

Connecting climate and health research

- outcomes and identified knowledge gaps from the **ENBEL** project

Health impacts of climate change: Advancing the European adaptation agenda to 2030

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Center for International
Climate Research

 *Connecting* HEALTH
& CLIMATE CHANGE

Climate HAZARDS

- ★ Air pollution including from wildfires 1 8 9
- Cascading effects 4
- Coumpound events 4 8 9
- Drought 4
- ★ Environmental heat 1 2 3 4 5 6 7 8 9
- Human-nature interactions 3 4 5
- ★ Occupational heat 7 10 12
- Storm/heavy precipitation/flooding 2 3 4

VULNERABILITY factors

- Age 6 8 7 9
- Community organisations 1 5 12
- Ethnicity 8
- Medical conditions 6 8
- Resilience 1 12
- Sex / Gender 6 8 9
- Socio-economic position 6 8 9 11 12

Health RISKS

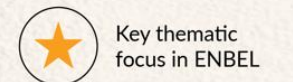
- Cardiovascular and respiratory death and disease 1 7 8 9
- Kidney disease 12
- Maternal, neonatal and child health 2 6 7
- Mental health 10
- ★ Infectious and vector-borne diseases 1 2 5
- Nutrition/food systems 4 5
- Workers health 7 8 10 12

EXPOSURE determinants

- Geographical location
- Setting

OUR PROJECTS

- | | | |
|-------------|--------------|----------------|
| 1 ACROBEAR | 5 CCCEHN | 9 HEATCOST |
| 2 AWARD-APR | 6 CHAMNHA | 10 HEAT-SHIELD |
| 3 BUILDERS | 7 CLIMAPP | 11 PARSEC |
| 4 CASCADES | 8 EXHAUSTION | 12 PREP |










The scale and urgency of the health risks of climate change is critical

- A coherent **research agenda** must emerge in the next few years, and with **adequate funding**
- Testing **adaptation interventions** in terms of **costs, benefits, equity, and feasibility** should be a priority



Urgent need to develop targeted adaptation to protect the most vulnerable

Amount of evidence on type of interventions per category of vulnerable populations

Vulnerable groups	Heath Health Preventive Interventions						
	Information 	Cooling 	Workplace 	Education 	Healthcare 	Social 	Urban 
Older people	++++	++		++	+	++	+
Children	+	+			+		+
Low SES		+		+		+	+
Chronic diseases	++	+		+	+	+	+
Athletes	+	++++					
Workers	++	++++	++++	+	+		
Pregnant women	+			+			
Homeless	+	+		+			

Number of articles describing each intervention:
 1-3: +
 4-6: ++
 7-9: +++
 10-13: ++++

- Limited evaluation of heat-health interventions, and a lack of evidence regarding effectiveness for vulnerable groups
- Interventions need to address the socially deprived, homeless, chronically ill, and mental illness groups
- Need for more active preventive measures

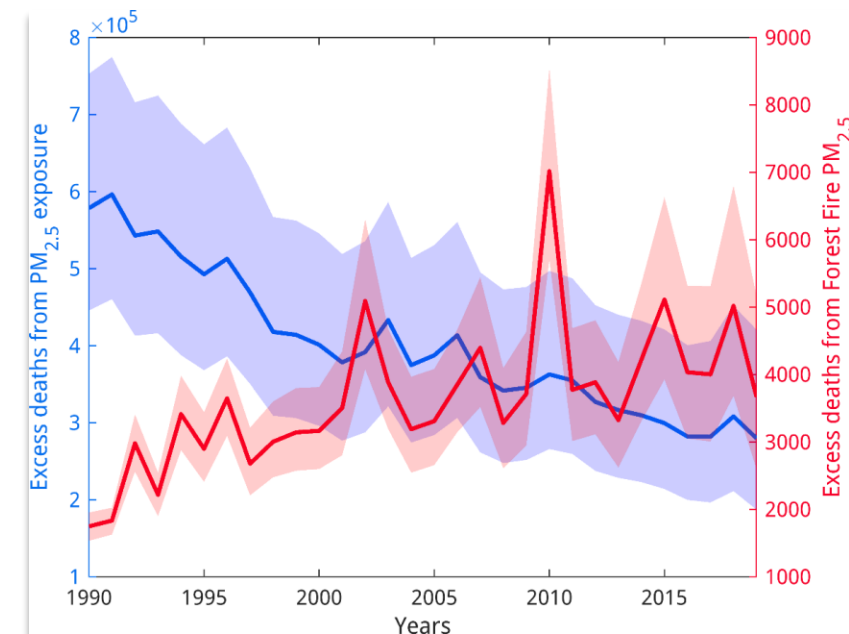
Co-design with local communities and stakeholders is essential

