

MONITORING AND MITIGATING ENVIRONMENTAL HEALTH INEQUALITIES RELATED TO AIR QUALITY IN BELGIUM

The post-ELLIS era: the way forward

Research Team of the ELLIS project



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Research Team on Environmental Health Inequalities



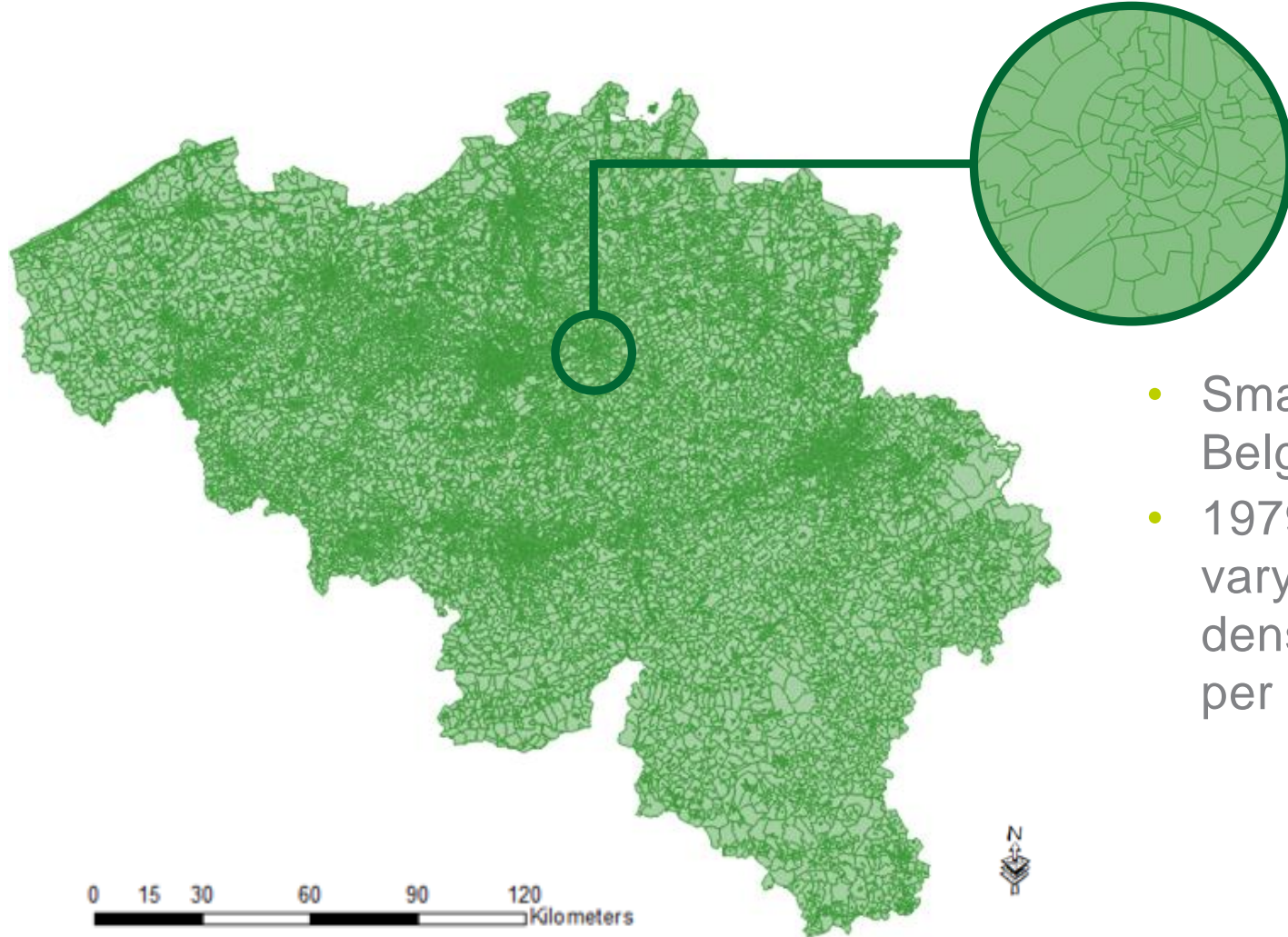
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ELLIS follow up projects & activities

- King Baudoin Foundation : BELAIR_POL
- Department Care : EBOD-FL
 - **Mapping the Environmental Burden of Disease in Flanders**
- BELSPO : TEMPUR
 - **ClimaTE change-related Mortality in different Population groups in URbanised Belgium**
- Horizon EUROPE : BEST-COST
 - **Measuring The Health Costs Of Pollution**
- Multiple project submissions ongoing ...



