Health and Sport Committee

Inquiry into the Preventative Agenda: Clean Air

Submission from the British Lung Foundation

The British Lung Foundation (BLF) Scotland welcomes the Health and Sport Committee’s inquiry into the Preventative Agenda. We believe that improving Scotland’s lung health cannot just be focused on disease management; preventing lung disease from ever developing should be the ultimate goal.

Scotland has some of the highest rates of lung disease in the UK, affecting 1 in 5 people, particularly those living in urban areas. It is Scotland’s third biggest killer after cancer and heart disease, though in 2015 more people died from respiratory system diseases (7,669) than heart disease (7,142) for the first time.¹

Most lung diseases are chronic, meaning that people living with these conditions can become heavily dependent on health and care services. These long-term conditions impact on all aspects of sufferers’ lives – their physical and mental health and wellbeing, their employability, their family and social lives.

Lung disease accounts for over 700,000 hospital admissions and over 6.1 million hospital bed days in the UK each year. Only heart disease accounts for more. This is a huge financial burden on health services which cannot be ignored when budgets are already stretched.

Whilst smoking remains a key cause of lung illnesses in Scotland, it is important to recognise that lung disease is not just a smoker’s disease. There are many other environmental factors, such as air pollution, that contribute to poor lung health, particularly in children. There is now compelling and overwhelming scientific evidence that air pollution contributes to poor health outcomes from non-communicable diseases, such as stroke, heart attack and chronic lung disorders, and has lifelong health implications, from the first weeks in the womb through to old age. Air pollution is also estimated to cost £20 billion each year to society as a whole, including to the NHS. This needs to be tackled if we are to protect our nation’s lungs.

This is also of increasing concern from the patients we support. They want to see quicker and bolder action at national and local level to ensure everyone has the right to breathe clean air.

As such, we welcome the opportunity to contribute to the Committee’s evidence session on Clean Air.

1. To what extent do you believe the Scottish Government’s Cleaner Air for Scotland – The Road to a Healthier Future and the approach by Integration Authorities and NHS Boards towards clean air is preventative?

The Scottish Government’s Cleaner Air for Scotland (CAFS) strategy has some key preventative policies and actions. These include the development of Low Emission Zones (LEZs), the promotion of active travel through the national walking and cycling strategies, the greening of the bus fleet, the consideration of air quality in future placemaking, and the commitment to a national air quality public awareness campaign.

The extent to which these policies are successful and effective in reducing air pollution at the shortest time possible is dependent on the Scottish Government’s level of commitment, not least in funding and resourcing. The commitments in the current Programme for Government to doubling the active travel budget and phasing out of new petrol and diesel vehicles by 2032 are very welcome and show a willingness by the Scottish Government to tackle air quality. However, there is still uncertainty around the detail and funding for other aspects of CAFS, such as LEZ funding, and a seemingly minimal commitment to a national public awareness campaign.

The latter point on public awareness is concerning because the success of CAFS is also heavily dependent on behaviour change and modal shift, which arguably cannot be achieved without effective and useful information, communication and education of the public on the negative impact of air pollution. In particular, any public awareness campaign should take into account the fact that some people are more vulnerable to air pollution than others, such as people with chronic conditions, children, whose lungs, hearts and brains are still developing, the elderly, and people living in deprived areas.

The British Lung Foundation recently launched a Clean Air Parents’ Network in England to facilitate parents’ engagement with local councils, and enable them to discuss local solutions to improve air quality around schools and where children gather. Such initiatives will bring together local policy-makers and residents to discuss the different contributing factors to the local air pollution problem and the levels of exposure linked to different transport modes.

This is why we are calling for a national public health awareness campaign on air pollution that provides useful information to people about the local mechanisms put in place to improve air quality. (See more in answer to question 2).

The current focus and responsibility for tackling air pollution, as detailed in CAFS, falls predominantly on the transport, planning and environmental sectors and
government directorates, and local authorities. The CAFS demand of NHS Boards and Integration Authorities is limited to the requirement of “NHS Boards and their local authority partners to include reference to air quality and health in the next revision of their joint health protection plans, which should identify and address specific local priority issues.” We believe that more should be done to focus on public health outcomes (see answer to question 2). In addition, air quality should be incorporated in national health policies (see answer to question 4).

2. Is the approach adequate or is more action needed?

The British Lung Foundation believes that more action is required to tackle poor air quality in Scotland and has a number of policy asks and recommendations, which include the following:

- A network of carefully-designed Clean Air or Low Emission Zones that restrict the most polluting vehicles from driving through city centres, use cleaner and more effective public transport, make cycling and walking the easy choice and other measures to improve air quality;
- Improved pollution monitoring, awareness campaigns and public health alerts, especially around schools, hospitals and GP practices, so that people living in every part of Scotland – particularly the most vulnerable - are aware of local pollution levels and how to minimise the impact on their health;
- Incentives for upgrading to cleaner vehicles, such as tailored diesel scrappage schemes, with special schemes to enable people with chronic respiratory conditions or mobility problems to upgrade their vehicle;
- Inclusion of public health outcomes, and specifically lung disease outcomes, as a measure of success in reducing air pollution.
- Independent real-world emissions testing for all vehicles, to inform public pollution-reduction strategies and private vehicle purchases;

These have been laid out in more detail in our responses to Transport Scotland’s Building Scotland’s Low Emission Zones consultation and the inquiry into air quality conducted by the Environment, Climate Change and Land Reform Committee.

