

EU policies for the prevention of allergy-related disease

ATOPICA meeting

5 – 6 March 2015

Brussels, Belgium

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Health & Environment Alliance : www.env-health.org

HEAL's member network

>70 organizations
in 28 countries

Doctors associations

Patient groups

Nurses associations

Public health institutes

Research institutes

Not-for-profit health insurers

Women's groups

Youth groups

Environmental groups



*Promoting environmental policy
that contributes to good health*

Broad scientific network and collaborations

- Collaborative on Health and Environment (CHE)



- WHO (particularly the European Center on Health and Environment)



World Health
Organization

- United Nations Environment Programme
UNEP

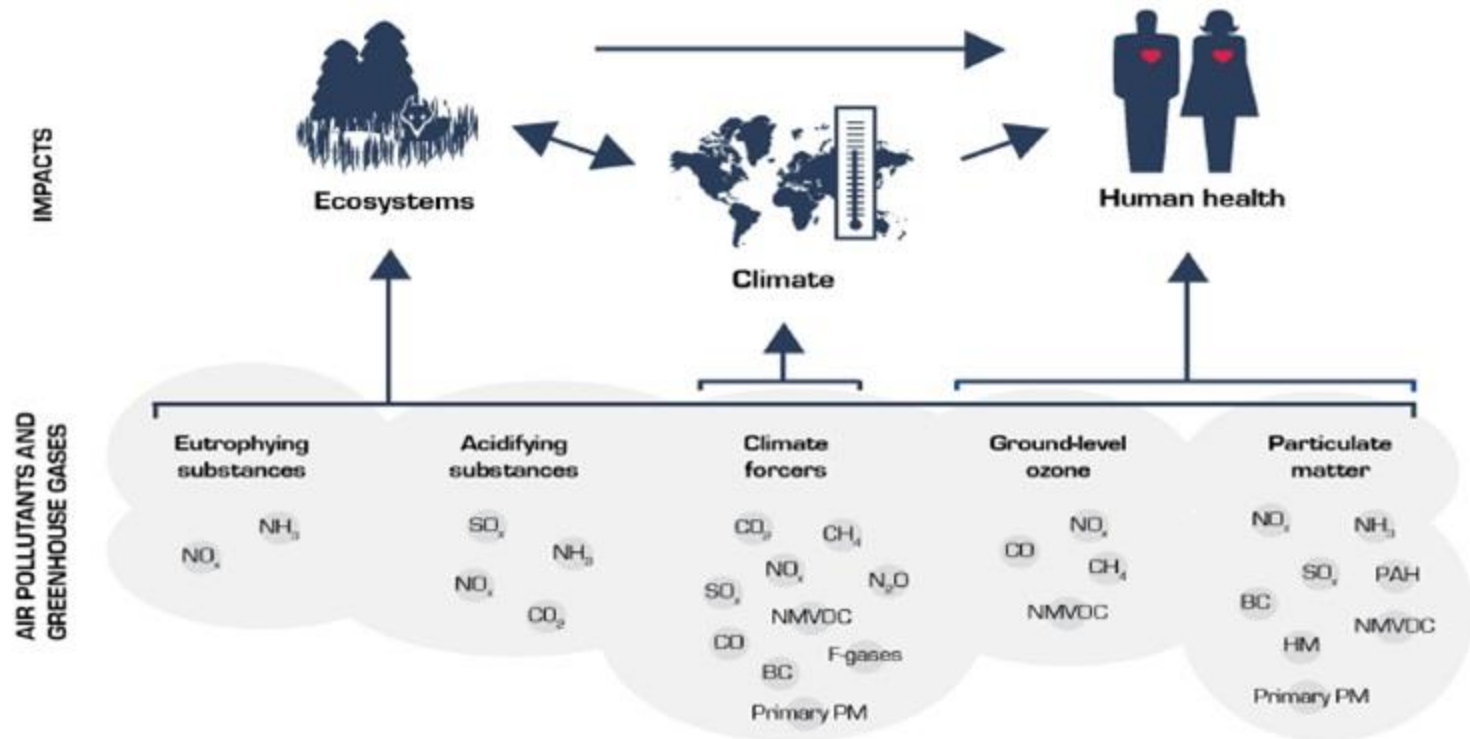


- United Nations Framework Convention on
Climate Change (UNFCCC)



Air Pollution

Why should we care about air pollution?