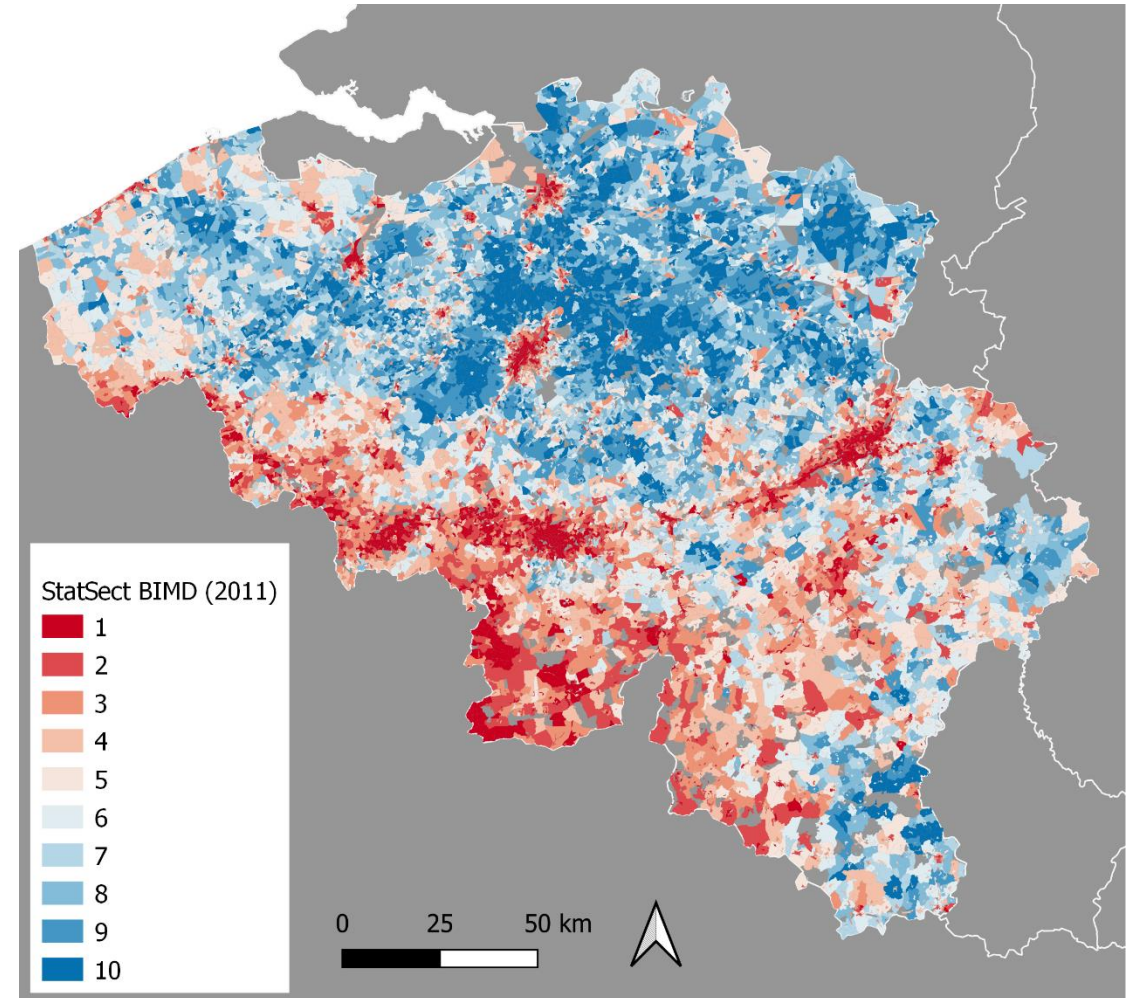
Statistical Sectors as common denominator



