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The importance of protecting **human health** in the EU climate policies

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Summary

As anthropogenic climate change continues to escalate, its detrimental effects on human health are becoming pronounced, demanding urgent transformative actions from European policymakers. This policy brief underscores the importance of protecting human health in the EU climate change policies. As the European Climate-Health Cluster, comprising six pioneering research projects, we call for increased engagement of legislators and policymakers to co-create evidence-based policies that e¬ffectively safeguard public health in the face of climate challenges.

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What's at stake?

Human health is increasingly impacted by anthropogenic climate change. Globally, 2023 was the warmest year on record, with average global temperatures exceeding pre-industrial levels by 1.5°C between February 2023 and January 2024.

As the 2024 European Climate Risk Assessment (1) shows, Europe is the fastest-warming continent in the world and increasingly prone to a range of climate-related hazards. Extreme heat in marine and terrestrial systems is becoming more frequent and shifting precipitation patterns, including more severe rainstorms, are evident. In recent years, catastrophic floods, severe droughts and wildfires have occurred across various regions, in Europe. Climate change is a risk to human health and a multiplier that can exacerbate existing risks and crises, putting pressure on our food, water, energy, transportation and health systems. Cascading climate hazards pose systemic society-wide challenges, significantly threatening human health across Europe.

According to the 2024 report of Lancet Countdown on Health and Climate Change in Europe (2), heat-related deaths have increased across most of Europe, with an average increase of 17.2 deaths per 100,000 inhabitants between 2003-2012 and 2013-2022 (Figure 1). Risky hours for physical activity due to heat stress have been spreading beyond the hottest parts of the day over the period 1990-2022, which may result in people reducing their overall physical activity and thereby increasing their risk of non-communicable diseases. Heat exposure can further undermine people's health by impacting the social and economic determinants of health such as

labour supply. Moreover, in Europe, climate change has resulted in almost 12 million people experiencing moderate or severe food insecurity in 2021.

Impacts are also unequally distributed across Europe. Southern Europe tends to be more affected by heat-related illnesses, wildfires, food insecurity, drought and leishmaniasis, whereas northern Europe is equally or more impacted by Vibrio and ticks. Within countries, ethnic minoritised and Indigenous people, low-income communities, migrants and displaced people, sexual and gender minoritised, and women going through pregnancy and childbirth, tend to be more severely affected by climate-related health impacts.