We believe the points on public health campaigns, awareness and outcomes in the above list should be of particular interest to the Health and Sport Committee. As such, they are outlined in further detail below.

A national public health awareness campaign on air pollution

The government should ensure that drivers receive clear and accurate health information on air pollution. We need a Scotland-wide public health campaign to

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1 Cleaner Air for Scotland - The Road to a Healthier Future p.37
ensure that everyone knows how exposed they are to air pollution, how they can protect themselves and how they can be part of the solution.

Many drivers are not aware how exposed they are to air pollution in their own car. Studies have found that drivers actually breathe in higher amounts of pollution than cyclists on the same road. For the cyclist, emissions dissipated into the wider atmosphere which reduced their exposure but for the car driver, these emissions were circulated and built up in the cabin. In fact, levels of air pollution can be between 9 and 12 times higher inside a car than outside. The government should include this as a key message to drivers in a national health campaign. As well as clear health advice on how they can reduce their exposure.

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.

An awareness campaign will also help dispel myths around pollution exposure and reassure people that they are taking effective steps to protect themselves. For instance, we are often contacted by members of the public and organisations who are keen to use face masks. The majority of face masks do not protect people effectively from pollution, as small particles are still able to get through any gaps. Likewise, many drivers don’t realise that they may be exposed to higher amounts of air pollution sat in their own car than outside of it.

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. Any awareness campaign must be accompanied by clear health advice that facilitates behaviour change. Health advice could be delivered in partnership with trusted voices such as health charities and/or health practitioners. It should also be written in simple and easy to understand language that is tailored for different groups. This campaign should seek to target hard to reach groups and vulnerable people.

We note the several commendable one-off communications projects that have been delivered by SEPA and partners since 2015, including those involving children and young people. We also note the work being done on the online Spotfire air quality visualisation tools, which are still in development. However, we feel this has taken a piecemeal approach and has failed to reach the breadth of audience it needs to.

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4 Scottish Government (2017) Cleaner Air for Scotland: The Road to a Healthier Future, 2016 Progress Report, p.6-8
want to see the Scottish Government deliver on its CAFS commitment for a national air quality public awareness campaign, which we argue should be a nationwide public health campaign.

Such a campaign would not only help to target respiratory disease, but could have much wider public health benefits, helping to achieve goals across health policy such as improving mental health, increasing physical activity and reducing obesity. It would also help to address health inequalities. Deprived communities are more likely to be exposed to toxic pollution levels, yet have less access to public transport, cycle paths, walking routes and green space. People in the poorest areas of the UK are twice as likely to have COPD and lung cancer compared to people living in the richest areas. A properly resourced, nation-wide public awareness campaign focused on reducing air pollution and promoting active travel will help create greener, safer and healthier communities in Scotland.

The Scottish Government has led some very successful public health campaigns in the past, such as “Detect Cancer Early” and “Take it right outside”, which led to tangible, positive health outcomes across Scotland. Now the government has the opportunity to do the same with air quality, if properly supported. BLF Scotland would be keen to support the Scottish Government in delivering this, as we have done with previous public health campaigns.

**Inclusion in CAFS of public health and lung health outcomes as a measure of success**

Lung diseases place a huge and unsustainable strain on NHS hospitals most winters. Lung disease accounted for over 100,000 hospital admissions in Scotland last year, and was the second greatest cause of emergency admissions to hospital. While air pollution is by no means the sole reason for these admissions, improving air quality will help support our struggling health services.

Public Health England looked at the impact of two air pollution episodes (related to particulate matter (PM2.5) over a 10-day period in March and April 2014. It was found that the total burden of emergency hospital admissions for respiratory and cardiovascular causes associated with short-term exposure to PM2.5 was estimated to be around 1,500 across the United Kingdom (around 3.5% of total emergency respiratory and cardiovascular hospital admissions).

Alongside actual reductions on levels of pollutants in the air, we think an improvement in respiratory health could be measured to assess the effectiveness of air quality interventions and policies. For example, outcomes could include a

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7 Public Health England (2016) Working Together to Promote Active Travel: a briefing for local authorities
https://www.blf.org.uk/what-we-do/our-research/the-battle-for-breath-2016
9 Information Services Division, (Nov 2017), Acute Hospital Activity and NHS Beds Information in Scotland, p.21-22
reduction in respiratory emergency admissions to hospital. Scottish Government and local authorities should also look to regularly include people living with lung disease in the assessment to find out how air quality measures have impacted on their health.