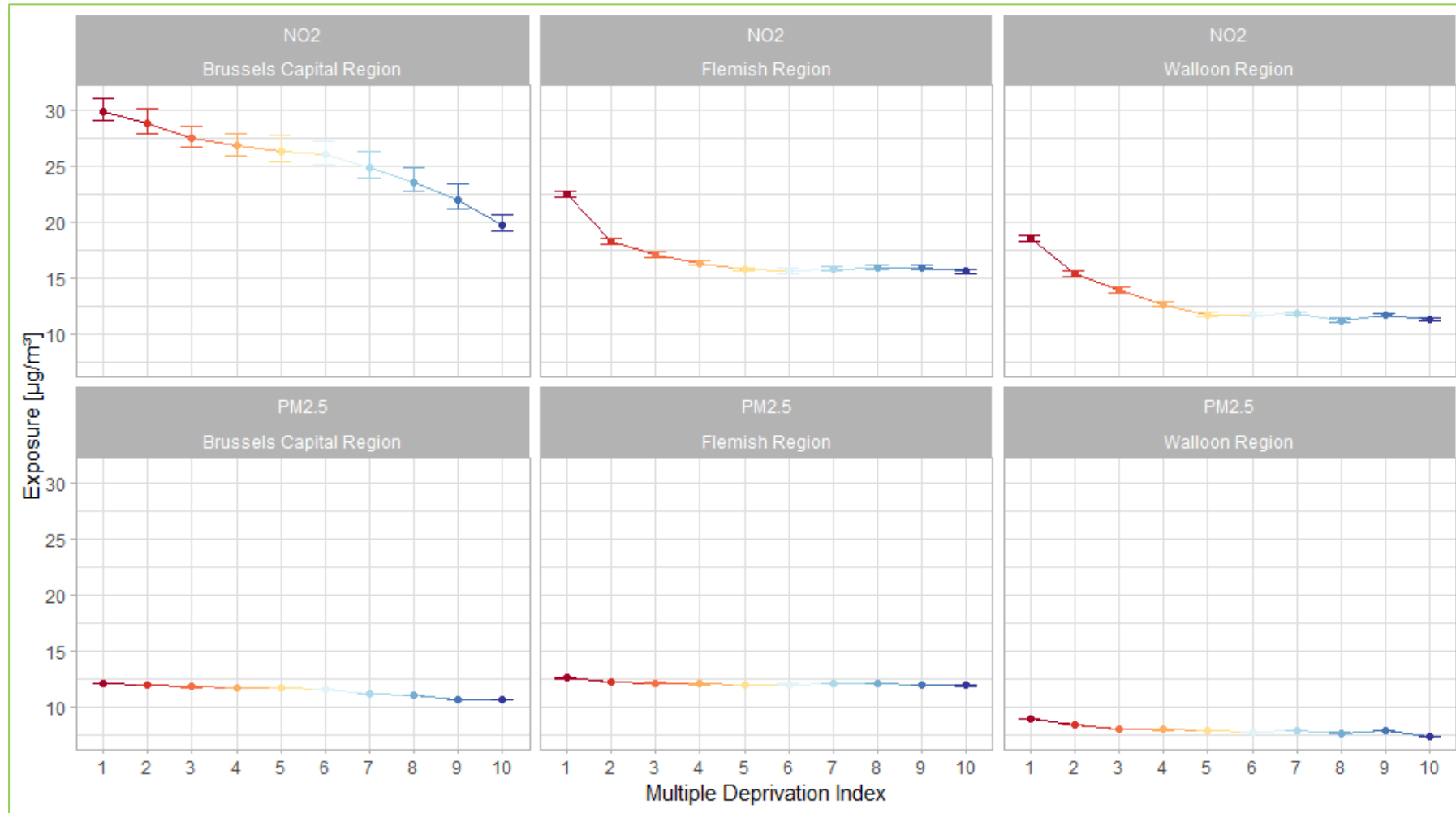
- Smallest administrative subdivision of Belgium
- 19794 statistical sectors in Belgium with varying area (depending on population density) and on average 500 inhabitants per sector

Belgian Index of Multiple Deprivation (BIMD)

