

V4+ Conference on Environment and Health in Central and Eastern Europe

11 March 2024

Scope and purpose

In the Budapest Declaration adopted at the 7th Ministerial Environment and Health Conference in Budapest (5 – 7 July 2023), the Ministers committed to “accelerate the just transition towards resilient, healthy, equitable and sustainable societies”. The integral part of this declaration is the “Roadmap for Healthier People, a Thriving Planet and a Sustainable Future 2023-2030” describing a set of actions to tackle the most pressing health challenges related to the triple crisis (climate change, environmental pollution and biodiversity loss) for Member States’ consideration. The Roadmap includes a commitment to promote research and innovation addressing environment and health challenges and translating science into policies and actions by organizing national multisectoral policy dialogues and exchanges of experiences among countries.

To contribute to this dialogue, **the Czech Republic intends to utilize its Presidency of the Visegrad Group** to organise the **V4+ Environment and Health Conference to be held on 11 March in Brno**. The conference will focus on human exposure to environmental pollution and will address challenges that are most relevant for the region of Central and Eastern Europe as well as priority actions to tackle them. It will be structured around three topics: (i) chemical pollution of ambient and indoor air, (ii) impact of chemical exposures on child development and health, and (iii) complex urban exposures. Each block will consist of several scientific presentations followed by a panel discussion. The conference will be concluded by a high-level multisectoral science-to-policy panel. The outcomes of the panel discussions will be presented to the **V4+ Meeting of the Ministers for Environment to be held on 12 March**.

The conference will provide a platform for exchanges of knowledge and discussions on potential collaborations towards healthier and more sustainable CEE region. The meeting is open to scientists, experts from Ministries of Health and Ministries of Environment as well as other entities addressing environmental impacts on human health. In addition to the V4 Group members: Hungary, Poland and Slovakia, we extend our invitation to the experts and policy makers from the following countries: Austria, Bulgaria, Croatia, Germany, Romania and Slovenia. The invited experts will include the leaders of the “Health and Environment Research Agenda for Europe” (HERA project), the Horizon Europe “Partnership for the Assessment of Risks from Chemicals” (PARC), Horizon 2020 project “Human Biomonitoring for Europe” (HBM4EU), “International Human Exposome Network” (IHEN), as well as representatives of WHO and national ministries.

08:00 – 09:00

Registration and welcome coffee

09:00 – 09:25

Welcome remarks (moderator: Kateřina Šebková, RECETOX)

- Vlastimil Válek, Minister of Health of the Czech Republic
- Petr Hladík, Minister of Environment of the Czech Republic
- Francesca Racioppi, Head of the European Centre for Environment and Health (WHO)

Jana Klánová – Introduction to the Conference

09:25 – 09:45

Key-note speech: Martin Scheringer (ETH Zürich, Masaryk University)

Chemicals in the 21st century – what is needed for an effective science-policy interface

09:45 – 11:00

Chemical pollution of ambient and indoor air in CEE

Chair: Milan Chrenko (European Environmental Agency)

- 09:45 – 10:00 **Gerhard Lammel (Max Planck Institute, MU):** Ambient air pollution
- 10:00 – 10:15 **Lisa Melymuk (MU):** Indoor exposure
- 10:15 – 10:30 **Maria Uhl (Environment Agency Austria):** Microplastic pollution – threat to planetary boundaries
- 10:30 – 11:00 **Panel discussion**

There is a strong commitment in Budapest Declaration to reduce the health impacts of pollution through addressing both established and emerging environmental risk factors. Pollution of air, water and soil, exposure to hazardous chemicals, noise, and other physical risk factors are responsible for a major burden of disease, which still need to be fully estimated. Exposure to different types of pollution poses a multitude of health risks to people throughout the life course, contributes to the burden of non-communicable and communicable diseases, and can lead to both acute episodes and long-term adverse effects. These health impacts include cardiovascular and respiratory diseases, endocrine, immunologic and metabolic disorders, and cancer. While the ambient air pollution has been recognised as a burning problem in many CEE countries, the indoor environment was given much less attention. The EC is currently funding a cluster of research projects dealing with the indoor exposures but it is still an emerging field.

