

Written evidence submitted by the British Medical Association (BMA) (AQU0043)

About the BMA

The BMA is a professional association and trade union representing and negotiating on behalf of all doctors and medical students in the UK. It is a leading voice advocating for outstanding health care and a healthy population. It is an association providing members with excellent individual services and support throughout their lives.

The Association is also a founding member of the UKHACC (UK Health Alliance on Climate Change), a coalition of major health institutions committed to increasing awareness of the public health impact of climate change and encouraging the health sector to act in a more sustainable, environmentally conscious way.

The BMA has repeatedly called for more decisive action from the UK Government to tackle the climate change emergency, which will have a significant impact on health and further exacerbate poverty and inequality and protect the public by creating a cleaner future. We welcome the opportunity to contribute to the select committee's inquiry into air quality.

Introduction

Air pollution and climate change pose significant threats to public health¹. Exposure to air pollution, including fine particulate matter and nitrogen dioxide, is associated with a wide range of adverse health impacts. Around 40,000 deaths a year in the UK are attributable to outdoor air pollution.² Reducing and mitigating the impact of air pollution and climate change requires sustained and collaborative action across all platforms: globally, nationally, and locally.

In the UK, the Government must fund and create infrastructure that is energy-efficient and facilitates environmentally friendly behaviour. Sources of air pollution are diffuse and varied, to respond to the challenge of reducing pollution will require significant Government investment across multiple areas including transport, agriculture and energy. We would like to see Government invest in transport infrastructure with the aim of reducing the use of polluting vehicles, champion the use of renewable energy and inform those living in the UK about how they can help reduce household air pollution. Legislative change must drive forward ambitious targets to improve air quality and systems should be implemented to regularly monitor levels of pollution, including testing car emissions and tracking exposure to harmful pollutants in major urban areas (particularly around schools and hospitals).

Overview of key areas

1. Did the UK Government's 2019 Air Quality Strategy set out an effective and deliverable strategy to tackle the UK's poor air quality and address the issues raised in our 2018 report? Has the UK Government put in place the necessary structures and resources to deliver its strategy?

1.1 The UK Government's Clean Air Strategy is a robust diagnosis of air pollution and its harmful impact on public health. We believe strengths of the strategy include:

¹Read more about the BMA's policy at: www.bma.org.uk/what-we-do/population-health/drivers-of-ill-health/climate-change-and-air-pollution

² Royal College of Physicians, 'Every Breath we take: the lifelong impact of air pollution', 2016. Available at: www.rcplondon.ac.uk/projects/outputs/every-breath-we-take-lifelong-impact-air-pollution

- The attention the strategy draws to air pollution as the largest environmental risk to health, and its categorisation as a ‘public health emergency’. BMA members feel strongly about the need for action on air pollution in order to safeguard the health and well-being of those living in the UK; 83% of our members, when surveyed, said that they were worried about the impact of air pollution on public health.³
- The detailed account the strategy provides of the sources of air pollution at quite a granular level, and an appreciation of the issue’s complexity. For example, we welcome the UK Government’s awareness that public communication and messaging will be vital, both in the form of a public health warnings, but also as a preventative measure to inform the public of how to reduce household air pollution. Equally, the investment and commitment to better data, modelling, and reporting in the strategy are positive, given the complexity that comes with assessing air pollution levels, particularly PM2.5 levels.