Source: EEA

Source: EU Commission / EEA

Air Quality – Good news

- Decision-makers have for a long time worked to tackle air pollution, with the understanding that pollution knows no borders
- First EU laws in the 1970s
- Today range of EU laws on



... sources, e.g vehicles, industrial emissions

... curbing emissions overall, e.g. NEC

... setting ambient air quality limits

... international agreements – LTRAP

- Clean air goal in EU environmental programmes, clean air strategy

Air Quality – bad news

- Air pollution continues to be major health problem, has environmental impacts, so is also of major concern for the economy
- 430 000 premature deaths in the EU-28 in 2011
- Economic cost for 2010: 330 – 940 billion EUR (3-9% of EU's GDP)
 - including 15 bn EUR lost working days, 4 bn EUR healthcare costs (chronic bronchitis)
- Environmental cost: crop yield losses 3 bn EUR, damages to buildings 1 bn EUR



Air Quality – bad news

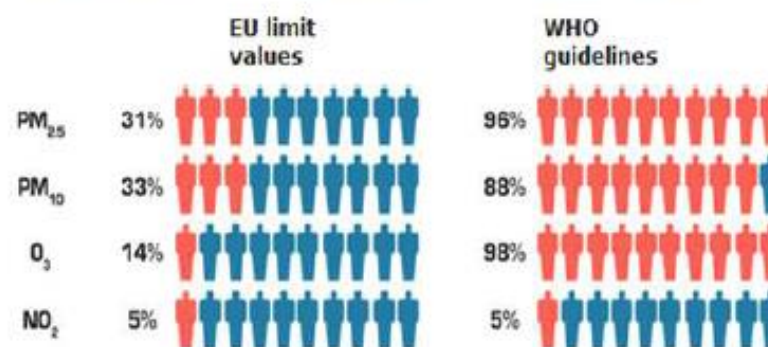
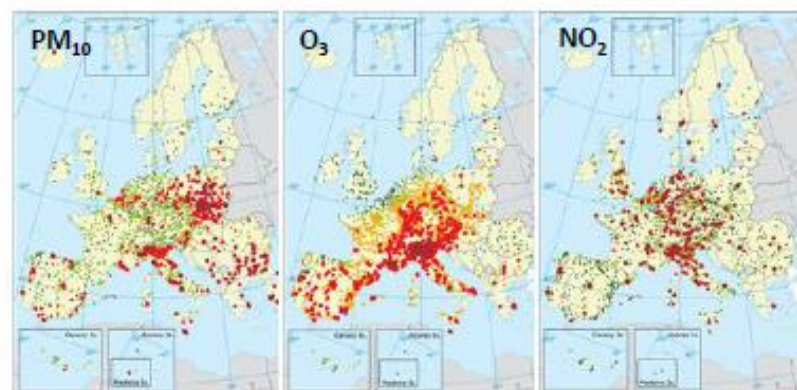
Today's air quality in Europe today

- Health & Environment Impacts

- > 400.000 premature deaths each year
(10 times the amount of people dying prematurely in traffic)
- > 30% EU citizens exposed to air pollutant levels above EU standards
- > 90% EU citizens exposed to air pollutant levels above WHO guidelines

- Socio-Economic Impacts

- External costs: €300-900 billion
- 436 million restricted activity days
(incl. 121 million lost workdays)
- Direct economic costs: €23 billion
(€15bn lost workdays, €4bn healthcare costs, €3bn crop yield loss and €1bn damage to buildings).

