Environment and health

A clean environment is essential for human health and well-being



Cover design: EEA Cover photo: © EEA

Layout: EEA

Legal notice

The contents of this publication do not necessarily reflect the official opinions of the European Commission or other institutions of the European Union. Neither the European Environment Agency nor any person or company acting on behalf of the Agency is responsible for the use that may be made of the information contained in this report.

Copyright notice

© European Environment Agency, 2008

Reproduction is authorised, provided the source is acknowledged, save where otherwise stated.

Information about the European Union is available on the Internet. It can be accessed through the Europa server (www.europa.eu).

Electronic publication notice

This report has been generated automagically by the EEA Web content management system on 17 Jun 2017, 03:29 PM. This report is available as a website at https://www.eea.europa.eu/themes/human/intro. Go online to get more interactive facts and figures.

On the report web page you may download the electronic publication (EPUB) for easy reading on your preferred eBook reader.

Please consider the environment before printing.

European Environment Agency Kongens Nytorv 6 1050 Copenhagen K Denmark

Tel.: + 45 33 36 71 00 Fax: +45 33 36 71 99 Web: eea.europa.eu

Enquiries: eea.europa.eu/enquiries

Contents

Environment and health	
Livii Oillicit alla licatti	•

Environment and health

A clean environment is essential for human health and well-being. However, the interactions between the environment and human health are highly complex and difficult to assess. This makes the use of the precautionary principle particularly useful. The best-known health impacts are related to ambient air pollution, poor water quality and insufficient sanitation. Much less is known about the health impacts of hazardous chemicals. Noise is an emerging environment and health issue. Climate change, depletion of stratospheric ozone, loss of biodiversity, and land degradation can also affect human health.

In Europe, the major environment-related health concerns are related to outdoor and indoor air pollution, poor water quality, poor sanitation and hazardous chemicals. The related health impacts include respiratory and cardiovascular diseases, cancer, asthma and allergies, as well as reproductive and neurodevelopmental disorders.

Fine particulate matter and ground-level ozone are the main threats to human health from air pollution. The EU's Clean Air for Europe (CAFE) programme estimated a total of 348 000 premature deaths per year due to exposure to fine particles ($PM_{2.5}$). At this level of exposure, average life expectancy is reduced by approximately one year.

The EU Green Paper on noise exposure states that around 20 % of EU's population suffer from noise levels that health experts consider to be unacceptable, i.e. which can lead to annoyance, sleep disturbance and adverse health effects.

Transport, especially in urban areas, is one of the key contributors to human exposure to air pollution and noise.

Much less is known about the health impacts of chemicals. There is growing concern about the effects of exposure to mixtures of chemicals at low levels and for long periods over our lifetime, in particular during early childhood and pregnancy.

Persistent chemicals with long-term effects, such as polychlorinated biphenyls (PCBs) and chlorofluorocarbons (CFCs), and those used in long-life structures — for example construction materials — may present risks even after their production has been phased out.

Many pollutants known to affect human health are gradually coming under regulatory control. However, there are emerging issues for which environmental pathways and effects on health are as yet poorly understood. Examples are electromagnetic fields (EMF), pharmaceuticals in the environment and some infectious diseases (the spreading of which may be affected by climate change). The development of 'early warning' systems should be encouraged to shorten the time between detection of a potential hazard and a policy action or intervention.

Human health has always been threatened by natural hazards such as storms, floods, fires, landslides and droughts. Their consequences are being worsened by a lack of preparedness and by human actions such as deforestation, climate change and biodiversity loss.

Published on 12 Mar 2008