Assessment of health risks of chemicals

CASE STUDY

Estonia

TRAINING ON ASSESSMENT OF HEALTH RISKS FROM COMBINED EXPOSURE TO MULTIPLE CHEMICALS IN INDOOR AIR IN PUBLIC SETTINGS FOR CHILDREN

Implementing institution: Estonian Health Board

Overview

A training on the WHO IAQRiskCalculator software was organized to promote the transition from assessment of risks from individual chemicals to a more realistic evaluation of risks from combined exposure to multiple chemicals in indoor air in public settings for children in Estonia.

Objective

The project’s objective was to create a pool of national experts with experience in the assessment of combined-exposure risks.

Activities

- Introducing the WHO IAQRiskCalculator software and a package of accompanying documents
- Piloting the selection of sampling sites and risk assessment using the software
- Gathering advice for WHO on ways to improve the software, if needed
- Promoting combined-exposure risk assessment

Engagement of partners/stakeholders

The training was organized in collaboration with the Estonian Health Board’s Environmental Health Department and the WHO Regional Office for Europe (through the WHO European Centre for Environment and Health and the WHO Country Office in Estonia).

The main partners were public health professionals from central and local institutions: the Estonian Health Board, Tartu University, the Ministry of Economic Affairs and Communications, the Ministry of Social Affairs, and the Consumer Protection and Technical Regulatory Authority.
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Outcomes

- Participants highly appreciated both the software and the training, and gave valuable feedback on the user experience and recommendations for updates.
- The virtual training engaged 20 Estonian public health professionals who welcomed the opportunity to learn about the IAQRiskCalculator. They were able to use the software during the training and asked actively about possibilities for incorporating it in their work.
- Participants’ feedback and recommendations for improving the software were compiled in a report and given to WHO for future iterations of the IAQRiskCalculator.
- Public health specialists in Estonia can now use the IAQRiskCalculator for combined-exposure risk assessment in indoor air in public settings for children.

Key achievements

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Lessons learned

- Overall knowledge on combined-exposure risk assessment was increased.
- The training contributed to the implementation of national policies in the field of indoor environmental risk assessment in public settings for children, including schools and kindergartens.

Key messages and steps forward

- Children’s health is a high priority in Estonia. The IAQRiskCalculator can help public health specialists to comfortably, quickly and reliably assess health risks from combined exposure to multiple chemicals in indoor air in public settings for children.
- Next steps to improve the assessment of health risks from chemicals will be to:
  - integrate the use of the IAQRiskCalculator in the national environmental health risk-assessment process in schools and kindergartens;
  - evaluate how the risks in indoor air in public settings for children are changing;
  - strengthen policies to improve indoor air quality in public settings for children in collaboration with educational authorities; and
  - raise the awareness of local governments of the importance of indoor air quality in public settings for children and other indoor environments, and the possibilities to assess and improve it.

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