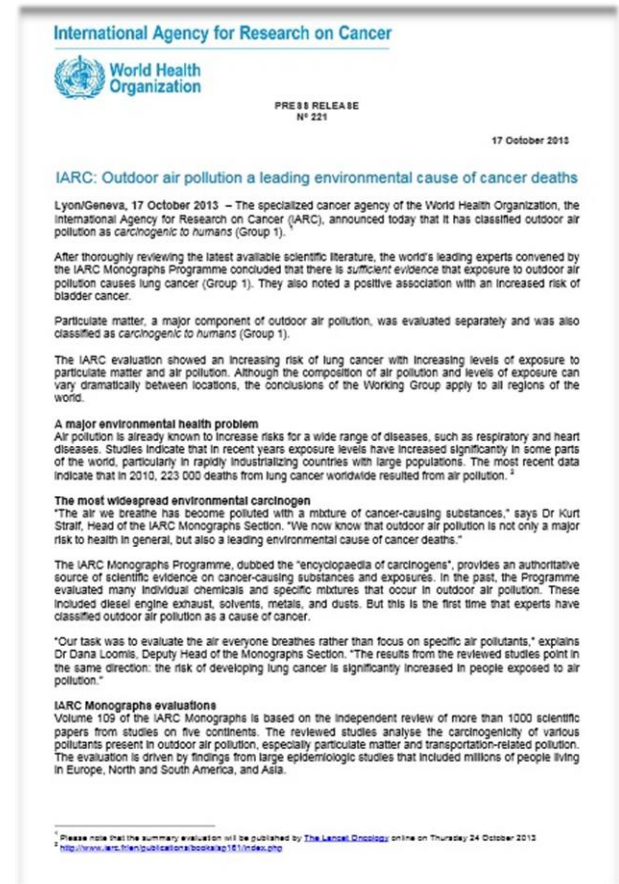
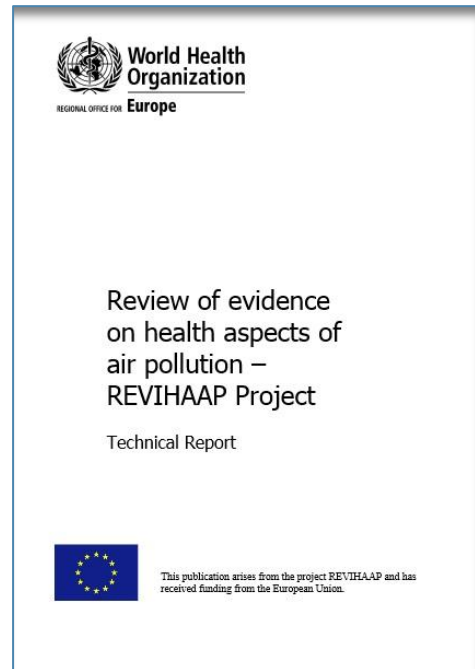


Source: EEA

Source: EU Commission / EEA

Air Quality – latest science

- WHO REVIHAAP
- UN Agency on Cancer:
Air pollution and lung cancer



<http://www.euro.who.int/en/health-topics/environment-and-health/air-quality/publications/2013/review-of-evidence-on-health-aspects-of-air-pollution-revihaap-project-final-technical-report>

What can be done?

EU Clean Air Policy package, December 2013

- Communication on Clean air programme
- Revised Directive on National Emissions Ceilings
- Directive on medium-scale combustion plants
- Council Decision on Gothenburg protocol

http://ec.europa.eu/environment/air/clean_air_policy.htm



National Emissions Ceilings Directive

- Proposal for a Directive on the reduction of national emission ceilings of certain atmospheric pollutants and amending DR 2003/35/EC (COM 2013 920 final)
- National emission reduction commitments for six pollutants: PM, SO₂, NO_x, VOCs, ammonia and methane – for 2020, 2025, 2030
- Only instrument that addresses transboundary pollution
- Negotiations 1st half of 2015: European Parliament and Council –

ENVI vote July 15, Progress report Council June 15

NEC needs to be made stronger

- Ambition level: clean air by 2030
- Inclusion of all major pollutants and sectors
- Addressing ambient air quality

NGO position paper:

http://env-health.org/IMG/pdf/nec_paper_final.pdf



Climate Change

- Key issue on EU's policy agenda
- 2020 Climate and Energy Package:
 - - 20% GHG emissions
 - 20% share of renewables
 - 20% improvement in energy efficiency
- Commitments for 2030
- Paris COP21 in Nov/Dec 2015: binding international agreement, it's a public health agreement
- Addressing win-wins for health and the climate

THE LANCET

www.thelancet.com

The health benefits of tackling climate change

An Executive Summary for *The Lancet* Series



"If properly chosen, action to combat climate change can, of itself, lead to improvements in health. The news is not all bad."