1.2 However, while noting these strengths we also believe that the strategy falls short in setting out detailed steps as to how the UK Government intends to deliver on its ambition, which will be crucial to reduce pollution and improve air quality. Significant shortcomings in this regard include:

- While there is a target expressed in the strategy for reducing average exposure to PM2.5 levels, there appears to be little appetite to make this legally binding in order to prevent future backsliding from targets established in transposed EU air quality directive. It was hoped that the UK Government’s Environment Bill would remedy this – however, in its current form it still lacks legally binding targets despite attempts to strengthen the legislation’s ambitions by Opposition MPs during the Bill’s scrutiny in the Commons.
- Furthermore, there have been legitimate questions asked about local government’s capacity to deliver the role it has been given in the national strategy. The strategy pushes a localised model of governance as the most appropriate way to deal with air pollution. As such the UK Government has sought to bolster local government powers by introducing, among other measures, new legislation to help curb PM2.5 pollution from burning fuel or household waste and by making local authorities responsible for dealing with severe air pollution episodes⁴. However, there have been worries raised by local government⁵ that the strategy has been accompanied by insufficient funding to achieve this model.⁶ Given the strain on local authority budgets and capacity – now more than ever –, we think it is imperative that the UK Government supports local authorities with adequate resources needed to implement the clean air strategy.

1.3 Overall, while we find the Government’s strategy encouraging and would say that it represents movement in the right direction, the lack of detail and omissions around how the very laudable aims are to be achieved means that we think that the strategy is not sufficient and would need to be bolstered in the future, particularly with respect the requisite structures to help local authorities meet their new responsibilities.

2. Will the Environment Bill provide England with a robust legal framework to define and enforce air quality limits?

³ BMA Survey 2019

⁴ UK Government, ‘Clean Air Strategy’, 2019 :

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/770715/clean-air-strategy-2019.pdf

⁵ Environmental Analyst, ‘Clean Air Strategy attempts to tackle diffuse sources’, 2020: <https://environment-analyst.com/global/73405/clean-air-strategy-attempts-to-tackle-diffuse-sources>

⁶ The Lancet, ‘New strategy for clean air in the UK – Is it enough ?’, 2019: [www.thelancet.com/pdfs/journals/lanres/PIIS2213-2600\(19\)30025-6.pdf](http://www.thelancet.com/pdfs/journals/lanres/PIIS2213-2600(19)30025-6.pdf)

- 2.1 The EU has been a leader in environmental legislation over the last 40 years, with the UK playing an important part. The Environment Bill is an important opportunity to ensure environmental protections in the UK are maintained and enhanced after the end of the transition period following the UK's exit from the EU.
- 2.2 However, the BMA is concerned that the Environment Bill, in its current form, fails to provide a legal framework that defines and ensures adherence to legally binding air pollution targets. Whilst provisions in the Bill require the Government to set targets, these are not legally binding. It is also regrettable that targets created as a result of this Bill will have an unnecessarily long timeframe for implementation – details of the air quality target, for example, will not need to be in place until October 2022 and there will be no requirement to meet such a target before at least 2037.
- 2.3 Equally, we are concerned that the Bill does not adequately guard against future weakening of the UK's environmental protections – in particular, its current provisions would allow the Secretary of State to 'lower or revoke' a long-term air quality target created from this Bill, and to lower a target set specifically for PM2.5. We believe provisions in the Bill to amend targets must not have the scope to derail the UK Government's stated ambition to become the first generation to leave the environment in a better state than it was found.⁷ It is crucial that the weakening of environmental standards will not be facilitated by the Bill.
- 2.4 With respect to enforcement, we have concerns that the Bill does not give the OEP (Office for Environmental Protection) adequate independence to scrutinise the UK Government's performance on the environment in a robust and impartial way. The UK has consistently been in breach of the EU directive on air quality, for which it has received significant fines – it is vital that an independent body is able to ensure that the UK Government adheres to the targets it sets itself. Our briefing on the Bill⁸ urged ministers to consider select committees' recommendations⁹ for closer ties between the green watchdog and Parliament.

3. What progress had the UK Government made on reducing air pollution and enforcing legal pollution limits before the COVID-19 pandemic?

