



Key messages and points discussed at the webinar on May 26, 2021:

Climate change and health: promoting wellbeing through climate action

This webinar was one of nine ECCA2021 webinars on critical climate change adaptation challenges. The webinar presented state-of-the-art knowledge on the health effects of global warming, with a particular focus on increasing temperature and heat stress in a European context, and discussed how alternative climate policy options and measures can help safeguard the health and wellbeing of citizens.

The webinar was divided into two sessions 1) health risks from climate change – the impacts and urgency of climate change and health in Europe and 2) adaptation solutions and best practices. The webinar also addressed the need for climate adaptation policies to move forward hand-in-hand with greenhouse gas mitigation.

The event was moderated by Sonja van Renssen, Managing Editor of Energy Monitor and a freelance climate energy & environment journalist based in Brussels.

Key messages and points discussed:

Extreme heat is a key climate change health risk in Europe in the near and long term

- Climate change affects human health in a multitude of ways: Direct impacts (death and disease from extreme weather events, floods, droughts) and indirect impacts (including vector-borne disease, food and waterborne disease, air pollution, undernutrition, issues related to occupational and mental health, and, under given circumstances, violence and conflict).
- Heatwaves are currently one of the deadliest extreme weather events in Europe. Europe is warming faster than the global average and is already 2,2 degrees hotter than pre-industrial levels.
- Extreme heat is a key climate change health risk in Europe in the near and long term, as stated
 by the IPCC. Ageing populations, combined with a high prevalence of chronic disease and rising
 levels of urbanisation, has made populations in the European and Eastern Mediterranean
 regions the most vulnerable to heat extremes of all WHO regions, according to the Lancet
 Countdown report for 2020. This should put the health sector and wider services including
 policy makers on high alert.
- Chronic exposure to air pollution is probably the biggest environmental killer in Europe today.
 Air pollution amplifies the health impacts of heat on mortality. Climate change can impact air
 pollution in several ways, e.g. through impacts on biogenic and man-made emissions
 (including from wildfires), chemical transformation, and dispersal and removal rates. Abating
 air pollution could become more difficult due to global warming.



- The direct health effects of heat range from heat exhaustion to heat stroke, a severe medical condition that can lead to coma and death. Heat is associated with worsening of chronic cardio-respiratory conditions, renal disease, and diabetes, and interacts with pharmacological treatments. Heat exhaustion can occur frequently and vulnerable subgroups most at risk during heat waves are the chronically ill as identified by epidemiological studies.
- We need to acknowledge the mental health impact of climate change, as well as its
 physiological impact. Mental health should be a part of the climate change adaptation
 process. People with mental health conditions are among the vulnerable subgroups to the
 effects of climate change, e.g. heatwaves. A holistic approach is necessary.
- There are clear geographical differences in the health risks associated with heat across Europe, mostly with a south-north gradient. Whereas heat has a much bigger impact on mortality in Southern than in Northern Europe, there are also differences within countries.
- Future impacts on mortality depends on the emission pathways and associated degree of
 warming in future. Limiting global warming to 1.5°C, compared with 2°C, could reduce the
 number of people both exposed to climate-related risks and help to reduce further increase in
 mortality from heatwaves. If emissions remain unchecked, populations in Southern Europe
 in particular will be at risk.
- Mortality due to heat stress is the tip of the iceberg. A range of heat-induced conditions are
 now more common also in Central and Northern Europe. As heatwaves become more
 frequent, vulnerable people in particular need to become aware of the risks and be prepared
 to take action to protect themselves, e.g. by keeping cool and avoiding becoming dehydrated.
- **Heat is a silent killer**. Further epidemiological research is needed to reveal the full impact of heat stress on premature death and disease. For instance, flood victims are more visible in the media, although the number of deaths is far lower, at least in Europe.
- The ongoing temperature rise and the frequency and intensity of extreme heat events underscore the urgency of implementation of climate action and adaptation in Europe.
 Citizens of all countries will be affected by the rising temperature and health effects of climate change. Taking action is urgent and imperative to prevent adverse impacts.

Adaptation measures, including heat action plans, contribute to reduced death and disease rates linked to heat stress

- Excess death and disease from extreme temperatures is largely preventable to the extent
 that adaptation measures can be tailored to alleviate contextual and individual
 vulnerability. WHO Europe's 2021 publication with updated evidence for heat and health
 prevention in Europe is the most comprehensive evidence base regarding implementation of
 heat health action plans in Europe.
- Reduction of heat related impacts have been reported in a number of countries and there is
 a clear indication that heat health action plans play a role. Heat warning systems are key and
 widely implemented, but a formal evaluation of existing heat warning systems and heat health
 action plans and the specific measures taken is limited.



