

Summary: RCOG and RCPCH parliamentary roundtable “The air we breathe: putting women and children at the heart of the debate on air quality in the UK” – May 2022

This roundtable was an opportunity for MPs and Peers to hear directly from healthcare professionals on the specific health impacts of air pollution during pregnancy and childhood, and the clear evidence for the UK Government to adopt ambitious air quality targets in line with WHO-recommended levels.

Exposure to air pollutants including fine particulate matter during pregnancy and early childhood can have harmful and irreversible effects on the development of the lungs and other organs, with the potential for respiratory and other health problems as an adult.

Our recommendation

The UK Government must set its legally binding target for fine particulate matter (PM2.5) of 10 micrograms per cubic metre by 2030 – ten years earlier than their [current proposal](#) – in order to safeguard the health of current and future generations.

The [Pathway to Healthy Air in the UK](#) report clearly demonstrates that a PM2.5 target for of 10 micrograms per cubic metre can be met by 2030 if current and proposed policies are fully implemented. The same research highlighted clear economic and health co-benefits of meeting this target, including **children across the UK suffering an average of 388,000 fewer days of asthma symptoms per year.**

Our concerns

- The DEFRA consultation on environmental targets does not reference the [WHO Air Quality Guidelines](#), which are based on expert evaluation of current scientific evidence.
- The consultation documents, and therefore the proposed targets, do not take account of the unique impact of air pollution exposure during pregnancy.
- The consultation’s proposed air quality targets lack ambition. 2040 is 18 years away, meaning that under the proposed target another generation of children are set to grow up breathing polluted air.
- The consultation does not include targets for reducing the other components of air pollution that also have adverse impacts on health, including ozone, nitrogen dioxide and sulphur dioxide.
- The consultation does not clearly recognise the urgent need for strong policies in key areas such as domestic burning and road transport in order to be able to reach the proposed PM2.5 targets

What you can do

- Secure a Westminster Hall debate on the impacts of air pollution on women and children’s health.
- Table a PQ to DEFRA asking them for more detail on the policy changes they plan to implement in order to improve air quality in England.
- Make private representation to the DEFRA Secretary of State The Rt Hon George Eustice MP noting concern about the lack of ambition.

Further reading

- [Policy brief for the UK](#) (Lancet Countdown on Health and Climate Change, 2021)
- [Outdoor air pollution and pregnancy in the UK](#) (RCOG, 2021)
- [Outdoor air quality in the UK](#) (RCPCH, 2020)
- [Pathway to Healthy Air in the UK](#) (Clean Air Fund & Imperial College London, 2022)

Key themes from the roundtable

1) Children are especially vulnerable to air pollution, which can lead to lifelong health issues

Children's organs and immune systems are still developing – therefore toxin-induced damage is far more likely to have an impact. They are also proportionally exposed to more airborne toxins than adults as they are smaller and breathe faster. Damage to lungs in childhood can also lead to lung problems in later life.

Fine particulate matter is associated with impaired lung function and asthma exacerbations in childhood – the UK has one of the highest prevalence, emergency admission and death rates for childhood asthma in Europe and outcomes are worse for children and young people living in the most deprived areas.¹

"legally binding targets based on WHO guidelines would reduce the number of deaths from air pollution in the UK"² – coroner's conclusion following the death of Ella Kissi-Debrah, who died in 2013 aged nine following an asthma attack, and was the first person in the UK to have air pollution listed as a cause of death.³

Children have a right to clean air – during COP26 in 2021, the UN acknowledged the right of children to breathe clean air, cementing it as a basic human right.

Young people should be at the centre of planning and action on this issue – a young shared their perspective with roundtable members and illustrated why involving children in decisions about their health is vital.

2) Air pollution exposure in pregnancy is linked to poor pregnancy outcomes, including miscarriage

Fetal development is a critical window of exposure to environmental pollutants – which can have long-term impacts on future health – due to the rapid cell division which takes place in this period.⁴ There is consistent evidence that exposure to particulate matter during pregnancy increases the risk of poor pregnancy outcomes including stillbirth, low birth weight and preterm birth.⁴

A "modifiable risk factor for miscarriage" – the Lancet [Miscarriage Matters](#) series (2022) concludes that exposure to air pollution appears to increase miscarriage risk and constitutes a modifiable risk factor.

Air pollution particles have been shown to reach the fetal side of the placenta – the placenta regulates the fetal environment and is a gatekeeper for nutrient exchange between mother and fetus.

Evidence of adverse impacts on maternal health – links have been made between pollution and increased risks of pre-eclampsia, infertility and diabetes in pregnant women.⁴

3) Air pollution is a health equity issue

Air quality is an environmental determinant of health – a paediatrician explained their experience of seeing the broader impact of air pollution on children's lives, including missing school and being less able to exercise, or combining with health issues caused by poor housing.

The environment in which we live is a key determinant of inequalities in health⁵ – more deprived communities in the UK are typically exposed to higher levels of air pollution. Emergency admissions for asthma are strongly associated with deprivation, and adverse pregnancy outcomes related to air pollution are higher among low socioeconomic and ethnic minority groups.⁶

¹ RCPCH, [State of Child Health: Asthma](#) (2020)

² Royal College of Physicians [Communicating the adverse effects of air pollution on health](#) (2021)

³ BBC News, [Air pollution: Coroner calls for law change after Ella Adoo-Kissi-Debrah's death](#) (21 April 2021)

⁴ RCOG, [Outdoor air pollution and pregnancy in the UK](#) (2021)

⁵ Institute of Health Equity, [Health Equity in England: The Marmot Review 10 Years On](#) (2020)

⁶ Lancet Countdown on Health and Climate Change, [Policy brief for the UK](#) (2021)