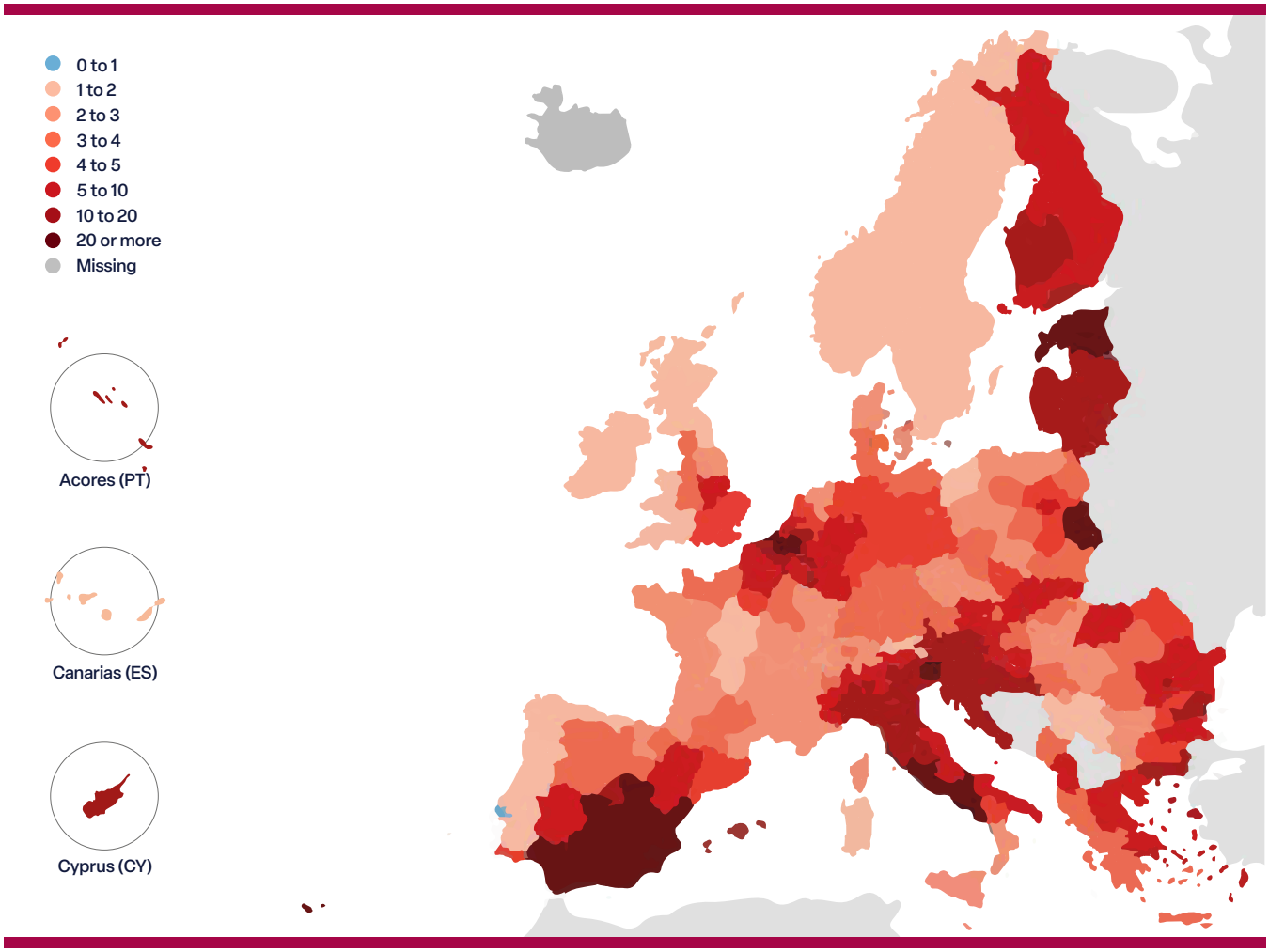

Figure 1 shows how much extreme heat-related mortality episodes due to anthropogenic warming have increased in 2003-2022 compared to the pre-industrial climate (increase range from no increase in blue to more than twenty-fold increase in dark red). (Source: Reference 2. 2024 report of Lancet Countdown on Health and Climate Change)

The disruptive impact of climate change, causing milder winters and warmer temperatures, enables the geographic expansion range of vector-borne diseases. Climate suitability for various climate-sensitive pathogens and disease vectors has increased in Europe (e.g., Vibrio, West Nile virus [WNV], dengue, chikungunya, Zika, malaria, leishmaniasis, and ticks).

Impacts are also unequally distributed across Europe. Southern Europe tends to be more affected by heat-related illnesses, wildfires, food insecurity, drought and leishmaniasis, whereas northern Europe is equally or more impacted by Vibrio and ticks. Within countries, ethnic minorities and indigenous people, low-income communities, migrants and displaced people, gender and sexual minorities, women going through pregnancy and childbirth, and the elderly tend to be more severely affected by climate-related health impacts. These differential impacts represent an equity deficit.

The role of legislators and policymakers to support climate change policies to protect human health

In recent years Europe has made progress to protect human health and well-being against the detrimental e¬ffects of climate change. Advances in the European Union (EU) and in di-fferent countries in the European region include, among others, the European Climate Law, the EU Adaptation Strategy, multilateral declarations such as the Budapest Declaration adopted by the WHO Europe, WHO Global

Resolution on Climate Change in 2024 and reviews of the standards that regulate air quality. EU policies directly related to climate change cover a large variety of climate hazards, and national climate risk assessments are increasingly used to inform adaptation policies. **However, current levels of action are insufficient both with respect to transitioning to net-zero energy systems** as well in view of implementing adaptation measures. According to a recent EEA report, Europe has failed to meet the 2020 Green House Gas (GHG) reductions targets (3). The latter requires the pace of

annual absolute GHG emission reductions be more than doubled compared with the annual progress seen since 2005.

Legislators and policymakers in Europe have an opportunity to be at the forefront of efforts to protect human health from climate change as well as to maximise the potentially huge health co-benefits of mitigation strategies, mainly due to improvements in air quality, nutrition and physical activity. Political awareness of the health impacts of climate change remains low. The Lancet Countdown in Europe initiative tracks political engagement with health and climate change at the EU-27 level. Its latest report assessed references including both climate and health related terms in 264,122 speeches made by legislators in the European Parliament in 2022. In total, there were only 10 references to the intersection of health and climate change, most of them coming from German legislators, followed by Spanish, French and Swedish legislators. Of the speeches referencing the climate-health intersection, only two included terminology related to equity.

Likewise, a recent analysis of climate-related EU and international policies conducted by TRIGGER, a Horizon Europe project, has revealed critical gaps in addressing certain climate hazards and cascading hazards (4). Additionally, social and mental health impacts of climate change remain largely overlooked in most climate policies, and there is limited coverage of certain physical health impacts (e.g., allergies and respiratory, cardiovascular, neurological and skin diseases). Furthermore, there is little attention in climate policies to the impacts on vulnerable groups.