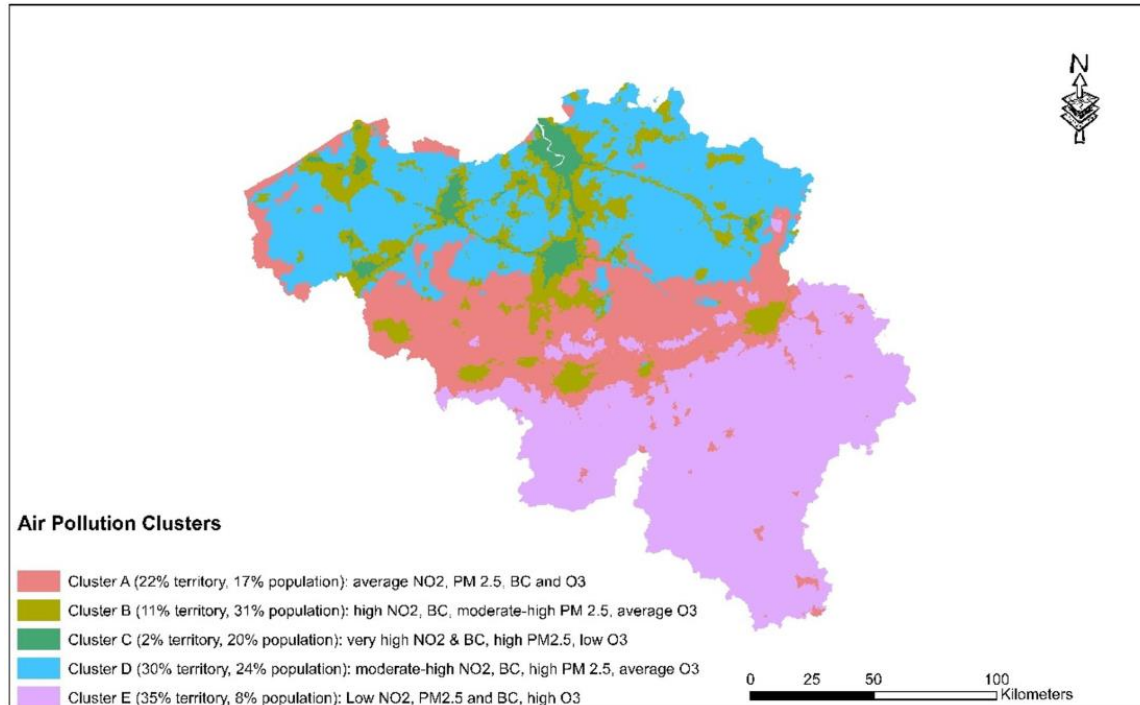
- Measure of socio-economic status (SES)
 - 0 : lowest SES
 - 10 : highest SES
- <https://bimd.sciensano.be/tool>
- <https://github.com/bimd-project/bimd>
- In the future available through  Geoportal of the Belgian federal institutions



BIMD applications : BIMD and air pollution



Co-exposure to air pollution (PM_{2,5}, NO₂, BC, O₃)