The presence of air quality monitors in the vicinity of schools, care homes and GP surgeries would indicate the relative importance of these locations and allow the government to track reductions in air pollution affecting the most vulnerable members of the community.

Tackling air pollution will help achieve goals across health policy such as improving lung health, increasing physical activity, reducing obesity and addressing health inequalities. Deprived communities are more likely to be exposed to toxic pollution levels, yet have less access to public transport, cycle paths, walking routes and green space.11 People in the poorest areas of the UK are twice as likely to have COPD and lung cancer compared to people living in the richest areas.12 Reducing air pollution and promoting active travel will help create greener, safer and healthier communities in Scotland.

3. Is the Scottish Government’s Cleaner Air for Scotland – The Road to a Healthier Future being measured and evaluated in terms of cost and benefit?

The CAFS strategy as published is largely uncosted and considerable uncertainty still remains as to what funding is on offer from the Scottish Government for key aspects of CAFS. As such it difficult to know to what extent it is being measured and evaluated in terms of cost and benefit. CAFS does acknowledge that the health impacts of poor air quality have been estimated to cost around £20 billion per year in the UK13, and the total economic costs are potentially as high as £54 billion a year.14 However, there appears to be no calculation of what the economic benefits might be of implementing the various actions listed in CAFS.

Some work has been done in this area by other organisations. For example, Transport Scotland provided funding for a piece of work commissioned by Sustrans looking at the benefits of active travel. The report, published in November 2017 by Eunomia, found that if the target of 10% of all journeys set out in Scotland’s Cycling Action Plan (CAPS) were achieved this would mean £364 million in air pollution benefits per year.15

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13 RCP (2016) Every Breath We Take
15 Eunomia, (Nov 2017), Air Quality Benefits of Active Travel, Final report for Sustrans, p.ii
Having analysis and figures like this could be beneficial for decision-makers and the public in helping to garner support for implementing actions listed in CAFS and, ideally, other ambitious interventions regarding air quality.

As well as calculating the costs and potential savings of air quality measures in financial terms, we would recommend, as mentioned above, also measuring impact in terms of public health improvements.

4. To what extent do NHS Boards and local authorities reference air quality and health in their Joint Health Protection Plans?

All NHS Boards would seem (not all Boards’ most recent JHPPs can be readily found online) to be meeting the requirement of referencing air quality and health. However, the extent to which air quality is referenced in these plans varies considerably.

For example, the North Ayrshire and Arran JHPP for 2016-18 focuses on managing the effects of air pollution. The plan states that Health Protection work in the area of environmental exposures “includes responses to acute incidents and chronic contamination”, so focuses on Local Authority generic contingency plans and specific emergency plans for hazardous sites regarding air quality.16

Meanwhile, the Grampian JHPP for 2016-18 lists all the current AQMA and air pollution information from the Local Authorities, whilst also taking a more preventative approach: “Aberdeen City Council, in liaison with NHS Grampian, will support the implementation of the CAFS actions and specifically promote the provision of local information about air quality, support behaviour change to improve health and air quality, and encourage active travel and alternatives to car travel.”17

We acknowledge that each JHPP should reflect their different population needs and air quality issues. We also recognise that the requirement of Health Boards and Integration authorities stipulated in CAFS is arguably quite vague and open to interpretation. This is why we believe that tackling air pollution needs to go beyond references in JHPPs, and should form an important part of a Scotland-wide plan to improve lung health.

Prevention and protection should be key themes of future national lung health plans

Lung disease is the Scotland’s third biggest killer, costing the NHS across the UK £9.9 billion a year and business £1.2 billion through work days lost.\textsuperscript{18} Despite the millions affected, there is currently no plan in place to evaluate or improve respiratory services. Successive governments have failed to prioritise lung disease and put a robust strategy in place. This is why the top recommendation coming out of our \textit{Battle for breath} report in 2016 was that taskforces be established in both Scotland and England, to produce new five year strategies for tackling lung disease.\textsuperscript{19}

BLF Scotland have been lobbying the Scottish Government on this issue and, with the support of and collaboration with many other organisations represented on the Cross Party Group for Lung Health, have been successful in securing a commitment from the Minister for Public Health to establish a taskforce for lung health in Scotland. This taskforce will lead on developing a national plan for tackling lung disease and improving lung health.

This taskforce and plan are in the very early stages of development, though it is our understanding that the first iteration of the plan will look at areas that could benefit greatly from immediate review, such as priority disease pathways and management. We would recommend that future iterations of the lung health plan seek to focus on prevention and protection, which would include environmental factors such as air quality, both outdoor and indoor.

The British Lung Foundation will be grateful of the opportunity to support and contribute to the work of the lung health taskforce and national plan.

\textsuperscript{18} British Lung Foundation (2017) Estimating the economic burden of respiratory illness in the UK

\textsuperscript{19} British Lung Foundation (2016), \textit{The battle for breath} - the impact of lung disease in the UK