

# **PE2123/B: Update air quality standards in Scotland to align with 2021 World Health Organisation guidelines**

## **Petitioner written submission, 11 December 2024**

Air pollution is the greatest environmental threat to public health. The causes of air pollution are complex with numerous sources and the harms to human health are widespread. Everyone is exposed to air pollution, short-term or long-term, and at all stages of life, no matter where they live, work and play. It is a cause of ill-health and mortality for people across Scotland, especially for those living with a lung condition, such as asthma or chronic obstructive pulmonary disease (COPD). There is no safe level of air pollution.

Toxic air is a public health emergency, causing new lung conditions and worsening existing ones. It can stunt the growth of children's lungs and travel deep into the lungs and brains of unborn babies. The evidence on the damage to public health by air pollution is well-documented. Depending on the source, between 1,800 and 2,700 people die prematurely each year in Scotland as a result of toxic air. There is a clear link between air pollution and respiratory disease, lung cancer and cardiovascular disease, and there is growing research and evidence linking air pollution to brain health issues, mental health problems, neurological conditions, and diabetes. Air pollution has been shown to cause cancers, with research showing that for every 10  $\mu\text{g}/\text{m}^3$  of increased exposure to fine particulate matter (PM<sub>2.5</sub>), the risk of dying from any cancer rose by 22%.<sup>1</sup>

As well as the serious impacts on public health, there are economic consequences on individuals, communities, and society as a whole. Air pollution is estimated to cost the Scottish economy over £1.1 billion each year in days lost at work and costs to the NHS<sup>2</sup>. As air quality improves and the effects on people with respiratory and other health conditions ease, the financial burden on the NHS and employers will be significantly reduced. However, given the growing evidence associating air pollution with various conditions, the estimated cost to the economy and NHS is likely to rise as research progresses. This is also true for the numbers of estimated early deaths attributable to air pollution.

A parliamentary question (S6W-03401)<sup>3</sup> submitted by Mark Ruskell MSP to the Scottish Government, following the publication of the updated World Health Organisation (WHO) air quality guidelines in September 2021, asked what its response was to the new air quality guidelines and what new targets were planned to meet the new WHO guidelines accordingly. Responding for the Scottish Government, then Minister for Environment, Biodiversity and Land Reform, Màiri McAllan MSP said that the Scottish Government welcomed, and was "carefully considering" the recommendations, adding that the "case for making any changes to

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<sup>1</sup> <https://aacrjournals.org/cebpa/article/25/5/839/71066/Cancer-Mortality-Risks-from-Long-term-Exposure-to>

<sup>2</sup> <https://foe.scot/press-release/scottish-budget-announcement-a-strong-step-towards-changing-transport/>

<sup>3</sup> <https://www.parliament.scot/chamber-and-committees/questions-and-answers/question?ref=S6W-03401>

air quality targets in Scotland to reflect the new guidelines will be assessed and taken forward during implementation of the Cleaner Air for Scotland 2 strategy.” In June 2023, then Cabinet Secretary for Transport, Net Zero and Just Transition, Màiri McAllan MSP responded to the Scottish Parliament’s Net Zero, Energy and Transport Committee’s inquiry ‘Air pollution in Scotland’ to state that the Scottish Government was “currently considering the ambitious targets” in the new WHO guidelines “in the context of both CAFS2 and development of the next air quality strategy”. The 2024 ‘Cleaner Air for Scotland 2 strategy: progress report’ confirmed that the updated WHO guidelines will be considered as part of the review of CAFS2, however made it clear that adopting the 2021 guidelines will “have implications for the current system of LAQM [Local Air Quality Management].”

Using local authority Annual Summary Reports for 2023, we found that 60 of the 85 automatic monitoring sites for NO<sub>2</sub> and 35 of the 82 sites recording PM<sub>2.5</sub> would meet the new WHO guidelines. Only four local authorities would meet these new limits – East Renfrewshire, Inverclyde, Midlothian, and North Lanarkshire. This shows that Scotland could adopt the lower limits for NO<sub>2</sub> and PM<sub>2.5</sub>, but more work will need to be done to achieve these targets and we hope that the next version of the Cleaner Air for Scotland strategy will go further than previous strategies to tackle sources of air pollution like domestic burning and transport. More information on [the summary reports and local authority monitoring performance can be found on page 14 of our Clearing the Air: Transport + Lung Health report](#).

Furthermore, we believe that for Scotland to meet its ambition to have the best air quality in Europe, every part of the country should have better monitoring. Other stakeholders have expressed similar positions with the Royal College of Physicians Edinburgh, the Royal College of Paediatrics and Child Health, and the Royal College of General Practitioners Scotland calling for greater monitoring where groups of vulnerable people are.<sup>4</sup>

The Net Zero, Energy and Transport Committee heard during the ‘Air Quality in Scotland’ inquiry that a more robust system of monitoring is required. Environmental Standards Scotland questioned if the existing network of monitoring was “comprehensive enough to detect poor air quality”. The data in paragraph four of this submission, taken from the Clearing the Air: Transport + Lung Health report, excludes Aberdeenshire, Argyll and Bute, Moray, Nan Eilean Siar, and Orkney Islands as no information was available.

Asthma + Lung UK Scotland strongly encourages the Scottish Government to align its air quality ambitions with the 2021 World Health Organisation air quality guidelines. Meeting the new targets may prove challenging for the Scottish Government, local authorities, and other public bodies. However, with no safe levels of air pollution, lower limits will better protect human health, particularly those living with lung conditions and those at risk from developing lung conditions. Greater monitoring will determine if Scotland is on track to have the best air quality in Europe.

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<sup>4</sup> <https://www.rcpe.ac.uk/news/doctors-call-action-air-pollution>