



A collaborative cluster on the role of environmental pollution in non-communicable diseases: Air, noise, light and hazardous waste pollution

To maximise synergies, prevent overlaps and enhance impact, seven Horizon Europe projects form a collaborative cluster – ExpoHealthNet. The cluster unites cutting-edge research projects set to investigate how environmental stressors contribute to non-communicable diseases. By fostering collaboration and knowledge exchange, ExpoHealthNet aims to drive impactful research on the health risks of air pollution, noise, hazardous waste and climate change.

7 EU projects





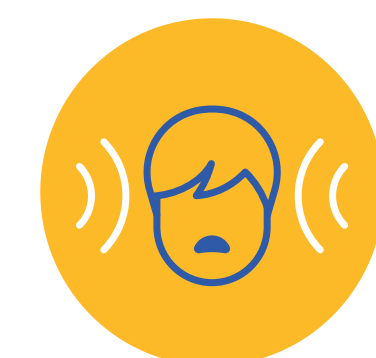




Exposures Under Research



Air Pollution & Particulates



Physical Stressors



Climate & Environment

5 Working Groups



Policy & practice

- ✓ Alignment of scientific outputs with policy needs
- ✓ Dialogue between researchers & decision-makers
- ✓ Strategies for science-to-policy translation
- ✓ Evidence-informed environmental health policies



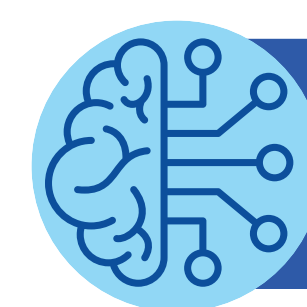
Data management and protection

- ✓ Ensure all data follows FAIR principles
- ✓ Harmonised data standards and ontologies across projects
- ✓ Compliance with GDPR
- ✓ Joint approaches for data sharing, storage and reuse



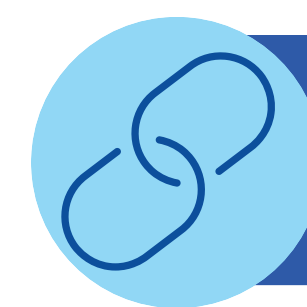
Communication & Dissemination

- ✓ Cluster identity
- ✓ Joint communication and dissemination strategy
- ✓ Transparency and knowledge sharing
- ✓ Support projects in amplifying their results



AI, Modelling, Tools

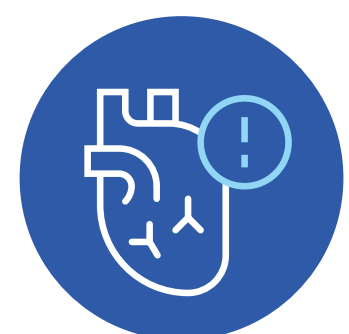
- ✓ AI tools and modelling approaches
- ✓ Interoperability and reuse of the tools
- ✓ Development of decision-support systems
- ✓ Avoidance of duplication across projects



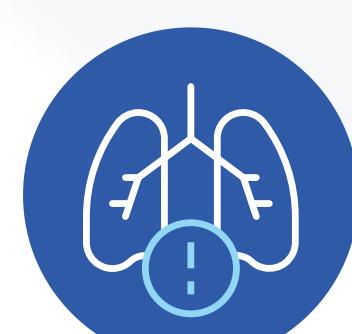
Adverse Outcomes Pathways

- ✓ Linkage of exposures to health outcomes
- ✓ Use of shared pathways and biomarkers
- ✓ Support for modelling and policy translation
- ✓ Development of FAIR-compliant AOP frameworks

Health Outcomes



Cardiovascular Diseases
Coronary artery disease, hypertension, stroke, metabolic syndrome



Respiratory Diseases
Chronic Obstructive Pulmonary Disease (COPD), asthma, hypersensitivity pneumonitis, pediatric respiratory illness



Neurological & Cognitive Outcomes

- Dementia, Alzheimer's disease, autism, ADHD
- Cognitive decline, neurodegenerative disorders



Immune-Mediated & Developmental Diseases

- Autoimmune disorders (Rheumatoid Arthritis, lupus, type 1 diabetes, systemic sclerosis)
- Allergic diseases (atopic dermatitis, food allergies)
- Fetal & perinatal outcomes: low birth weight, preterm birth, intrauterine growth restriction



Other outcomes

- Cancer, dermatological diseases, ocular diseases
- Sleep disorders, mental health disorders

Get in Touch with Us!



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