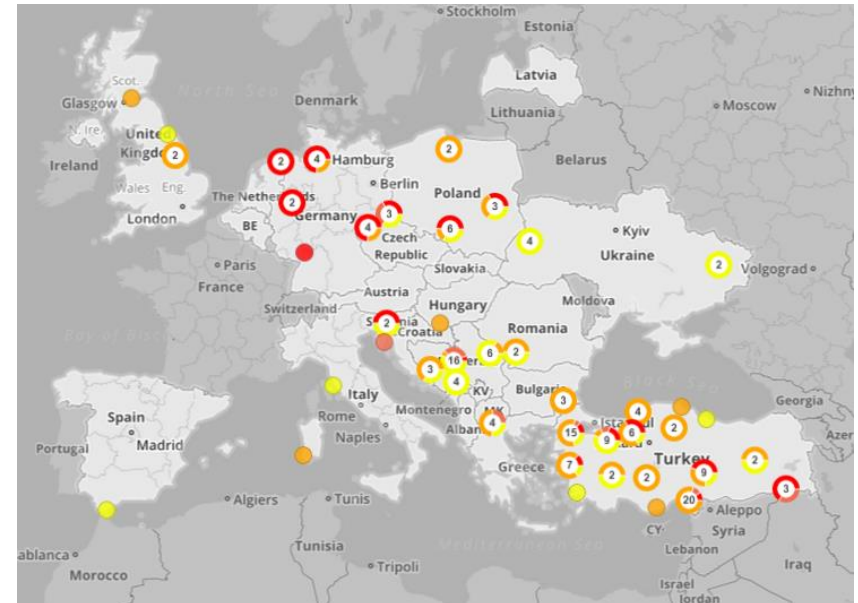
"Climate change is the biggest global health threat of the 21st century"

The Lancet, May 2009



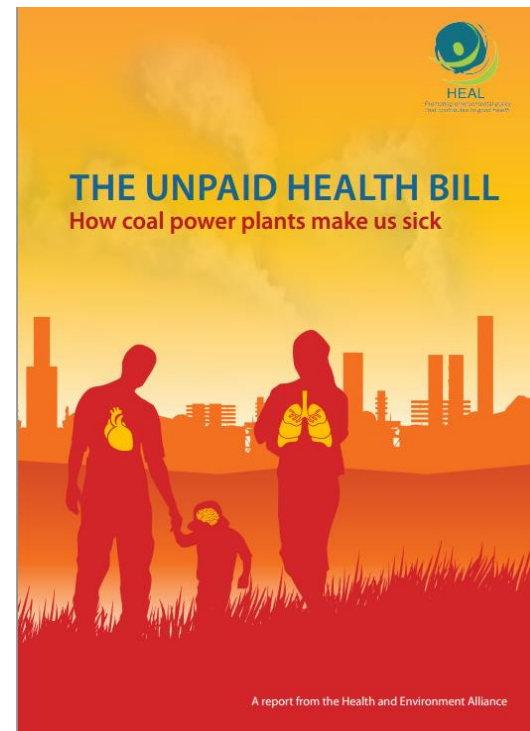
Energy, Climate change and health

- EU ③ largest GHG emitter worldwide (of around 10% of total global emissions; ① China 20%, ② USA 15%)
- Largest share comes from energy sector
- Fossil fuel still dominates energy mix
- Coal power plants lock in GHG and air emissions
- 47 new coal-fired power plants projected for EU+86 Turkey+36 Balkan countries and Ukraine