- Ensures that policies and interventions are **feasible and acceptable**
- Building trust takes time: **Longer-term funding is needed**
- Fund projects with **potential to scale up**



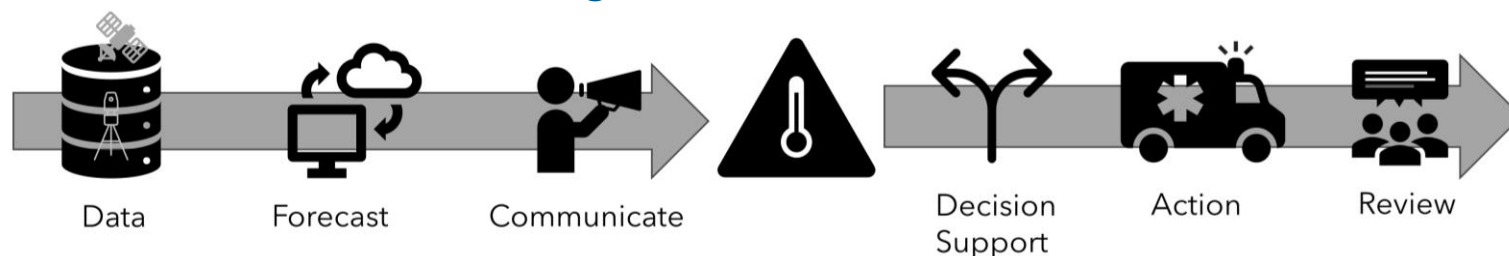
Wildfire pollution is increasing: More difficult to reach air quality targets

- There is need for **improved modelling and forecasting techniques** to predict air pollution from wildfires
- More research is needed to understand the **toxicity and health burden from wildfire smoke**
- Development and implementation of **comprehensive wildfire management strategies** that focus on prevention, early detection, and rapid response needs to be enhanced



Climate services and early warning systems are key tools in adaptation to increasing health risks

- Developing and implementing climate services require **high resolution health and climate data, funding, training, and technological infrastructure and support (including for surveillance)**
- Enhanced **collaboration between Health and National Weather Services** is needed
- Partnerships with the intended users of the services are needed to **ensure that the services align with user needs and target high-risk groups**
- Ensuring **effective communication**, including the use of multiple languages and culturally appropriate messaging, is essential to ensure equitable access to climate services, particularly for high-risk groups
- Progress on early warning systems is piecemeal and often not sustainable – needs **coordination** to exchange lessons learned, incl. on **benefits obtained from their use**



Lessons learned from stakeholders

- There are major gaps in knowledge about *how to adapt* to the major climate hazards
- There is still *limited attention to health risks in adaptation policies*, including in climate services
- Adaptation requires *cross-sectoral interaction, engagement with civil society, capacity building and training* for health professionals
- As adaptation policies and measures are put in place, *monitoring and evaluation* is necessary

Science conference in Stockholm Oct. 2023

CONFERENCE
on CONNECTING

**HEALTH & CLIMATE
CHANGE**



11-12 October 2023
Stockholm, Sweden

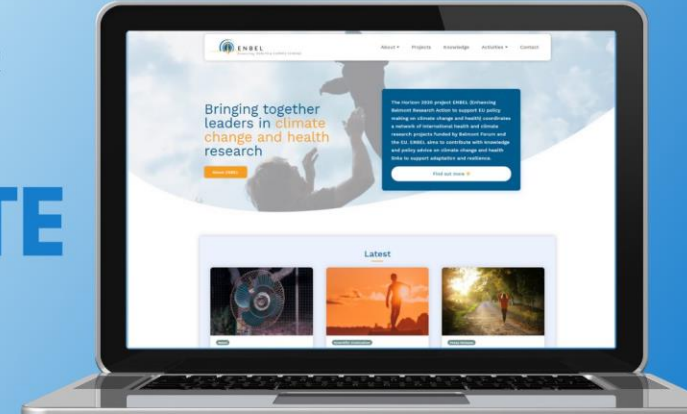


Transdisciplinary conference bringing together researchers, experts, policy makers, and NGO and private sector representatives, from all career stages.



An arena to present research findings and discuss climate change effects on health, adaptation, societal consequences, and opportunities for climate resilient development.

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Thank you

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