CASE STUDY

Assessment of health risks of chemicals

Belarus

STRENGTHENING NATIONAL CAPACITIES FOR CHEMICAL RISK ASSESSMENT

Implementing institution: Scientific and Practical Centre of Hygiene at the Ministry of Health of Belarus

Overview

Risk assessment for individual chemicals and combined exposures to multiple chemicals is a priority in Belarus. In 2021, the focus was on strengthening the methodological basis for chemical risk assessment and health risks of chemical pollution of indoor air in public settings for children.

Objective

The project set out to improve the methodological basis and related national capacities for chemical risk assessment in Belarus.

Activities

- Reviewing and improving the methodological basis for chemical risk assessment
- Increasing the level of expertise through a series of trainings on chemical risk assessment at the national level
- Promoting the use of WHO approaches, instruments and tools, including the new IAQRiskCalculator for assessment of risks from multiple chemicals in indoor air in public settings for children.

Engagement of partners/stakeholders

A multidisciplinary and multistakeholder approach to sound chemicals management is well established at the national level in Belarus. In line with this approach, the project implementation involved toxicologists, risk assessors, chemists and public health specialists from different sectors.

Representatives of national and local governments, the scientific community and nongovernmental organizations, as well as medical students and young professionals, participated in the trainings and contributed to the development of the national methodological document.

World Health Organization
European Region

Outcomes

- Awareness of chemicals, their health impacts and recent developments in risk-reduction measures was increased, and country perspectives on building the sound chemicals management system were discussed.
- National capacities for assessing risks from individual chemicals and combined exposures to multiple chemicals were increased.
- A methodological basis for chemical risk assessment was improved.
- Experience in mapping health risks from chemical exposure was gained.
- Knowledge and experience of combined-exposure risk assessment using the WHO IAQRiskCalculator were increased, including at local level
- The project's achievements contributed to the implementation of the WHO Chemicals Road Map, the National Strategy for Sustainable Development of Belarus, the *Roadmap to the sound management of chemicals in the Republic of Belarus*, and the Ostrava Declaration on Environment and Health.

Key achievements

- At least 43 public health professionals were trained in chemical risk assessment and the use of the IAQRiskCalculator.
- A map of populations at risks in the case of a chemical emergency was created.
- Criteria for prioritization of chemicals for risk assessment were agreed at the national level.
- The benefits of chemical risk assessment were presented at a high-level multisectoral meeting that gathered representatives of the environmental, health and agricultural sectors as well as industry.

Lessons learned

- Analyses of good available practices for chemical risk assessment and careful study of WHO tools and instruments and their adoption at the national level can save financial and technical resources.
- Taking a multidisciplinary approach in chemical risk assessment is key. The involvement of public health experts at the local level is important for promoting risk assessment and the implementation of risk-reduction measures.

Key messages and steps forward

The project outcomes created a basis for further progress in setting up a sound chemicals management system in Belarus. Next steps include:

- enforcement and implementation of the Technical Regulation "On the safety of chemical products" of the Eurasian Economic Commission, in which chemical risk assessment is a key;
- strengthening of institutional capacities for chemical safety, including prevention and minimization of the adverse effects of chemicals;
- development of a module to educate and train state sanitary inspection specialists in post-registration monitoring of chemicals and chemical products; and
- development of a special postgraduate programme on chemical risk assessment.

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