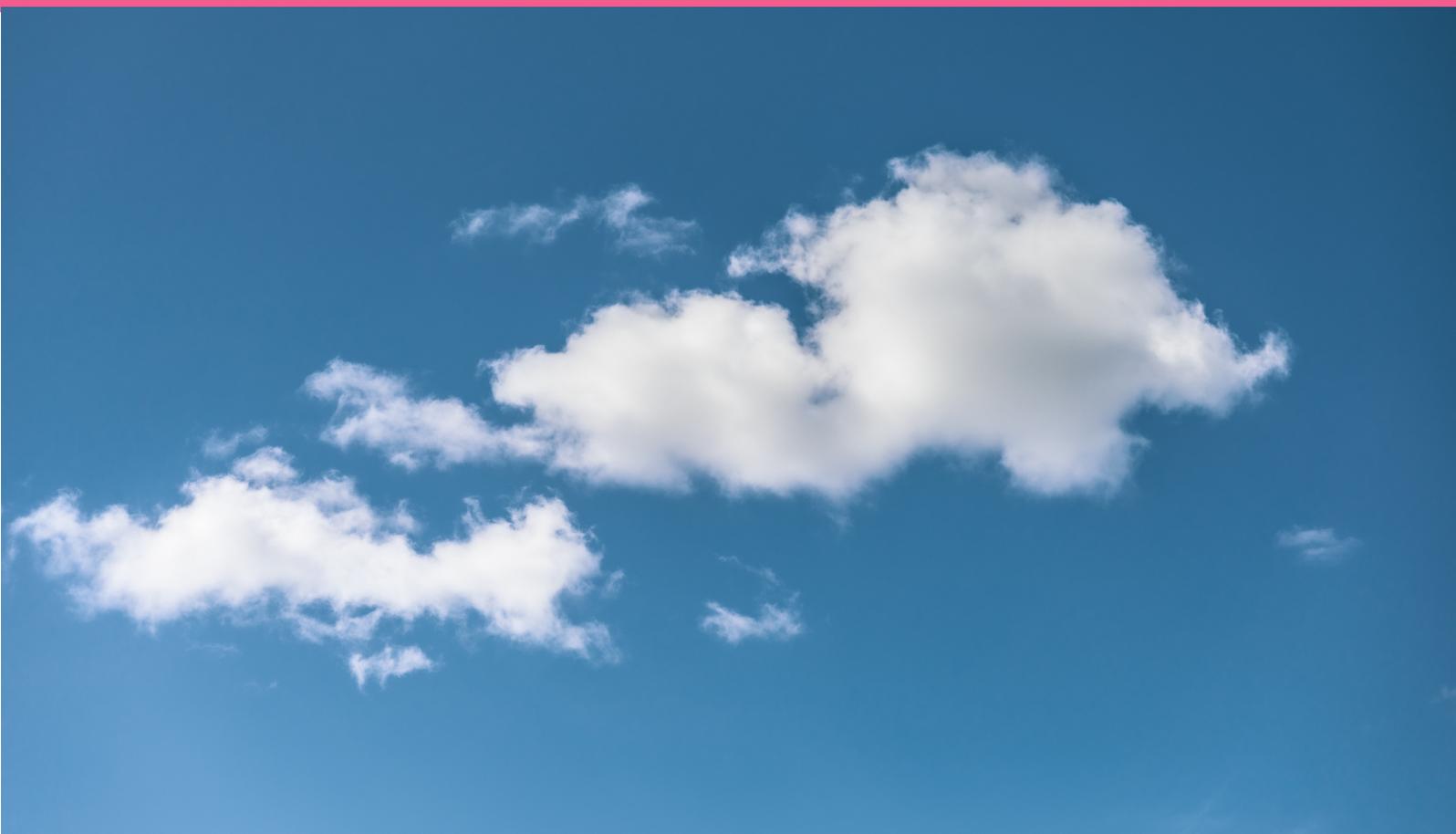


SUMMER 2022

Beating cancer with better environments

EVENT REPORT



Cover image credits: Brett Sayles from Pexels

The European Commission support for the production of this publication does not constitute an endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.



**Co-funded by the
European Union**

Event summary

- An estimated 10% of cancer cases in Europe are caused by exposure to pollutants and chemicals, impacting both adults and children. Cancers related to the environment are largely preventable.
- EU environmental policies can help improve health by reducing cancer-causing pollutants. Implementing the European Green Deal agenda and related policies is crucial for reducing cancer-causing environmental risks.
- Health and environmental policy actors are working together to eliminate pollution and environmentally linked cancers.
- The new European Environment Agency (EEA) report, 'Beating cancer — the role of Europe's environment', sets out the evidence on the environmental determinants of cancer and underscores the need for preventive measures.
- Inequities in the burden of environmental cancers across Europe must be addressed. Support will be needed for lower-income countries to transition to clean solutions, and attention must be given to the communities most adversely affected – notably low-income groups and populations experiencing vulnerability.
- A new social health atlas from the EEA will provide a more granular picture of the environmental cancer burden with data on social, economic and health determinants.
- Sharing data, evidence and best practices can foster a harmonised approach across Europe and ensure environmental measures are a top priority.
- Industry and businesses need to provide pollutant and chemical-free environments for workers in Europe and for outsourced production chains.