11:00 – 11:30 - Coffee Break

11:30 – 12:45

Environmental determinants of child development and health

Chair: Jana Klánová (Masaryk University)

- 11:30 – 11:45 **Stephan Böse-O'Reilly (Medical University Munich)**
Climate Change and Children's Mental Health
- 11:45 – 12:00 **Kinga Polanska (Institute of Occupational Medicine Łódź)**
Exposure to phthalates, non-phthalate plasticizers and bisphenols and neurodevelopmental outcomes in school age children from Poland
- 12:00 – 12:15 **Lubica Murinova (Slovak Medical University)**
Slovak PCB cohort – 20 years of follow-up
- 12:15 – 12:45 **Panel discussion**

There is a specific focus on vulnerable population groups such as pregnant women, children and adolescents because chemical exposures can impair children's development and affect their physical and mental health. Longitudinal mother-child cohorts are the only tool to study environmental impacts on child health but they are much less common in the CEE region than in other parts of Europe. EU supports many collaborative projects applying a holistic concept of human exposome to study a complex of environmental factors behind child development and health. They are complemented by the human biomonitoring efforts (such as HBM4EU coordinated from GE).

12:45 – 14:15 - Lunch

14:15-15:30

Urban Environment

Chair: Pavla Svrčinová (Chief Public Health Officer)

- 14:15 – 14:30 **Jelle Vlaanderen (Utrecht University):** Maximizing one's health in a modern urban environment: the EU EXPANSE project
- 14:30 – 14:45 **David Kocman (Jozef Stefan Institute)**
Personal exposure assessment – ICARUS
- 14:45 – 15:00 **Pavel Švec (Czech Healthy Cities)**
Czech Healthy Cities: a platform for supporting health and sustainability, focus on strategic management and participation at local level.
- 15:00 – 15:30 **Panel discussion**

As majority of Europeans live in cities, we need to pay an attention to their interactions with a complex urban environment. People are exposed to a mixture of physical, chemical, environmental and social factors effects of which can be modified by their behaviour and choices (healthy diet, physical exercise). Provision of safe built environments is central in preventing disease, but sustainable and healthy design, planning and management of built environments can also promote healthy lifestyles and improve population health.

European projects on urban exposome and/or healthy cities assess health impacts of various urban exposure factors or strategies to build smart and healthy cities.

15:30 – 16:00 – Coffee Break

16:00 – 17:30

Panel discussion: Safe environment for healthy and resilient communities, building on strengthened intersectoral collaboration and knowledge for health and environment

Chair: Jiří Lehejček (Deputy Minister of Environment of the Czech Republic)

Addressing the existing and emerging environment and health challenges requires additional, strong joint action, and concrete mechanisms to improve coordination and cooperation, while recognizing that different countries have different environment and health priorities, which reflect country-specific political, economic, social, cultural and natural conditions. To this aim, the seventh Ministerial Conference on Environment and Health launched a new mechanism – the “EHP Partnerships” and the first partnership on human biomonitoring was introduced at the conference.

17:30 – 18:00

Closing remarks

20:00 – 22:00

Reception at Brno Observatory

Informal dinner hosted by the Minister of Health and the Minister of the Environment.

12 March 2024

From 09:00

Excursion to the CELSPAC Biobank (optional)

The CELSPAC Biobank is an open-access infrastructure that collects, processes, stores, and subsequently, distributes various types of biological samples (e.g., cord blood, blood, milk, urine) derived from population, environmental, bio-monitoring, and clinical studies. The samples are used for basic scientific research and the development of new diagnostic methods. The laboratory information system was developed in cooperation with the Czech national node of the European Biobanks Infrastructure Network (BBMRI) in order to ensure its compatibility with European standards.