# Disease prevention and our environment – bridging the science policy divide

2013 has seen a substantial increase in research findings on how environmental pollution and the degradation of our environment is linked to disease and ill-health. Greater environmental action can help to prevent many diseases and health problems confronting today's societies. Here are some examples showing how HEAL has drawn on cutting-edge environmental health research to make the health case for more protective environmental policies in Europe.

# Respiratory

## Asthma



School children exposed to higher levels of nitrogen dioxide, black carbon and fine particles had a lower lung function than other children.

This and other findings of the EU-funded ESCAPE project have been used widely by HEAL in media work and with policymakers.

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HEAL members, European Respiratory Society (ERS) and European Lung Foundation (ELF) published Lung Health in

Europe, Facts and Figures. in December 2013. "Living close to

a busy road increases a child's risk of developing asthma" was

# Chronic lung disease and cancer and cardiovascular disease

Outdoor air pollution is a leading environmental cause of cancer deaths.



The World Health Organization's (WHO) International Agency on Cancer Research (IARC) has classified outdoor air pollution as carcinogenic to humans. IARC concludes that there is sufficient evidence that exposure to outdoor air pollution causes lung cancer, and

there is also an association to bladder cancer. This finding has been important to HEAL's advocacy work.

1 in 8 deaths in the EU are from respiratory diseases

The majority of Europeans in cities breathe in air that the WHO considers harmful to health. Health costs from airpollution in the European Union amount to up to 900billion EUR a year, according to the EU Commission.

A large body of evidence exists for short-term and long-term effects on cardiovascular diseases and respiratory diseases including chronic obstructive pulmonary disease, asthma, and lung cancer. Newly emerging evidence suggests possible effects on premature births, lung-function development in

one of its findings.

### Air pollution: Europe's avoidable health risk

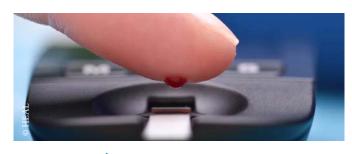


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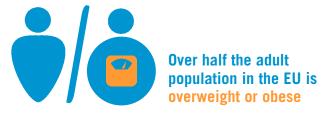
There is now no doubt that air pollution, and especially fine particulate matter (PM2-5), has many serious consequences for heith and leads to avoidable permature consequences for heith and leads to avoidable permature consequences for heith and leads to avoidable permature consequences for heithman deads to avoidable permature consequences for heithman deads to avoidable permature consequences for heithman deads to avoid power plants. It amount for the underappreciated source on March 7, points out the underappreciated source of March 7, points out the underappreciated source of March 7, points out the underappreciated source on March 7, points out the underappreciated source of March 7, points out the underappre

# **Obesity and diabetes**

Some chemicals promote weight gain, and an association exists between our contamination with persistent pollutants and diabetes







CHEM Trust's review on environmental prevention of obesity and diabetes showed that these two conditions are not only the result of poor diet and lack of exercise. Exposure to hormone disrupting chemicals, including "obesogens", also play a role. In December, HEAL translated the brochure based on the CHEM Trust review for new contacts developed as part of the Chemical Health Monitor project. The list includes several hundred German journalists who expressed interest in HEAL's work during our participation the largest environmental conference for journalists in Germany.

# **Cancer**

Prostate cancer risks were in some studies related to occupational exposures to pesticides (of an unidentified nature), to certain PCBs and to arsenic.

A joint statement, known as the Berlaymont Declaration, signed by 89 scientists, links exposure to endocrine disruptors to breast, prostate, thyroid, endometrium, ovarian and testicular cancer.

With the exception of high prevalence countries such as The Netherlands and Austria, all EU countries are experiencing strong rises in prostate cancer. Similar trends exist for other hormonal cancers, including those of the testes, endometrium, ovaries and thyroid.



Prostate cancer represents one in four of all cancers diagnosed in men

HEAL has promoted the Berlaymont Declaration widely in direct discussions with policy makers, media releases, its newsletter and social media. Lisette van Vliet, HEAL's senior policy advisor on chemicals appeared in Euractiv article.

Rising levels of cancer along with increasing brain, thyroid and reproductive problems have led an international group of scientists to call for tougher EU regulation on some chemicals used in everyday life.

# **Brain damage**

The number of chemicals known to be toxic to children's developing brains has doubled over the last seven years.

In February 2014, Lancet Neurology released a major new review of the chemicals that are contributing to "a global, silent pandemic" of disorders of brain and nervous system (from clinical manifestations of autism spectrum disorder, attention-deficit hyperactivity disorder, dyslexia, all the way to subclinical decrements in brain function). The authors considered current chemical regulations worldwide to be woefully inadequate to safeguard children whose developing brains are uniquely vulnerable to toxic chemicals in the environment.

HEAL made the findings available with policy quotes, links to the huge media coverage in US and EU press, and suggestions for tweets and Facebook posts to its members and to HEAL "Children" and "Chemicals" listserves. It was also provided to two HEAL members, Women in Europe for a Common Future and PAN Europe, who were joint organisers of a meeting "Protecting children from EDCs" taking place in Brussels the same week.



The prevalence of autistic disorders is currently around one in 500