The Unpaid Health Bill

- First ever economic assessment of coal's impact on health for Europe
 - Numbers for the EU as a whole and for specific countries
 - EU27 up to €42.8 billion per year
 - Europe (including Croatia, Serbia, Turkey) €54.7 billion per year
 - Launch at EU level & national launches in Germany, Poland: more than 160 articles in media coverage in EU and globally
 - Many requests from national and local health groups for this kind of evidence



*available in **English, Romanian, German and Polish; Turkish coming soon***

<http://www.env-health.org/news/latest-news/article/the-unpaid-health-bill-how-coal>

The Unpaid Health Bill

- 18,200 premature deaths
- 8,580 cases of chronic bronchitis
- 4.1 million lost working days
- 5,500 hospital admissions
- 2.1 million days of medication
- 28.6 million lower respiratory symptoms

How inhalation of particulate matter may affect our health

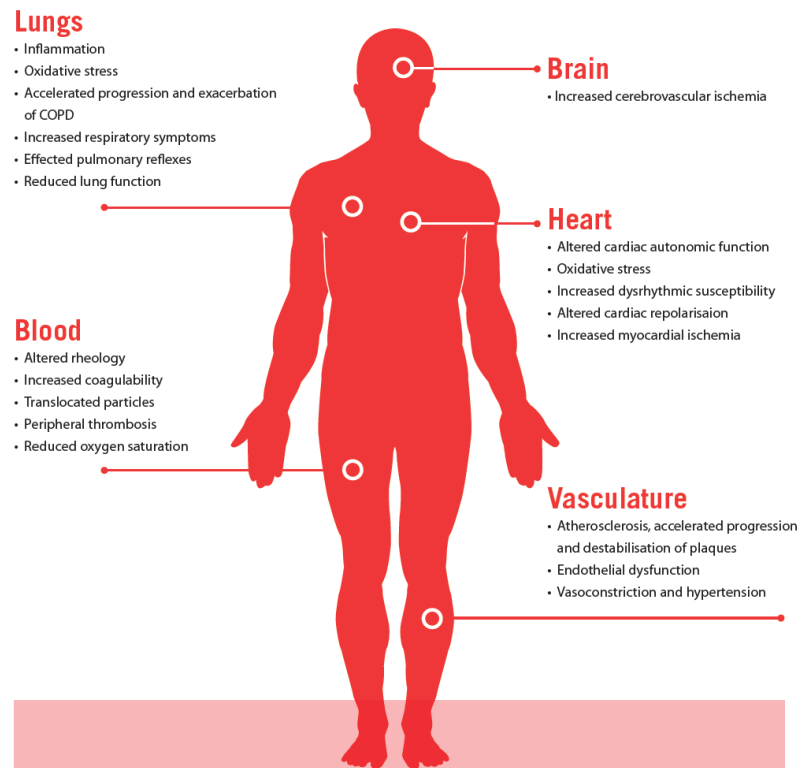


Figure 2: Exposure to particulate matter (PM_{2.5}) causes a multitude of health impacts
Adapted from source: Aphekom project (2012); Summary report of the Aphekom project 2008-2011

Engagement of health sector

- Kolkata call to action

- rapid phase out of coal
- divestment from fossil fuels
- transition to renewable energy

http://www.wfpha.org/images/events/150216_Kolkata_Call_to_Action_FINAL.pdf

- Opportunities at EU and national level

- EU Energy Union
- National climate mitigation and energy strategies



Materials

Air Pollution and Health in Bulgaria Facts, Figures and Recommendations



PUBLISHED December 2014

Air pollution is an important risk factor for health in Europe and worldwide. A recent review of the global burden of disease showed that it is one of the top ten risk factors for health globally¹. Worldwide an estimated 7 million people died prematurely because of pollution; in the European Union (EU) 400,000 people suffer a premature death². The Organisation for Economic Cooperation and Development (OECD) predicts that in 2050 outdoor air pollution will be the top cause of environmentally related deaths worldwide³. In addition, air pollution has also been classified as the leading environmental cause of cancer⁴.

