focus on air quality and the steps that the Treasury could take to mitigate the health impacts.

Air quality

Poor air quality affects all groups of society and has been linked to higher levels of ill health and higher all-cause mortality.¹ Air pollution is estimated to contribute to around 40,000 premature deaths every year.² DEFRA estimates that this imposes an annual social cost of up to £27.5 billion a year.³ Over 12 million people live with a lung condition in the UK, for them air pollution poses a daily threat to their health and wellbeing.⁴

UK air quality levels have improved in recent decades: for instance, since 1970, emissions of nitrogen oxides have declined 62%, while emissions of PM10 have declined nearly 74%.⁵ This has been attributed to various factors including governmental clean air policies, and the move from coal to natural gas for power generation. However, UK air pollution continues to exist at levels deemed unsafe by the World Health Organisation (WHO), remaining high enough to represent a significant health risk.

Levels of some pollutants remain illegal under EU law: for instance, nitrogen dioxide concentrations exceeded EU limits in 40 out of 43 UK areas in 2010, and 38 zones still exceeded the annual limits in 2012.⁶

A clear link has been established between diesel exhaust and incidence of lung cancer.⁷ Diesel vehicles are the primary source of NO₂ and PM emissions in urban areas. Over recent years they have made up an increasing share of road traffic and now constitute over half of all new car purchases.⁸ It has been theorised that this growth has been spurred in part by

¹ World Health Organisation. Ambient (outdoor) air quality and health: Fact sheet N° 313. March 2014.

² Royal College of Physicians (2016) *Every Breathe We Take: The lifelong impact of air pollution*

³ Department for Environment, Food and Rural Affairs (2016) *Committed Clean Air Zone Impact Assessment* p.12

⁴ British Lung Foundation (2015) *Battle for Breath: the impact of lung disease across the UK*

⁵ DEFRA. Emissions of air pollutants in the UK, 1970 to 2013 (statistical release). December 2014

⁶ DEFRA. Updated projections for Nitrogen Dioxide (NO₂) compliance, June 2014

⁷ World Health Organisation. Press Release No.213, IARC WHO, 12 June 2012.

⁸ Department for Transport website. Vehicle licensing statistics 2014.

incentives, such as the current vehicle tax banding system that was intended to reduce environmentally damaging pollution levels despite emitting more physiologically harmful pollutants.

Diesel cars produce more NO₂ and PM₁₀ than petrol cars, with the extent depending on the emissions standard: Euro 4 (2005) diesel cars produce over three times more NO₂ than petrol cars, with Euro 5 (2009) producing three times as much, and Euro 6 (2004) producing 25% more.⁹ In 2014, diesel cars constituted over 50% of all cars sold and 36% of the total car fleet - up from 10% in 1995.¹⁰ Diesel in the light goods vehicle fleet increased from 51% in 1994 to 96% in 2014.¹¹

Diesel cars currently fit in lower VED bands as diesel releases less CO₂,¹² despite being more harmful. VED bands are based on engine size, or fuel type and CO₂ emissions, depending on registration date. Models show a near total phase out of diesel cars in inner London would result in nearly all of London complying with legal NO₂ limits, saving 1.4 million life years with economic benefits of up to £800 million.¹³

We would therefore like to see the Treasury **reform vehicle excise duty (VED) to factor in NO₂ and PM emissions when calculating VED bands**, and for the Government to ensure funding for alternatives to private car travel - such as clean public transport and active travel. It is essential that these policies are part of a package so as to not unfairly impact on people who drive diesel cars and do not have access to alternative modes of travel.

This should act as a disincentive for purchasing and maintaining high polluting diesel vehicles. DEFRA documents show that such financial shifts can lead to behaviour change.¹⁴ We would favour this approach over an additional tax on diesel at the pump, as this could significant impact on the cost of living.

In a survey we carried out with lung patients last year 58% of people we asked said the financial cost of switching to a cleaner car was the biggest barrier to them upgrading. Nearly 50% of people also said that they purchased a diesel car because they thought they were making a cleaner and healthier choice. It is important that fiscal changes seek to change consumer behaviour moving forward rather than penalising people who thought they were making a cleaner choice buying a diesel car. This will also ensure that fiscal changes don't further exacerbate existing health inequalities.

The BLF has recently submitted Freedom of Information requests to local authorities to find out the extent to which air pollution is being monitored outside schools. We found that 57% of councils do not prioritise schools as sites to place air pollution monitors. This is concerning as research¹⁵ suggests children growing up in areas of severe air pollution are up to five times more likely to have poor lung development and are more prone to respiratory infections. As well as affecting children with conditions such as asthma, everyday exposure to pollution has even been found to contribute to breathing problems in healthy children.

⁹ Transport and Environment (2015) *Don't Breath Here*

¹⁰ IPPR (2016) *Lethal and illegal: London's air pollution crisis*

¹¹ IPPR (2016) *Lethal and illegal: London's air pollution crisis*

¹² Office for Low Emission Vehicles (2016) *Tax benefits for ultra low emission*

¹³ Laybourn-Langton L, Quilter-Pinner H, Ho H (2016) *Lethal and Illegal: Solving London's air pollution crisis*, IPPR

¹⁴ Department for Environment, Food and Rural Affairs (2016) *Exploring and appraising proposed measures to tackle air quality: project summary report for contract AQQ959*

¹⁵ Anderson, J. et al. *Clearing the Air: A Review of the Effects of Particulate Matter Air Pollution on Human Health*. *J Med Toxicol*, Volume 8, pp. 166-175

We believe that the **DEFRA air pollution monitoring guidance should be amended to specify schools as priority sites for monitoring**. In order to do this it is essential that local authorities are properly resourced. A parliamentary question¹⁶ showed that £500,000 was allocated to local authorities to support their air quality improvement work for the 2015-16 period - a reduction of 50% since the previous year. We would therefore urge the **Treasury to increase investment in this area so that local authorities are able to take necessary action on air pollution**.

Additionally, we would like to see a **new Clean Air Act enacted to bring together all existing air quality legislation and set ambitious targets to bring air pollution down to 'safe' limits as defined by the WHO**.

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.

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¹⁶ Commons written question 16051, 10 November 2015