- 3.1 The UK Government made good progress in reducing levels of most measured pollutants over the past two decades, however this has plateaued in recent years.¹⁰ Despite some recent actions which the BMA welcomes, such as expediting the date by which diesel and petrol cars will be banned in the UK by 5 years (to 2035), in general, we would characterise pre-pandemic UK Government action as not going far enough to address air pollution. For example, data released in October 2019 shows that the UK Government is still significantly behind on its mandated targets for reducing ambient levels of PM2.5¹¹ and, indeed, since 2010 much of the UK had been in breach of the EU limit on NOX.¹²

⁷ UK Government, 'A green Future: our 25 year plan to improve the environment', 2018: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-environment-plan.pdf

⁸ BMA briefing, www.bma.org.uk/media/2081/bma-briefing-environment-bill-hoc-second-reading.pdf

⁹ Former EFRA Committee Chair, Neil Parish MP (Oct 2019): www.parliament.uk/business/committees/committees-a-z/commons-select/environment-food-and-rural-affairs-committee/news-parliament-2017/environment-bill-inquiry-launch-19-20/

Former Environmental Audit Committee Chair, Mary Creagh (Oct 2019): www.parliament.uk/business/committees/committees-a-z/commons-select/environmental-audit-committee/news-parliament-2017/draft-environment-bill-government-response-19-20/

¹⁰ UK Government, 'Air Quality Data', 2019:

<https://webarchive.nationalarchives.gov.uk/20200303040317/https://www.gov.uk/government/statistics/air-quality-statistics>

¹¹ Air Quality News, 'Latest UK Air Pollution Data', 2020: <https://airqualitynews.com/2020/05/01/latest-uk-air-pollution-data-no2-continues-to-fall-pm2-5-stable/>

¹² Financial Times, 'Breathless: Air quality in British cities remains dangerously low', 2020: www.ft.com/content/12c596f6-224b-11ea-b8a1-584213ee7b2b

4. What does the early evidence from the COVID-19 pandemic say about the impact of poor air quality on health, and health inequalities for disadvantaged communities and other at-risk groups, and possible policy responses?

- 4.1 Air pollution is a known driver of ill health, responsible for an estimated 40,000 excess deaths a year and a contributor to many chronic illnesses, such as respiratory and cardiovascular disease.
- 4.2 Air pollution impacts disadvantaged communities much more severely than wealthier communities. In London, 46% of disadvantaged communities experience levels of pollution that exceed EU limits – this falls to 2% when we consider the wealthiest communities.¹³ Disadvantaged communities live in the most polluted areas and as a result their health is adversely affected, exacerbating existing health inequalities.
- 4.3 The BAME community has been disproportionately affected by COVID-19, accounting for 34% of critically ill COVID-19 patients despite making up just 14% of the population. The BMA was vocal in calling for a Government review into why the BAME community has been so substantially and disproportionately affected.¹⁴ This report has since been published, but it is tentative in its conclusions and cites the need for more high quality research.¹⁵ We believe that recent studies on air pollution should be considered within this scope – for example, there appears to be a significant correlation between areas with higher levels of pollution in years preceding the COVID-19 pandemic and a higher mortality rate from the virus. A study from the Harvard school of Public Health by Dominici *et al.*¹⁶ found that an increase of 1 µg/m³ in PM_{2.5} is associated with an 8% increase in the COVID-19 death rate. This finding has been corroborated by several other studies including one from the University of Cambridge.¹⁷

5. What are the current and emerging risks and opportunities for air quality posed by: short-term policy and societal changes in response to the pandemic, for example changes to transport to reduce the risk of transmission?

