

**Senedd Cymru**  
**Y Pwyllgor Newid Hinsawdd, Amgylchedd**  
**a Materion Gwledig**  
**Ymgynghoriad ar effaith argyfwng**  
**Covid-19**  
**CCERA(5) CP 09**  
**Ymateb gan Partneriaeth Asthma UK a'r**  
**British Lung Foundation**

**Welsh Parliament**  
**Climate Change, Environment and Rural**  
**Affairs Committee**  
**Consultation on the impact of the Covid-19**  
**pandemic**  
**CCERA(5) CP 09**  
**Evidence from Asthma UK and British**  
**Lung Foundation Partnership**

## Executive Summary



THE ASTHMA UK AND  
BRITISH LUNG FOUNDATION  
PARTNERSHIP

1. Asthma UK and British Lung Foundation Wales are pleased to submit written evidence to the inquiry.
2. COVID-19 is an infectious respiratory disease and the most serious pandemic to affect Wales since the 1918-20 'Spanish Flu'. Before COVID 1 in 5 people in Wales were affected by a lung condition, including asthma, COPD and pulmonary fibrosis. COVID-19 is now affecting every family in every town, regardless of whether they had a pre-existing lung condition or not. However, people with pre-existing lung conditions have been told they are at an increased risk of developing severe symptoms if they contract COVID-19, meaning they are strongly advised to observe strict social distancing.
3. Our response takes into account of the devastating impact that the virus has had on families and communities across the country. We highlight in this response the impact that COVID-19 has had on the environment and the health benefits of such changes under the shadow of the pandemic.
4. Our response covers:
  1. Clean Air
  2. Air Quality at Home
  3. Behavioural Changes, the new normal?

## About Asthma UK and British Lung Foundation

4. Building on existing collaboration, in January 2020 Asthma UK and the British Lung Foundation merged to become the Asthma UK and British Lung Foundation Partnership. Both retain individual identities.
5. Every 10 seconds, someone has a potentially life-threatening asthma attack and three people die every day. Tragically the majority of these could be prevented, while others have asthma, so severe current treatments don't work. This must change. That's why Asthma UK exists. We work to stop asthma attacks and, ultimately cure asthma by funding world-leading research and scientists, campaigning for improved care and supporting people with asthma to reduce their risk of a potentially life-threatening asthma attack.
6. The British Lung Foundation is the only UK charity looking after the nation's lungs. We offer hope, help and a voice for people with all lung conditions, including COPD and pulmonary fibrosis. 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 so that one day everyone can breathe clean air with healthy lungs.

## Clean Air

7. One of the most significant impacts of COVID-19 is the reduction in human activity. Such a decline has led to reduced use of automotive vehicles, industrial production and air travel. The usual after-effects of such activity, namely the pollution generated, has reduced. Such a reduction has led to an improvement

in air quality.<sup>i</sup>

8. The cost of such an improvement is deadly, and when submitting evidence, we do so with remorse at the human toll to record such a reduction.
9. Pollution levels collated by the University of Swansea have noted the significant drop in NO<sub>2</sub> concentrations.<sup>ii</sup> The reduction is significantly lower, where roadside emissions are the main contributory factor. The effects of which have been felt by our beneficiaries with lung conditions.
10. Results from a survey conducted between 27th April and 4th May noted a majority of our respondents indicating a slight if not a significant change in air pollution.<sup>iii</sup> Such a change improved their lung conditions, with 15% of respondents highlighting that their asthma symptoms had reduced and overall management of their health improved.
11. However, in the same survey, 40% did not notice a change, some (4%) even noted an increase in air pollution.<sup>iv</sup> Such an increase might be interconnected with levels of PM<sub>2.5</sub> not changing and in some instances, higher than what they were previously.
12. Unfortunately, the sources of PM<sub>2.5</sub> are complicated with warmer weather being a factor for the increased levels. However, generally, levels have been lower than predicted if compared to the normal levels of activity for this time of year.<sup>v</sup>
13. Regardless of the impacts felt by each participant, nearly all, a majority of 82% in our survey indicated that air pollution and overall air quality should be the priority for the Welsh Government post-coronavirus.<sup>vi</sup> The lockdown has put a pause on usual activity. In that time, it has become apparent to many that our routine activity impacts not only the environment but also our health.
14. The cost of air pollution to the Welsh NHS already totals a billion pounds per year.<sup>vii</sup> Improving overall air quality will not only improve lung health but also free up resources of our vital service, improving the NHS' effectiveness in combating future pandemics.

## **Air Quality at Home**

15. The impact of COVID-19 has highlighted the adaptability of businesses. For the first time, we are now using web-based calling applications to host every meeting. The physical presence is no longer seen as vital to run a business effectively.
16. Recent research conducted by the ONS highlights that nearly half of all working-age adults (49%) had worked from home between 11th and 14th June 2020.<sup>viii</sup> What is more shocking is that this was an increase of 41% from the previous week. Indicating that as the economy restarts, the growing trend is to work from home.
17. The current levels of air pollution, as highlighted above, have dramatically dropped. If the current method of working without the need to attend a physical office space continues, the new normal could change travelling habits and possibly reduce commuter traffic.
18. Continued support should be granted to businesses to support staff to continue to work from home. Welsh Government needs to encourage the rollout of superfast broadband to remote areas of the country so that there is no need to travel away from home to work.
19. Such changes in the way we work can help to reduce levels of air pollution significantly. However, in turn, with more working from home, air quality at home becomes more important.
20. The draft Clean Air Plan for Wales only has a couple of pages highlighting the impact of poor air quality at home.<sup>ix</sup> With more time spent inside, actions at home, such as the use of Gas cookers and candles can increase levels of PM<sub>2.5</sub> with further measures needed to be taken outside in our gardens to decrease levels of poor air quality locally. Warmer weather increases the temptation to cook outside

with BBQs and wood-burning stoves. Without proposed bans on wet wood and coal as indicated in the Clean Air Plan for Wales, such actions will increase levels of PM<sub>2.5</sub> and NO<sub>2</sub>.<sup>x</sup>

21. During the summer we wouldn't expect the use of heating, but as the autumn approaches the required domestic need for heating will increase as more work from home. Therefore work to tackle domestic wood burning, increasing EPC levels and updating old boilers and appliances will help to reduce levels of poor air quality at home and further reduce the levels of energy needed to warm homes.