The European climate-health cluster: science translation for policy & practice

The Climate-Health Cluster, established in October 2022, brings together six European research and innovation projects funded by the EU's Horizon Europe Research and Innovation Initiative. As a Cluster, we aim to raise awareness about the health impacts of climate change both within Europe and globally, and the potentially huge health co-benefits from mitigation and adaptation strategies. We collaborate closely with policymakers to translate solid scientific evidence into effective and timely climate-health policies by providing cutting-edge scientific evidence, pioneering tools, co-created services, policy briefs, and recommendations. With this we strive to maximise the societal and policy impact of our EU-funded research linked to climate, health and policy.

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The six projects address different aspects of the nexus between climate change and human health:

BlueAdapt (https://blueadapt.eu) focuses on how coastal pathogens are affected by climate change and environmental pollution and the associated risks to human health.

CATALYSE (https://catalysehorizon.eu/) develops national and sub-national-level climate-health indicators for EU-27 and neighbouring countries relevant to EU, national, and regional policies.

CLIMOS (https://climos-project.eu/) generates science-based predictions, actions and policy-relevant recommendations to mitigate climate change-induced emergence and spread of sand fly-borne diseases

HIGH HORIZONS (https://www.high-horizons.eu/) looks to how heat exposure impacts pregnant women, infants, children and health workers and how these impacts could be prevented through mitigation and adaptation.

IDAlert (https://idalertproject.eu/) focuses on climate-sensitive zoonotic diseases to ensure that key stakeholders have easy access to relevant data and tools, that enable to develop monitoring strategies and improve design of policies and interventions.

TRIGGER (https://project-trigger.eu/) aims to produce trans-disciplinary knowledge and communication material about direct and indirect health effects of climate change and related policies in order to advance society uptake at a policy and personal level.

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Our call to European Union policymakers and legislators

Lawmakers and policymakers have an enormous responsibility to safeguard human health from the adverse impacts of climate change. Society is at a crossroads that requires the urgent formulation and implementation of transformative policies.

The European Climate-Health Cluster is committed to generating the knowledge and tools necessary to integrate human health in climate policies and programmes and raise awareness of the climate change and health nexus. **We recommend to:**

- ***Incorporate* the safeguarding of human health, including both physical and mental health and social wellbeing, into all pertinent climate policies**. Special attention is required for the most vulnerable demographics: low-income communities, women, elderly, ethnic minorities, migrants and displaced people and women going through pregnancy and childbirth, tend to be more severely affected by climate-related health impacts.

- ***Address* the equity gap to reduce social disparities in health outcomes and adopt a systemic and multisectoral approach.** Health Impact Assessments anticipate the health consequences of policies for vulnerable people and ensure equitable policymaking across sectors. Policies should consider not only individual hazards but also their interactions and cascading climate risks.

- ***Urgently* strengthen mitigation strategies to prevent catastrophic climate change.** The current health impacts of climate change are already exceeding adaptive capacity in the EU. Placing health at the centre of mitigation actions has the potential to avert millions of premature deaths by improving air quality, promoting better nutrition, encouraging physical activity, and reducing the incidence of vector-borne diseases.

- ***Put* health adaptation at the centre of climate change policies in tandem with the severity of existing impacts.** This entails implementing and leveraging tools such as early warning systems to disseminate real-time updates to local populations, facilitating proactive adaptation to prevailing risks. Strengthening and harmonising disease surveillance systems for climate-sensitive conditions, including heat health action plans, across Europe, is imperative.

- ***Transform* healthcare systems to substantially reduce their environmental footprint and enhance their preparedness,** response and resilience capacities for addressing climate-related risks and emergencies.

- ***Foster* collaboration among scientists, policymakers, legislators, and all stakeholders** to exchange knowledge and information regarding health risks, fostering greater comprehension and empowering individuals and communities to make informed decisions to safeguard their health and well-being.

- ***Increase*** **support for research on the nexus between climate change and human health and the health dividends of both mitigation and adaptation efforts.**

In the coming years, the **European Climate-Health Cluster** and its projects will develop novel evidence-based tools and policy recommendations to support policymakers in making informed decisions for improving human health and the health of the planet. Stay updated and connected by visiting our cluster website for the latest developments, resources, and insights. We welcome opportunities for further discussions or collaborations. Let's work together towards a healthier future for both our people and the planet.

Acknowledgments:

The Policy Brief is an output of the collaborative co-creative work of the Cluster's Working Group 1 (Science Translation to Policy) with cooperation from invited members including consultation with external and internal stakeholders.

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Blue Adapt · CATALYSE · CLIMOS · HIGH HORIZONS · IDAlert · trigger