- 5.1 The COVID-19 pandemic has precipitated an unprecedented change in how we live and work, around the world. In the short term we have seen a major decrease in emissions and air pollution from across society; It is currently unclear to what extent these short-term declines in emissions and air pollution can be captured and maintained.
- 5.2 One major benefit with respect to air quality during the pandemic came from the decrease in road traffic brought on by fewer people commuting and a move towards active travel in the form of cycling and walking. The Mayor of London's office for example reported that there had been a fall in most categories of measured pollutants – with those most directly associated with road travel, such as NO₂, falling by up to 50%¹⁸.
- 5.3 These findings were mirrored in cities across the UK, with Oxford reporting a decrease of 59%¹⁹, Edinburgh a 50%²⁰ decrease, and York a 30%²¹ decrease. Indeed, globally Milan, New Delhi, and

¹³ Greater London Authority, 'Updated Analysis of Air Pollution Exposure in London', 2017:

www.london.gov.uk/sites/default/files/aether_updated_london_air_pollution_exposure_final.pdf

¹⁴ BMA, 'Government must urgently publish report on COVID-19 impact on BAME communities' 2020 : www.bma.org.uk/bma-media-centre/government-must-urgently-publish-full-report-on-covid-19-impact-on-bame-communities-says-bma

¹⁵ PHE, 'Beyond the Data, Understanding the Impact of COVID – 19 on BAME Groups', 2020: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/892376/COVID_stakeholder_engagement_synthesis_beyond_the_data.pdf

¹⁶ Harvard school of Public Health, Dominici *et al.*, 'A national study on long-term exposure to air pollution and COVID-19 mortality in the United States', 2020: <https://projects.iq.harvard.edu/covid-pm>

¹⁷ The University of Cambridge, 'Links between air pollution and COVID-19, 2020 : <https://www.medrxiv.org/content/10.1101/2020.04.16.20067405v5>

¹⁸ Mayor of London, Dramatic Improvement in air quality on London's Roads, 2020: www.london.gov.uk/press-releases/mayoral/dramatic-improvements-in-air-quality

¹⁹ Air Quality News, 'Oxford Air Quality', 2020: <https://airqualitynews.com/2020/05/12/oxford-air-quality-cleanest-since-days-of-horse-and-cart/>

²⁰ The Scotsman, 'Edinburgh sees more than 50% drop in pollution', 2020:

Los Angeles have all reported significantly lower levels of pollution as a result of coronavirus restrictions.²²

- 5.4 There has been a similar decline in aviation emissions as a result of the COVID-19 pandemic, with emission from air travel falling by around 31% as compared to last year.²³ Aviation emission levels will however almost certainly rise back to usual levels as we see a return to more regular frequency of flights.
- 5.5 In order to cement that significant decline in roadside NOx emissions that we saw during the coronavirus restrictions, there would need to be a widespread move away from diesel and petrol vehicles and towards lower emission and electric vehicles. The bringing forward of legislation banning diesel and petrol vehicles is welcome in this regard, but we would also like to see the Government work with the public sector – particularly the NHS – to help organisations convert their fleet away from diesel and petrol vehicles. Over 5% of all road travel in England is NHS related²⁴ and there over 2,000 hospitals and GP surgeries in areas with dangerous levels of pollution²⁵. A move towards a cleaner NHS fleet could help alleviate this and at the same time reduce NHS carbon emissions.
- 5.6 We strongly believe that the changes precipitated by COVID-19 warrant a new injection of money by the UK Government for active travel, beyond that which was pledged by the Chancellor in February's Budget Statement.²⁶ Although the early release of £250 million²⁷, from the £5 billion announced in the Budget for cycling and buses, is welcome and will allow councils to make some necessary and positive changes, this 'emergency active travel fund' is not new money and comes in a context of little government investment in cycling in recent years, representing just 2% of transport spending since 2016.²⁸ With the added context of COVID-19, we think that the existing commitment for £2 billion²⁹ ringfenced for cycling and walking will need to be supplemented by additional investment to support the very welcome and ambitious plans from the UK Government for increased active travel. This sentiment has been echoed by Cycling groups including Cycling UK.³⁰

6. What are the current and emerging risks and opportunities for air quality posed by medium and long-term actions to promote economic recovery?