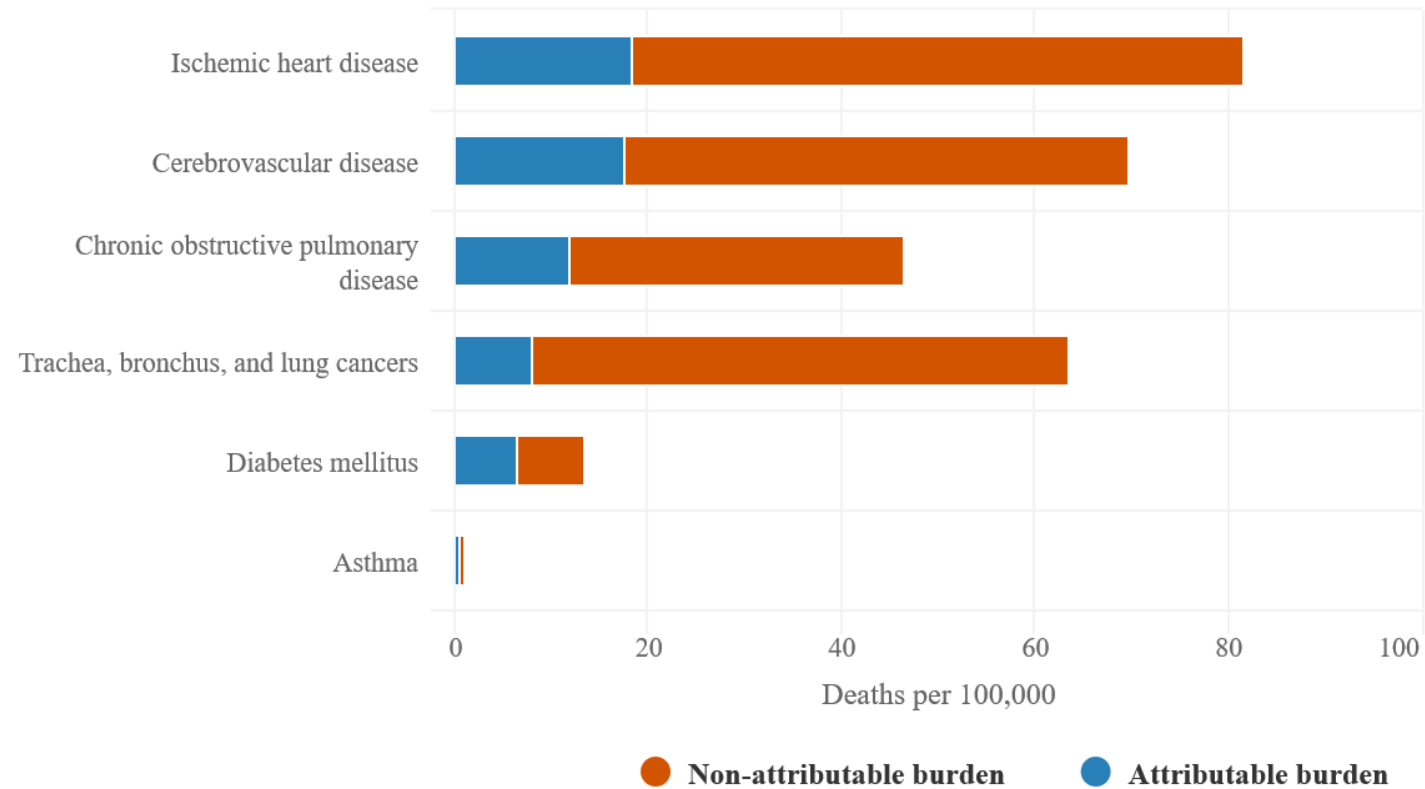
doi.org/10.1186/s12889-024-18011-0

In the future also available on

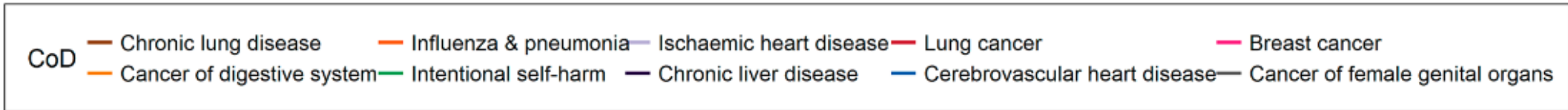
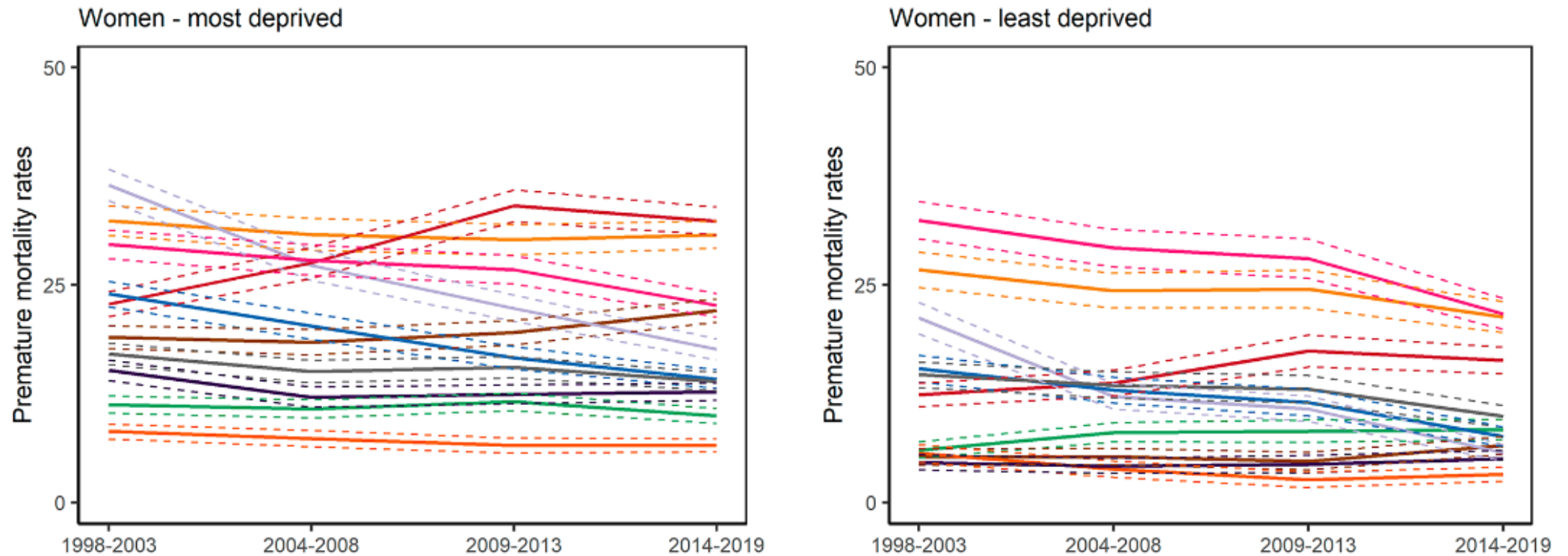


