Retrospective European observational Climate-health advanced innterconection study (retro-CLAVIS)

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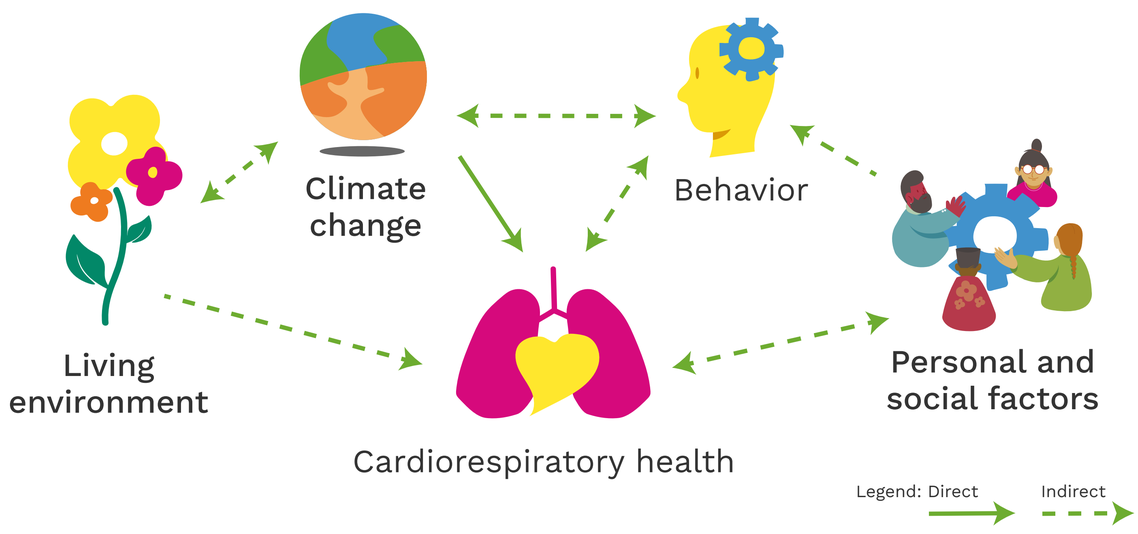
Background

Climate change impacts human health world wide. At the same time, exposure to climate change is rarely comprehensively assessed in observational studies.

Aim

Comprehensively characterise exposure to climate change and investigate its relationship with cardiorespiratory diseases.

Overview of the climate change and health system



Methods

TRIGGER Consortium

22 European partners **15** countries

Health data

- Northern Finland Birth Cohort 1966:
  31Y N=8705 and 46Y N=7074
- Blood pressure, medication use
- Personal and social characteristics
- Geolocation residential history

Climate exposure data

- ERA-land reanalysis
- Temperature, humidity, precipitation, solar radiation, snow depth, wind speed

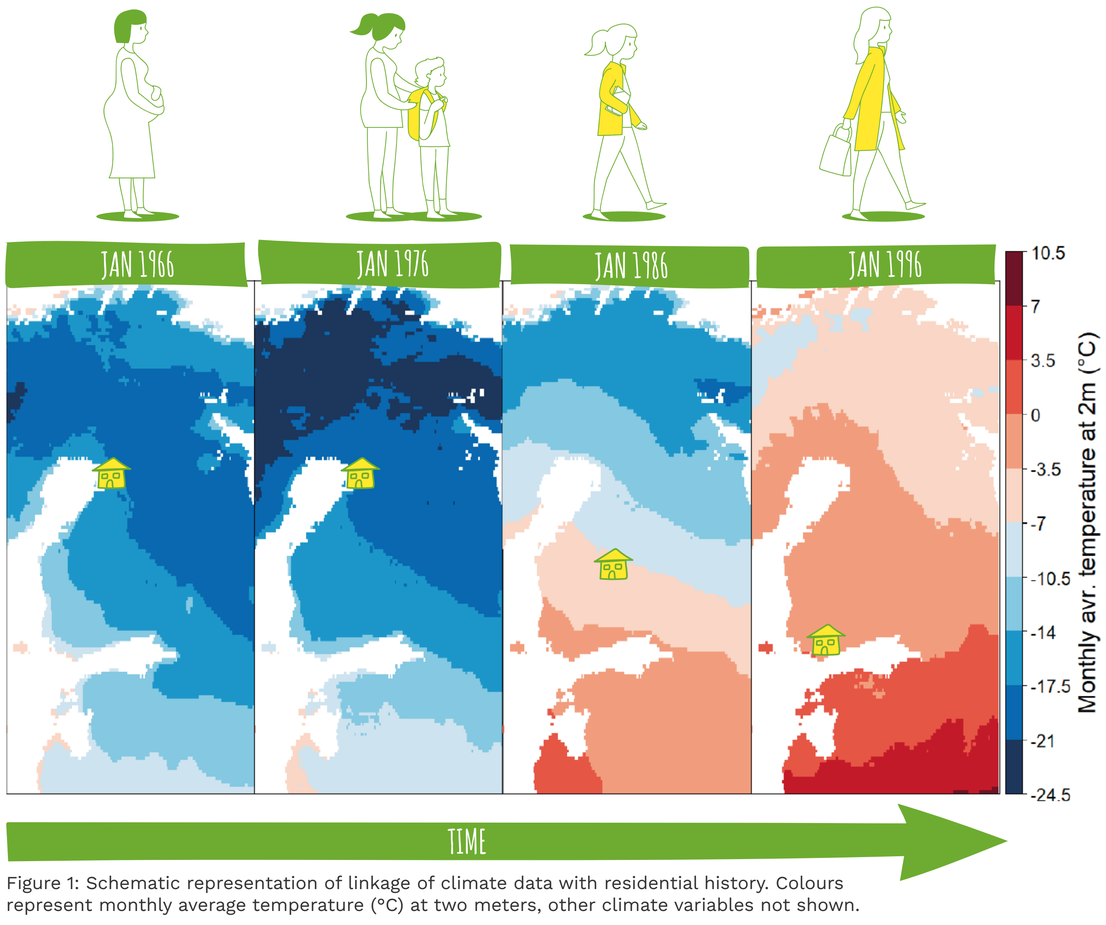


Figure 1: Schematic representation of linkage of climate data with residential history. Colours represent monthly average temperature (°C) at two meters, other climate variables not shown.

Data analysis

- Structural Equation Modelling
- Multidimensional longitudinal cluster analysis

Next steps

- Method validation in Northern Finland Birth Cohorts
- Replication within TRIGGER... and your cohort?

The resulting analytical framework will:

1. allow for individual composite climate change exposure assessment
2. shed light on the relationship between climate change and hypertension
3. enable future studies on the health impact in climate-vulnerable regions

Please connect!

climate-health cluster

Funded by the European Union

This project has received funding from the European Union under grant agreement n° 101057739.