- 6.1 The picture for air pollution is unclear over the medium to long-term. In certain countries we have already seen emissions have rebounded to near pre pandemic levels.³¹ However there have

www.edinburghnews.scotsman.com/news/environment/edinburgh-sees-more-50-cent-drop-air-pollution-lockdown-lowers-amount-traffic-2523138

²¹ University of York, 'New study reveals York air quality improves by 30% over lockdown', 2020: www.york.ac.uk/news-and-events/news/2020/research/air-quality-improves-york-lockdown/

²² CNBC, 'Air pollution has fallen dramatically for these cities', 2020 : <https://www.cnbc.com/2020/04/22/coronavirus-air-pollution-has-fallen-dramatically-for-these-cities.html>

²³ Financial Times, 'Aircraft emissions fall sharply as pandemic grounds flights', 2020: <https://www.ft.com/content/c736cd3c-1457-440b-af07-4061afb35bc9>

²⁴ Sustainable Development Unit 'Low carbon travel, transport and access': <https://www.sduhealth.org.uk/areas-of-focus/carbon-hotspots/travel.aspx#:~:text=The%20health%20and%20care%20system,of%20the%20NHS%20carbon%20footprint.>

²⁵ British Lung Foundation, 'Toxic Air at the door of the NHS', 2018: https://cdn.shopify.com/s/files/1/0221/4446/files/PM_Report_FINAL_web_40b0715b-8775-4ee1-a092-2199f9c48a46.pdf?14854756238904833688&_ga=2.226566040.401148642.1596190611-1578488112.1590591127

²⁶ 'Major boost for bus services as PM outlines new vision for local transport', 10th February 2020. Available at: www.gov.uk/government/news/major-boost-for-bus-services-as-pm-outlines-new-vision-for-local-transport

²⁷ '£2 billion package to create new era for cycling and walking, 9th May 2020'. Available at: www.gov.uk/government/news/2-billion-package-to-create-new-era-for-cycling-and-walking

²⁸ Walking and Cycling Alliance, 'Budget 2020: A briefing from the Walking and Cycling Alliance', 2020: www.cyclinguk.org/sites/default/files/budget_briefing.pdf

²⁹ UK Gov, '2 Billion package to create new era for cycling and walking', 2020: www.gov.uk/government/news/2-billion-package-to-create-new-era-for-cycling-and-walking

³⁰ The Guardian, 'Residents to get new decision making powers in cycling revolution', 2020 : www.theguardian.com/uk-news/2020/jul/27/residents-to-get-new-decision-making-powers-in-cycling-revolution

been behavioural shifts such as many organisations integrating homeworking as an integral part of their business plans for the future, which have the potential to help cement the kind of pollution reduction we saw during the coronavirus restriction measures.

- 6.2 However, there are equally other behavioural changes to consider that may have a negative impact on the effort to reduce air pollution such as an increased use of private cars by people returning to work in order to reduce contacts and potential infections.
- 6.3 In the medium to long term, the UK Government must pursue a 'Green Recovery' and prioritise investing in zero carbon and sustainable industries. Although the £3 billion Green investment package, pledged by the Chancellor in the Summer Statement³², is welcome, the last two Committee for Climate Change progress reports have warned that the UK is in danger of not meeting its net zero contributions unless new wide-ranging policy initiatives are introduced.
- 6.4 Given the diffuse nature of air pollution, the UK Government should ensure there is strong co-ordination across Whitehall to combat air pollution. We would like to see more cohesion across government departments and a mainstreaming on environmental issues at all levels of policy making. A serious and considered approach is needed by the UK Government to tackle the damage air pollution has on the health of those living in the UK – recognising its place in government policymaking across the board.

³¹CNBC 'Carbon emissions sharply rebound as countries lift coronavirus restrictions', 2020:

<https://www.cnn.com/2020/06/18/coronavirus-carbon-emissions-rebound-sharply-as-countries-states-open.html>

³² 'Chancellor's Plan for Jobs to help the UK's recovery', 8th July 2020. Available at: www.gov.uk/government/news/rishis-plan-for-jobs-will-help-britain-bounce-back