### **Behavioural Changes – a new normal?**

22. The UK's bike industry has seen sales of bikes surge in the UK by a staggering 192% during the lockdown.<sup>xi</sup> The increase is due in part to recreational use; however, with the request by Government to stay local, the use of a bike as a form of transport has increased.
23. With 80% of all pollution near roadsides caused by road transport, the benefits of such a trend will not only improve the nation's health but also enhance the quality of air in the city. Work in our towns and cities, such as in Cardiff where the council has pedestrianised Castle Street are warmly welcomed. The measures are in place to help reduce transmission rates; however, grant an opportunity to highlight how our major cities can function with less traffic coming through the city centre.
24. With reduced car access and promotion of alternatives, public opinion has changed in favour of improving and maintaining a healthier environment. Surveys of the UK population have found that almost half are now considering an electric vehicle (EV) as their next car.<sup>xii</sup> With an increased appetite for EVs, the Welsh Government should look to improve the charging infrastructure.
25. Currently, the eight counties in the UK with the lowest number of charging points per head of population are all in Wales.<sup>xiii</sup> To encourage the switch to EVs, sufficient infrastructure needs to be in place and should be a priority to reduce combustion vehicles in Wales.
26. The negative side effect of the pandemic has been the Ministerial direction by Governments to avoid the use of public transport and instead use the car. Such guidance reinforces behaviours to use a personal vehicle as the primary mode of transportation. Although the advice is to reduce the spread of COVID-19, the concern is that methods to combat air pollution such as Clean Air Zones will withdraw in favour of economic recovery.

- i Swansea University Trend Analysis of Air Pollution in Wales. Link to data can be found here: [https://chemri.shinyapps.io/Air\\_pollution\\_change\\_in\\_Wales\\_2020/](https://chemri.shinyapps.io/Air_pollution_change_in_Wales_2020/)
- ii Swansea University Trend Analysis of Air Pollution in Wales. Link to data can be found here: [https://chemri.shinyapps.io/Air\\_pollution\\_change\\_in\\_Wales\\_2020/](https://chemri.shinyapps.io/Air_pollution_change_in_Wales_2020/)
- iii Survey run by Asthma UK and British Lung Foundation, 27<sup>th</sup> April – 4<sup>th</sup> May 2020, 14,210 responses received (659 from Wales).
- iv Survey run by Asthma UK and British Lung Foundation, 27<sup>th</sup> April – 4<sup>th</sup> May 2020, 14,210 responses received (659 from Wales).
- v Swansea University Trend Analysis of Air Pollution in Wales. Link to data can be found here: [https://chemri.shinyapps.io/Air\\_pollution\\_change\\_in\\_Wales\\_2020/](https://chemri.shinyapps.io/Air_pollution_change_in_Wales_2020/)
- vi Survey run by Asthma UK and British Lung Foundation, 27<sup>th</sup> April – 4<sup>th</sup> May 2020, 14,210 responses received (659 from Wales).
- vii Making a Difference: Reducing Health Risks Associated with Road Traffic Air Pollution in Wales, 2018. Source can be found here: [http://www.wales.nhs.uk/sitesplus/documents/888/PHW%20Air%20pollution%20report%20\(final%20English\).pdf](http://www.wales.nhs.uk/sitesplus/documents/888/PHW%20Air%20pollution%20report%20(final%20English).pdf) (Page 1 reads “In Wales, the societal cost of air pollution from health service costs and lost work-days is estimated to be £1 billion each year.”)
- viii Coronavirus and the latest indicators for the UK economy and society: 18 June 2020, ONS. Link to data can be found here: <https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/conditionsanddiseases/bulletins/coronavirustheconomyandsocietyfasterindicators/18june2020>
- ix The Clean Air Plan for Wales, Healthy Air, Healthy Wales, 10<sup>th</sup> December 2019, Pages 61- 62. Link to original document can be found here: <https://gov.wales/sites/default/files/consultations/2019-12/consultation-a-clean-air-plan-for-wales.pdf>.
- x The Clean Air Plan for Wales, Healthy Air, Healthy Wales, 10<sup>th</sup> December 2019, Page 55. Link to original document can be found here: <https://gov.wales/sites/default/files/consultations/2019-12/consultation-a-clean-air-plan-for-wales.pdf>.
- xi Business News Wales, Transport News Wales, 1<sup>st</sup> June 2020. Link to report can be found here: <https://businessnewswales.com/growth-in-cycling-will-trigger-a-need-for-welsh-employers-to-think-bike/>
- xii Energy Live News, 15<sup>th</sup> April 2020, Link can be found here: <https://www.energylivenews.com/2020/04/15/almost-half-of-uk-drivers-consider-ev-switch-in-the-wake-of-covid-19/>
- xiii The Guardian, 2<sup>nd</sup> November 2020, Link can be found here: <https://www.theguardian.com/environment/2019/nov/02/wales-has-lowest-number-of-electric-car-chargers-per-head-in-uk>