- Long-term urban planning interventions to mitigate urban heat are still relatively rare. More involvement is needed from local governments and non-state actors. There is also a lack of resources for the implementation of heat health action plans.
- Individual and short-term adaptation measures especially for indoor cooling are neither enough nor sustainable in the long term (e.g. increased use of A/C). More emphasis should be put on long-term solutions for building more heat resilient cities, e.g., through promoting green and blue urban space and the use of building materials and designs that reduces heat exposure.
- An integrated and holistic approach is needed to ensure that climate change and health issues are integrated in all pillars of policy and society, including at the local level. Dealing with the challenges related to climate change and health should not be a task only for those working in the domain of public health, but involve the whole of government and the whole of society.
- Heat health action plans should no longer be stand-alone plans like today, but should be
 integrated into urban planning, mobility programs, education and welfare programs etc., and
 initiatives related to a green COVID19 recovery in the EU. Climate change and heat response
 communication should be further interlinked.
- Awareness raising and regular communication on risks are key for adaptation among both citizens and institutions. Information must be targeted to each vulnerable group. Positive messaging can have a better effect, e.g., focusing on what you can do during heatwaves, not what you cannot do.
- Health impacts from heat stress can differ from place to place. Hence, heat adaptation plans should be tailored to national and regional organizations and context, as well as to differences in vulnerability. Warning systems must consider local aspects. Vulnerable groups must be involved early on to ensure the relevance of adaptation measures.
- Monitoring and evaluation of the health impacts are central to adaptation planning, to
 understand how measures are implemented over time and how people respond to heat. E.g.
 in Italy, formal identification of susceptible subgroups is carried out yearly. Following that,
 specific measures are prepared, including active surveillance by the health care sector, and
 recently also adjusting the measures as a result of the COVID19 situation.
- Subgroups more at risk for COVID19 are also more at risk during heat waves, contributing to
 cumulative effects. There are also long-term effects on vulnerability for COVID-patients,
 enhancing the vulnerability of the most vulnerable.
- There is a need for more action-oriented research on adaptation to climate change and engagement from decision-makers on adaptation. It is important that the European Green Deal contributes to increased cooperation between researchers and decision-makers at different levels to promote evidence-based actions on climate change adaptation. Investments in both infrastructure and research are needed. Climate change adaptation supported by Horizon 2020 and Horizon Europe is important for informing policies.
- Multilevel governance collaboration is key to addressing climate change and health and is often the missing link at national level.



- COVID19 has taught us that a well-functioning health sector increases overall resilience. It also taught us a lot about social inequality, which needs to be addressed in order to increase resilience to heat.
- Collaboration, partnerships and integrated actions are key to putting the health impacts of climate change in Europe higher on the political agenda.

Climate adaptation must go hand-in-hand with greenhouse gas mitigation to reap potential health co-benefits and avoid costly trade-offs

- Mitigation is the best way of preventing the health impacts of climate change. Policymakers
 need to show greater commitment to urgent climate action. We need to see transformation
 and reduction in CO2 in this decade to avoid the most catastrophic impacts. The EU's Green
 Deal is a unique opportunity to protect health from the threats of climate change. There should
 be no more financing for climate and health harming activities if we are to succeed in 'building
 back better'.
- Health and wellbeing is recognised in EU policy documents as essential in a climate resilient Europe (EU Adaptatation Strategy, etc.) and the EU is pushing for climate action. However, member states are less proactive and ambitious and are lagging behind in implementing policies. We need to hold national leaders accountable.
- Through mitigation action, we protect health today and get less vulnerable societies in the future.
- Evidence on health impacts can be an effective way of mobilising people for climate action (e.g. by NGOs). We need to talk more about the health co-benefits of climate action and make the business case for it.
- Reducing greenhouse gases through more sustainable transport, food and energy use can have substantial health co-benefits, e.g. from reduced air pollution, enhanced physical activity (cycling and walking), and healthier diets. It is crucial to communicate avoided health damage both in the short and the long term as outcomes of mitigation.
- Across the nine countries studied by the Lancet Countdown it was estimated that, by 2040, ambitious NDCs that put health at the center of new climate policies and meet the "well below 2°C" goal of the Paris Agreement, could reduce annual deaths due to air pollution by over 1.6 million, annual deaths due to diet-related risk factors by over 6.4 million and annual deaths attributable to physical inactivity by almost 2.1 million.
- In Europe, modest actions to promote cleaner energy and transport were estimated to reduce the number of deaths from PM2.5 from 62 per 100 000 in 2015 to 59 in 2018. As air pollution is transboundary, mitigation actions can improve health across the region.
- Emission pathways will define future global warming and the decisions we make today will
 define the world of tomorrow. But we have a choice: we can cut emissions and thereby reduce
 the number of deadly heatwave days to come. Regardless of mitigation we cannot avoid a
 certain level of global warming, and adaptation is key to making the future climate more
 liveable.



- The European Climate and Health Observatory is a new European tool and web portal for promoting climate adaptation a first and crucial deliverable of the new EU adaptation strategy. It is a core partnership between the European Commission, the European Environment Agency and other key partners in the realm of climate change and health. The goal is to provide easy access to resources on climate change and health for target audiences such as policy makers, policy advisers as well as researchers.
- We do not have the luxury of addressing one health challenge at a time: Adaptation and mitigation and now the COVID pandemic need to be addressed at the same time.
- Aligning COVID19 recovery with response to climate change offers a triple win improve public health, create a sustainable economy and protect the environment.

The webinar was recorded and is available here: https://www.youtube.com/watch?v=npbCFHAIHi0

Slam poetry «A breath» by Oda Aunan showed at the webinar: https://www.youtube.com/watch?v=q2zIHwozLQk

Contributors to the webinar:

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- Miriam Weber, PhD Senior policy advisor and healthy city coordinator Utrecht and chair of the WHO European Healthy Cities Network environment and health working group, Netherlands (panelist)
- Miriam S. Dahl, CICERO Center for International Climate Research (assisted in the planning)

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EXHAUSTION