Monitoring environmental health

Causes of disease burden attributed to particulate matter (PM_{2.5}), by death rate per 100,000 persons in both sexes, all ages, 2019

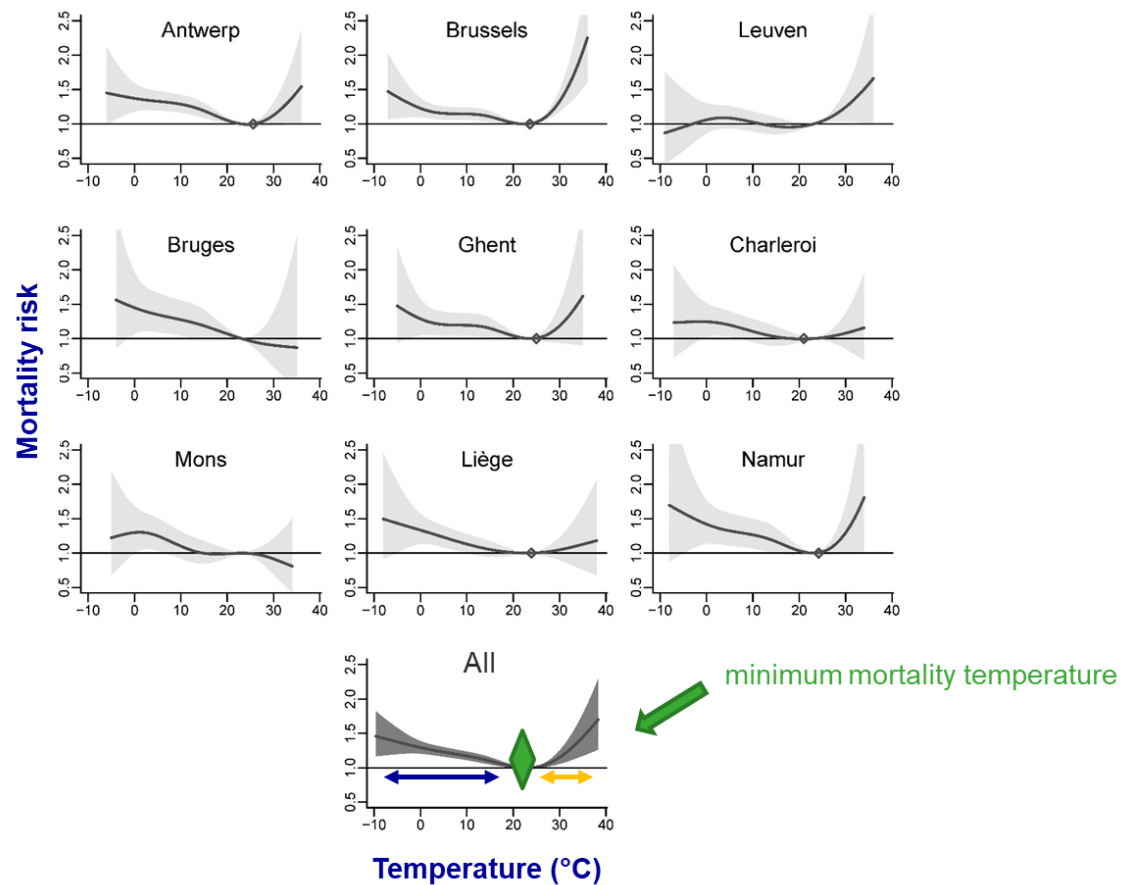


Expanding to other health outcomes



Expanding to other environmental stressors

Heat



Chemical exposure



Generated by chatGTP

Ensuring long-term impact through sustainability

Harmonized methodology

FAIR data

Internal and external use

Research

Monitoring

Network

Follow-up committee



OBSERVATORIUM
VOOR GEZONDHEID EN WELZIJN
BRUSSEL



Research Infrastructure Environmental Health Inequalities



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