CASE STUDY

Assessment of health risks of chemicals



Republic of Moldova

STRENGTHENING NATIONAL CHEMICAL RISK-ASSESSMENT CAPACITIES TO GUIDE RISK-REDUCTION DECISION-MAKING

Implementing institution: National Agency for Public Health

Overview

The assessment of risks associated with chemicals, including risks to human health, is among the strategic priorities for chemical safety and environmental health in the Republic of Moldova.

Objective

The project set out to strengthen the methodological basis and build capacities to assess health risks from exposure to chemicals in the Republic of Moldova.

Activities

- Raising awareness, educating and training specialists on assessing health risks from exposure to chemicals
- Revising and updating national methodological documents on chemical risk assessment (for individual chemicals and combined risks)
- Mapping the health risks of chemicals of concern to demonstrate the benefits of risk assessment to decision-makers

Engagement of partners/stakeholders

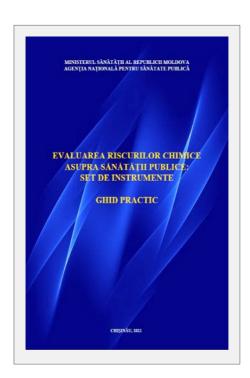
This project was implemented with the active involvement of the Ministry of Health, the National Public Health Agency, Nicolae Testemitanu State University of Medicine and Pharmacy, and territorial public health centres.

A practical guide/toolkit: Chemical risk assessment for public health: set of tools

This practical guide/toolkit was developed according to WHO recommendations with the aim of facilitating the involvement of specialists in decision-making processes on chemical management by assessing the potential public health risk associated with exposure.

It helps specialists to:

- identify and acquire the information needed to assess chemical hazards, exposures and risks; and
- use this information to estimate potential exposure to hazardous chemicals and health risks.



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Outcomes

- Further steps were taken to improve the capacities of the public health system of the Republic of Moldova to manage chemical risks.
- The risk assessment methodology was adjusted and harmonized with international approaches.
- A map of the health risks of fluorine in drinking water was developed to visualize risks. The visualization was based on the results of a study conducted in 2015–2020, in which samples were taken from approximately 6500 public wells in 35 administrative-territorial units serving a population of 108 772 people. Testing confirmed that 7% of this population was using water from public wells with increased fluorine concentrations (> 1.5 mg/l).

Key achievements

- The guide/toolkit Chemical risk assessment for public health: set of tools was developed in alignment with WHO recommendations and approved at the national level.
- More than 40 specialists from the National Agency for Public Health and territorial public health centres were trained in chemical risk assessment using the developed guide/toolkit as the main source of information.
- A questionnaire study to assess the capacity and level of training of public health professionals in chemical risk assessment for public health was conducted. This created a base upon which to plan future trainings.
- National capacities to assess health risks from exposure to chemicals were increased, building the country's ability to protect human health and the environment from the negative effects of hazardous chemicals.

Lessons learned

 More projects to address practical problems/experiences in different formats are needed in order to better understand gaps and needs, and to evaluate existing practices in comparison with country expectations.

Key messages and steps forward

- To ensure the continuity of the Republic of Moldova's capacity to respond to the challenges of chemical management and to meet requests from specialists in the field, tools for the assessment of risk from combined exposures to multiple chemicals, including chemicals in consumer products, should be developed.
- A list of priority chemicals should be created based on the experience gained through the project implementation.

Acknowledgements

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