The issue

According to the World Health Organization (WHO), outdoor air pollution levels have risen globally by 8% in the past 5 years. Fast-growing cities are particularly affected.

Each year in the UK, inhaling particulates causes an estimated 29,000 deaths. That figure rises to 40,000 when exposure to nitrogen dioxide is included. Indoor air pollution contributes to thousands more deaths. Air pollution also has a major impact on ecosystems and biodiversity, affects crop yield in agriculture, and contributes to climate change. Its economic cost is around £20 billion a year.

Improved regulation of industry means that our exposure to some pollutants has fallen; sulphur dioxide and soot no longer pose the threat to health that they did 50 years ago.

However, other developments, such as growing use of cars and gas heating, have increased our exposure to different pollutants. The drive to reduce energy costs by creating homes with less ventilation may be increasing the harm done by indoor pollutants.

While air pollution is harmful to us all, people who are older, live in deprived areas, have pre-existing conditions or live near busy roads are at greater risk. Our most deprived communities are exposed to some of the worst outdoor and indoor air quality, contributing to the gap in life expectancy of nearly 10 years between the most and the least affluent communities.
The RCP view

In 2016, the RCP and the Royal College of Paediatrics and Child Health (RCPCH) published *Every breath we take: the lifelong impact of air pollution*. This report set out a range of recommended actions across central and local government, within the NHS and across the economy:

**Educate professionals and the public**
The NHS and patient charities must educate health professionals, policymakers and the public about the serious harm that air pollution causes. Health professionals, in particular, have a duty to inform their patients.

**Promote alternatives to cars fuelled by petrol and diesel**
Government, employers and schools should encourage and facilitate the use of public transport and active travel options like walking and cycling. European, national and local policies should encourage the use of hybrid electrical and hydrogen-powered vehicles.

**Put the onus on polluters**
Polluters must be required to take responsibility for harming our health. Political leaders at local, national and EU levels must introduce tougher regulations, including reliable emissions testing for cars.

**Monitor air pollution effectively**
Air pollution monitoring by central and local government must track exposure to harmful pollutants in major urban areas and near schools. The results should be communicated to the public in a clear way that everyone can understand.

**Act to protect the public health when air pollution levels are high**
When these limits are exceeded, local authorities must have the power to close or divert roads to reduce the volume of traffic, especially near schools.

**Tackle inequality**
Regulators, local government and NHS organisations must prioritise improvements in air quality in our most deprived areas, setting high standards of emission control across all sectors of industry.

**Protect those most at risk**
Children, older people, and people with chronic health problems are among the most vulnerable to air pollution. Public services must take account of this through local tools such as planning policies for housing and schools, equalities impact assessments, and joint strategic needs assessments. Healthcare professionals should help vulnerable patients protect themselves from the worst effects of air pollution.

**Lead by example in the NHS**
The health service must no longer be a major polluter; it must lead by example and set the benchmark for clean air and safe workplaces. The Department of Health, NHS England and the devolved administrations must give commissioners and providers incentives to reduce their emissions, and protect their employees and patients from dangerous pollutants.

**Improve our understanding of the impact of air pollution on our health, economy and communities**
Including the economic impact, the relationship between indoor air pollution and health, how global trends are affecting air quality, new technologies to improve monitoring, and the effects of air pollution on health.

**What the RCP is doing**

The RCP is campaigning for the implementation of these recommendations. We have produced a briefing on what Brexit means for air quality.

The RCP is a member of the UK Health Alliance on Climate Change, which brings together Britain’s major health institutions. Our collective aim is to encourage better approaches to tackling climate change that protect and promote public health, while also reducing the burden on health services.