Impacts of air pollution in Bulgaria

Bulgaria has the highest rate of premature deaths due to air pollution in Europe. In 2010, 11,787 people in Bulgaria died prematurely from PM2.5 and ozone exposure. Furthermore, there were 2.1 million lost working days in 2010⁵.

WHY IS AIR POLLUTION A CONCERN FOR HEALTH?

Exposure to outdoor air pollution is associated with a broad spectrum of acute and chronic health effects ranging from infant effects to death⁶. While the impacts on respiratory and cardiovascular disease are well documented, new science also shows air pollution as an emerging risk factor for children's health and even diabetes⁷. Sensitive and vulnerable groups such as pregnant women, children, the elderly and those already suffering from respiratory and other serious illnesses or from low income groups are particularly affected.

The health effects of air pollution are well documented, even though the pollution mixtures in the air can be complex. Air pollution exists as a mixture of liquid and solid phases, a mixture of gaseous, volatile, semi-volatile and particulate matter, and its exact composition varies widely. The main pollutants for which numerous studies on health effects exist are particulate matter, ozone, nitrogen dioxide, sulphur dioxide, methane, mercury and black carbon.

AIR POLLUTION IN BULGARIA

Air quality in Bulgaria is a big concern: measurements show that citizens all over the country breathe in air that is considered harmful to health. For example, concentrations of PM2.5 and PM10 are much higher than what the EU and the World Health Organisation (WHO) have set to protect health.

Bulgaria had the highest PM2.5 concentrations of all EU-28 member states in urban areas over a three-year average⁸. For PM10, Bulgaria is also leading on the top polluted countries with 77 µg/m3 on the daily mean concentration (EU limit value is 50 µg/m3)⁹.

According to the WHO, 60 percent of the urban population in Bulgaria is exposed to dangerous (unhealthy) levels of particulate matter (PM10)¹⁰.

PM CONCENTRATIONS IN BULGARIA EXCEEDS EU AND WHO STANDARDS

EU ANNUAL LIMITS	WHO RECOMMENDATIONS
27µg/m ³ BULGARIA*	10µg/m ³ PM2.5
43µg/m ³ BULGARIA*	20µg/m ³ PM10
70µg/m ³ EU ANNUAL LIMITS	40µg/m ³ WHO RECOMMENDATIONS

*European Commission. European Agency for Environment and Health. Air pollution, 2012.

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AIR & HEALTH

Around 90 % of Europeans living in cities are exposed to levels of air pollution deemed damaging for human health.

Although air pollution is rarely visible nowadays, Europe's air quality is still a huge problem. Air pollution is responsible for more than 400,000 early deaths in the EU each year [1]. Sensitive and vulnerable groups such as pregnant women, children, the elderly and those already suffering from respiratory and other serious illnesses or from low income groups are particularly affected [2].

The health effects of air pollution are well documented: not only is poor air quality a risk factor for heart and respiratory diseases such as asthma and chronic bronchitis, but it is also increasingly linked with harm to children's nervous systems and brain development, and even with diabetes.

The World Health Organization's Cancer Agency (IARC) also confirmed that outdoor air pollution can cause lung cancer [3].

Clearly the quality of indoor and outdoor air plays a major role in many chronic diseases in Europe with high costs for the individuals affected, national health services and the economy at large.

**PARENT INFORMATION LEAFLET:
CHILDREN WITH ASTHMA AND ALLERGIES**

AIR POLLUTION AND HEALTH

New findings from the EU-wide research project 'European Study of Cohorts for Air Pollution Effects' (ESCAPE) make raising awareness of the effects on health of exposure to air pollution even more urgent. This leaflet developed by the ESCAPE project in collaboration with the Health and Environment Alliance (HEAL) explains the latest news on the links between outdoor air pollution and children's health. It also provides prevention tips for parents of children with asthma and allergies, who are especially vulnerable to exposure to polluted air.

WHAT DOES THE LATEST RESEARCH SHOW?

The EU-wide ESCAPE project confirmed the serious impact of exposure to air pollution on children's lung health. Specifically, it showed three new associations. First, that family exposure to fine particles and nitrogen dioxide in the air was related to low birth weight babies. Second, that school children exposed to higher levels of nitrogen dioxide, black carbon and fine particles had a lower lung function than other children. Third, that there was more pneumonia early in life in children exposed to traffic, and to higher levels of almost all pollutants studied.