Introduction

Living and working environments have strong effects on health outcomes. Health can be improved by improving those environments; notably, the burden of cancer can be reduced.

Europe is poised to respond to the challenge of environmental pollution through the implementation of forward-thinking directives and strategies. This is good news for Europeans' health.

Alongside the European Green Deal with its key zero pollution and chemical strategy deliverables, legislation such as the recently revised Industrial Emissions Directive, the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) regulation and the Farm to Fork strategy are among the meaningful policies designed to reduce the risk and use of environmental pollutants, such as chemical substances or pesticides.

Europe's Beating Cancer Plan calls for the reduction of environmental pollution by aligning EU air quality standards with the World Health Organization's guidelines and reducing exposure to carcinogenic substances and radiation. Similarly, the European Code Against Cancer identifies pollutants, tobacco, and radiation exposure as risks to reduce.

Exposure to air pollution, pesticides, asbestos, micro-plastics, radiation, carcinogenic chemicals, and second-hand smoke – outdoors and at home, at school and in the workplace – is responsible for several non-communicable diseases, including ischaemic heart disease, obstructive pulmonary disease, strokes, mental and neurological conditions, and diabetes. Topping the list is cancer, with environmental pollution linked to an estimated 10% of all cancer cases in Europe.

A new European Environment Agency (EEA) report, entitled 'Beating cancer – the role of Europe's environment', delineates the evidence linking pollutant exposure to cancer. In Europe, 11.3% of premature deaths are linked to environmental factors. Air pollution and radon are responsible for over 5% of cancer deaths in certain countries and 80,000 deaths are linked to carcinogen exposure in the workplace. Among lung cancer deaths, 17% are associated with air pollution. Cancers caused by environmental determinants are largely preventable.

According to **Dr Hans Bruyninckx**, Executive Director of the EEA, these figures may be conservative. Further research and data are needed to capture the true amplitude of the problem. However, with an estimated 2.7mn new cases in 2020, including 16,000 among paediatric populations, it is clear that cancer impacts Europeans of all ages and creates enormous cost for health systems.

The EEA report data provides evidence to drive implementation of environmental policies. European policies on climate change and pollution will lower the burden of cancer and other exposure-related diseases.

A window of opportunity

Working side by side, health and environmental policy agencies can create a healthier, cleaner Europe. The pollutant exposure reduction goals of EU cancer initiatives dovetail with environmental regulations to prevent, reduce, and monitor pollutants in the air, water, soil, and consumer products – creating a window of opportunity to reduce and prevent related cancers across Europe.

Dr Alexander Simidchiev, a pneumologist and Member of the Bulgarian National Assembly, pointed out that the evidence outlined in the EEA report presents a compelling argument for ensuring the implementation of regulations to reduce pollution across Europe. Solutions have already been developed and implemented in some settings; the key to progress will be combining evidence and existing practices with this window for policy change.

Despite the current context of the global economic crisis and COVID-19 pandemic, this is a pivotal moment for Europe to reduce pollutants and associated health risks through forceful implementation of the environmental policies. Participants warned against allowing the current health and economic crises to forestall implementation.

“The window of opportunity is now,” Bruyninckx urged. “This is the time to stand by the European Green Deal agenda. The Zero Pollution Action Plan is the most impactful policy that we can implement. Strong implementation will massively improve human health.”

“ This is the time to stand by the European Green Deal agenda. The Zero Pollution Action Plan is the most impactful policy that we can implement. Strong implementation will massively improve human health.

Dr Hans Bruyninckx, Executive Director of the EEA

Building solutions through coordinated efforts

The most effective approach to reducing environmentally driven cancers straddles both health and environmental initiatives. The health impacts of pollution and climate change – and the policies to address these challenges – must be made clear.

Equally, EU cancer initiatives need to accentuate the link between environmental risks and cancer to ensure that awareness is maximised among the public, policymakers and health professionals. Evidence that is highly visible facilitates action.

Dr Wendy Yared, Director of the Association of European Cancer Leagues, stressed the need for robust health literacy around environmental risks and preventive measures, particularly for workers and employers. She also called for more information on the long latency periods of many cancers.

“We need to take action now to prevent the cancers of 2030 or 2040,” summarised Tamsin Rose, Senior Fellow for Health at Friends of Europe.

Addressing inequalities

The burden of environmentally linked cancers varies across populations. There are higher incidences of cancer in industrial and geographic pollution hotbeds, which are typically densely populated areas with high levels of traffic and industry. This means that low-income groups who live and work in these environments suffer disproportionately, although they contribute less to pollution.

