



UK Health Alliance on Climate Change

Cite this as: *BMJ* 2023;380:p224<http://dx.doi.org/10.1136/bmj.p224>

Published: 27 January 2023

## A bill before parliament for the right to breath clean air

Elaine Mulcahy *director*

In August last year, the United Nations General Assembly declared that everyone on the planet has a right to a healthy environment, including clean air, water and a stable climate.<sup>1</sup> A new bill before the UK parliament—the Clean Air (Human Rights) Bill—now sets to force the government to take action to bring air quality in every community up to World Health Organisation minimum standards.<sup>2</sup>

The ability to breathe is what defines us as living beings. It is the process in which we inhale the elements we need to keep our bodies functioning and exhale the by-products of waste gas. Keeping this system functioning is critical to our good health and when it starts to malfunction the impacts are life threatening.

Over the last 170 years, since the industrial revolution, we have allowed the air that we depend on so ultimately for our survival to get dirtier and dirtier, to the point where we are harming ourselves. Dr Tedros Adhanom Ghebreyesus, Director General of the World Health Organization (WHO), has said that, from a health perspective, the modern addiction to fossil fuels is an act of self-sabotage.

That is has taken until 2022 for the right to clean air to be officially declared a human right, is evidence in itself of how far we have allowed our own health to fall down the list of priorities. In the UK, the Clean Air (Human Rights) Bill has yet to secure the support of MPs. The Bill, also referred to as Ella's Law, is a legacy to Ella Roberta Adoo Kissi Debrah who died in 2013 when she was just nine years old as a result of asthma caused by exposure to excessive air pollution. 15 February 2023 will mark the tenth anniversary of her death. In that time, thousands more have died from air pollution. The Lancet Countdown report estimates that in 2020, exposure to outdoor air pollution contributed to 27 000 deaths in the UK. Globally, millions die every year from the effects of both indoor and outdoor pollution.<sup>3</sup>

In the UK, we expect the water that flows from our taps to be clear. If it turns brown, we suspect there is something wrong. We don't drink it. We report it and wait for someone to fix it. After a spell of freezing weather, when the potholes on the roads get bigger and deeper, we complain to the council. Radio chat shows have dedicated segments discussing how bad the roads are. We worry about our cars. And yet, every day we breathe polluted air with little outrage. As a society we seem to have come to accept pollution as a consequence of modern life, but accepting polluted air is accepting thousands of children being admitted to hospital with asthma and lung infections, thousands of vulnerable people dying every year as a consequence of breathing unsafe air, and hospitals struggling to cope with increasing volumes of patients suffering the direct and indirect harms of air pollution.

The WHO says that 99% of us are breathing air that is bad for our health. Two of the most dangerous pollutants are the gas nitrogen dioxide (NO<sub>2</sub>) produced by vehicles and fine particulate matter (PM<sub>2.5</sub>) produced by vehicles, wood burning, industry and farming.

High levels of NO<sub>2</sub> can damage the human respiratory tract and increase a person's vulnerability to respiratory infections and asthma. Microscopic fine particulate matter (PM<sub>2.5</sub>) is about the same size as bacteria, small enough to fit through the walls of the lungs and into the bloodstream where they are carried around the body, often eventually lodging themselves in different organs.

Exposure to air pollution increases the risk of respiratory and cardiovascular disease, lung cancer, diabetes, neurological disorders, and adverse pregnancy outcomes. Research has shown a direct link between increasing levels of pollution in the air and GP appointments for respiratory symptoms and asthma, and that exposure to traffic related pollution increases the likelihood of having multiple long term physical and mental health conditions.<sup>3 4</sup>

Despite this knowledge, the current targets for limiting air pollution in England would see the country aiming to be double the current WHO minimum standard by 2040. That means that a child born today would still be breathing dirty air by the age of 16. It also means that our stretched health service, already struggling to meet patient demand, is facing decades of hospital admissions and GP visits from the thousands of people whose health will be impacted by poor air quality.

Ella's Law—the Clean Air (Human Rights) Bill—provides an opportunity to change this, to force government action to address air quality and to put the quality of the air we breathe higher up the list of priorities, where it should be.

Competing interests: none declared.

Provenance and peer review: not commissioned, not peer reviewed.

1 UN declares healthy environment—including clean air—a human right <https://www.ccacoalition.org/en/news/un-declares-healthy-environment-%E2%80%93including-clean-air-%E2%80%93human-right>

2 Ella's Law. <https://ellaslaw.uk/>

3 UK Health Alliance. Lancet countdown UK policy brief. <https://ukhealthalliance.org/resource/lancet-countdown-uk-policy-brief/>

4 Adults living in areas with high air pollution are more likely to have multiple long-term health conditions <https://www.sciencedaily.com/releases/2022/12/221202112515.htm>