

Europe's environment now healthier – but new risks emerging

Europeans live longer and healthier lives than in the past, partly due to successful environmental policies that have reduced the exposure to harmful environmental contaminants in air, water and food, according to a new report. However, these contaminants are still a problem, and several new health risks are emerging, for example, from new chemicals, new products and changing lifestyle patterns.

The environment affects human health in multiple ways, according to the report 'Environment and human health' [LINK] published by the [European Environment Agency](#) (EEA) and the European Commission's in-house science service, the [Joint Research Centre](#). While pollutants, noise and other forms of environmental degradation can be harmful, the report underlines the large benefits of access to natural environments for physical and mental wellbeing.

Europe's 'health gap'

There is large disparity in the environmental conditions across Europe, which is often reflected in different levels of health and life expectancy, according to the report. People with low social status often live in degraded or harmful environments, with potential negative effects on health. Their condition may be further influenced by other factors, including socio-economic status, life style habits and general health status.

New risks and new understanding

As people live longer, the main causes of premature death and disability have become non-communicable, 'lifestyle'-related conditions, such as obesity, cardiovascular diseases, diabetes, and cancer. In so far as these problems may be linked to environmental conditions, it has become increasingly important to address all these issues together, the report says.

People are usually exposed to multiple environmental factors throughout their lives, and more research is needed to understand the impacts, the report says, especially for the most vulnerable in society – including children, the poor and the elderly.

Science needs to move away from focusing on individual hazards and look instead at the complex, combined effects environmental and lifestyle factors are having on our health, the report says.

Jacqueline McGlade, EEA Executive Director, said: "This report really reinforces some of the key links between health and the environment. People are now exposed to many different harmful factors, which together are reducing both lifespans and wellbeing."

Key findings

- Global sales of products from the **chemicals** sector doubled between 2000 and 2009, and there is an increasing range of chemicals on the market, including substances affecting human health.
- There is growing concern about '**endocrine disrupting chemicals**', which affect the hormone system, found in a wide range of common products including pharmaceuticals, pesticides

and cosmetics. Effects are not yet fully understood, but the chemicals may contribute to declining sperm count, genital malformation, impaired neural development, obesity and cancer.

- The report highlights evidence showing the contribution of air pollution to cancer, heart disease, bronchitis and asthma and estimates that air pollution reduces each EU citizen's life expectancy by an average of 8.5 months. Recent studies [LINK] of **air pollution** suggest that exposure in early life can significantly affect adult health, and the effect of air pollution on pregnancy may be comparable to that of passive smoking. Up to 95% of city dwellers are still exposed to levels of fine particulate matter (PM) above World Health Organisation guidelines, the report says.
- In Europe, an increasing health concern in relation to **water quality** is pharmaceutical residues and endocrine-disrupting substances, which are not always fully removed by water treatment. Water shortages and water quality issues may be further exacerbated by **climate change**, the report says.
- **Noise** can seriously harm health, affecting cognitive development, cardiovascular disease and sleep. Noisy areas are often those with high levels of air pollution, and each factor seems to augment the effect of the other.
- Devices emitting **electro-magnetic fields (EMF)** such as mobile phones are sometimes considered a possible cancer risk [LINK], but there is no conclusive scientific evidence supporting this link. Available data are reviewed regularly by the Commission's scientific committees. The next review will be published in the second half of 2013.
- **Nanotechnology** applications might be an emerging risk, as little is known about the effects of nanomaterials in the human body. This will require an adequate assessment of potential risks, to guarantee the safe production of nanomaterials and their safe use in consumer products.
- **Green spaces** seem to have multiple physical and mental health benefits. There are significant differences in access to these areas across Europe – all cities in Sweden and Finland have more than 40 % green space within their boundaries, while at the other end of the scale all Hungarian and Greek cities have less than 30 % green space.

Ends.