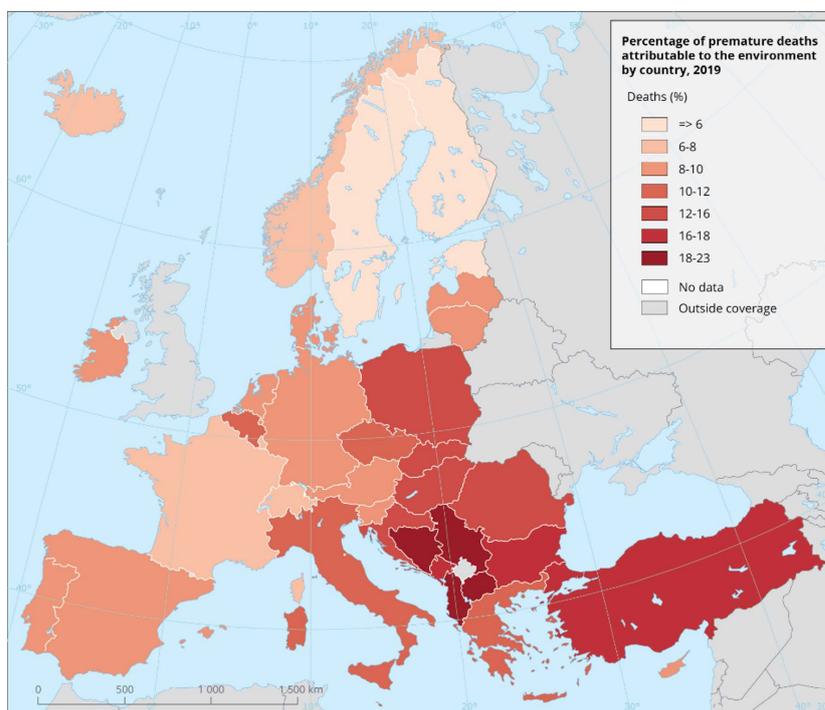
Jane Burston, Executive Director of the Clean Air Fund and 2015-2016 European Young Leader (EYL40), pointed out how the COVID-19 pandemic revealed the differences in vulnerability between populations: “*People and policymakers are now more aware of socio-economic and environmental determinants.*”

Tools, such as the Beating Cancer Plan’s European Cancer Inequalities Registry, survey populations with higher cancer rates in Europe. Environmentally driven risks need to be monitored. The EEA is working on a social health atlas for Europe that will provide more granular data on social, economic, and health determinants.

Incidence is also significantly higher in certain countries, particularly in eastern Europe. Simidchiev evoked the need for approaches that foster equality between regions, starting with the national health systems, asserting that “*the amount of influence the environment has, is mediated by the strength of the health system in a country.*”

Burston noted that, as higher-income countries transition to low-emission vehicles, high-polluting vehicles are exported to poorer countries, moving the issue to new areas where health systems may be less developed. This practice reveals the need for equitable measures backed by budgets that permit all countries to implement relevant policies. Lower-income countries need help transitioning to cleaner solutions.

Europe must also take action across its global production chains to prevent exporting problems associated with pollution. Bruyninckx evoked the need for “*innovation in governance across the global value chain that involves responsibility for pollution and health outcomes.*”



Source: IHME

Sharing knowledge and best practices, while listening to the voices of citizens

Sharing evidence and evidence-based solutions across member states, especially with underprivileged regions is key, along with pooling common preventive strategies.

Yared called for a joint approach to generating data and evidence. She emphasised the need to share best practices, citing the successful anti-tobacco campaign in Spain as an example of a strategy that could be shared across countries.

Burston described the Clear Air Fund's cooperative stakeholder approach at the city level. With 91% of Europe's urban population exposed to air pollution, city officials, environmental groups, parents, health professionals and businesses all have an interest in the drive for healthier air.

Mayors see first-hand the impact of pollution in their communities. To date, 37 mayors across Europe have signed up to meet the WHO guidelines for clean air. Environmental groups and citizens – notably parents – emphasise the ramifications on health, while businesses seek to reduce lost working days due to related illnesses. In Bulgaria, the NGO Air for Health is working to raise awareness among physicians on the impact of air pollution.

Conclusion

Europe has developed the policies for reducing pollution and climate change. Cancers caused by pollutant exposure can benefit from the implementation of these measures. Prevention strategies to reduce exposure offer the most efficient cost-effective solutions to the burden of environmental cancers.

As health and environmental policy agencies join forces to push for equitable, appropriately funded implementation of environmental measures, such as the European Green Deal, Europe has an opportunity to reduce the incidence of cancers caused by pollutant exposure.

"We are dealing with a serious risk that can be mitigated if we take the right actions," Bruyninckx stated. "*We have a moral and ethical obligation to address cancers in adults and children.*"