The findings showed no clear relationships between air quality and rates of asthma and allergic sensitisation in children. However, even a large study such as ESCAPE, cannot answer all questions and needs to be judged in the context of other evidence.

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Climate and energy

Action against climate change can help improve people's health

You are here: Home page > News > Climate and energy

Climate change threatens the basic elements of life such as access to food, water, shelter and clean air - which in turn severely impacts human health. Decisions on responding to climate change need to put health at the centre.

News on our policy work
Health community commitment brings gains in Lima
Participants at the Climate and Health Summit, organised alongside the official UN climate negotiations in Lima (UNFCCC COP20), heard that the health community's strong engagement on climate change is increasingly acknowledged by international negotiators. [Read more...](#)

Clearer air would offer major health benefits in the Baltics
Three briefings released by HEAL highlight the heavy toll on health resulting exposure to poor air quality in Bulgaria, Serbia, and Montenegro. Energy production and use is of particular concern as a source of air pollution. [Read more...](#)

Publications
Air pollution sources and health problems (PL)

Take Action!
Access ambient for 100% renewables!

The Unpaid Health Bill: How coal power plants make us sick presents the first-ever economic assessment of the health costs associated with air pollution from coal power plants in Europe as well as testimonials from leading health advocates, medical experts and policy makers on why they are concerned about coal.
The report develops recommendations for policy-makers and the health community on how to address the unpaid health bill and ensure that it is taken into account in future energy decisions. For a brief summary of the report see HEAL's coal and health postcard. [More information here](#)

In this section:
• Media coverage
• HEAL's action on climate and energy
• Acting NOW for better health
• Prescription for a healthier planet
• Coal's unpaid health bill

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EUROPEAN RESPIRATORY journal

OFFICIAL SCIENTIFIC JOURNAL OF THE ERS

Ten principles for clean air

B. Brunekreef, I. Annesi Maesano, J.G. Ayres, F. Forastiere, B. Forsberg, N. Kunzli, J. Pekkanen, and T. Sigsgaard



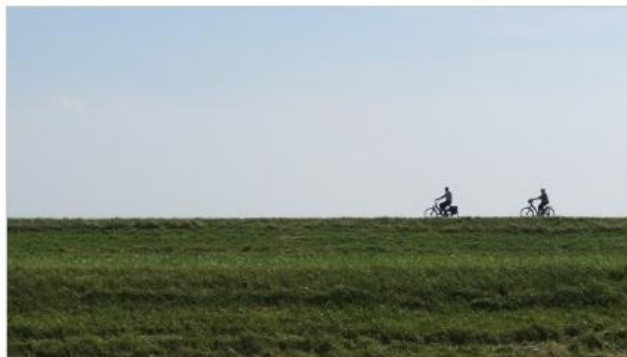
Know your air for health

Know your air for health



Breathing in dirty air has immediate effects – such as coughing and wheezing – but recent research shows that the long-term effects of polluted air on health are far greater. Asthma and lung diseases such as Chronic Obstructive Pulmonary Disease (COPD) can be a consequence of the air we breathe.

As European organisations representing asthma, allergy, chronic obstructive pulmonary disease (COPD) groups, and medical, scientific and health experts from across Europe, the European Federation of Allergy and Airways Diseases Patients' Association (EFA) and the Health and Environment Alliance (HEAL) call on decision-makers at the local, national and European level to support stronger air policies that protect our health from air pollution.



English (en) ▼

Twitter

Tweets

 **EFA** 3m
@EFA_Patients
GLOBAL CALL to end #coal and invest in healthy communities and #GlobalHealth: bit.ly/1FUQUYg #airpollution #asthma #airwebreath

 **Health&Environment** 21h
@HealthandEnv
Challenge of #airpollution #climatechange for people in cities: heatwaves & heat traps, we need liveable cities bit.ly/1B4OdCC #SOER

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Thank you for your attention!

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