

CASE STUDY

Assessment of risk to children's health from air pollution in schools



Russian Federation

TRAINING NATIONAL SPECIALISTS ON THE SCREENING TOOL FOR HEALTH RISK ASSESSMENT FROM COMBINED EXPOSURE TO MULTIPLE CHEMICALS IN INDOOR AIR IN PUBLIC SETTINGS FOR CHILDREN

Implementing institution: FBES FSCH named after F.F. Erisman of the Rospotrebnadzor

Overview

Good indoor air quality in public settings for children is a priority of the Russian Federation's Ministry of Health, Ministry of Education and local authorities. The WHO IAQRiskCalculator tool enables assessment of risks to children's health from pollution of indoor air with multiple chemicals.

Objective

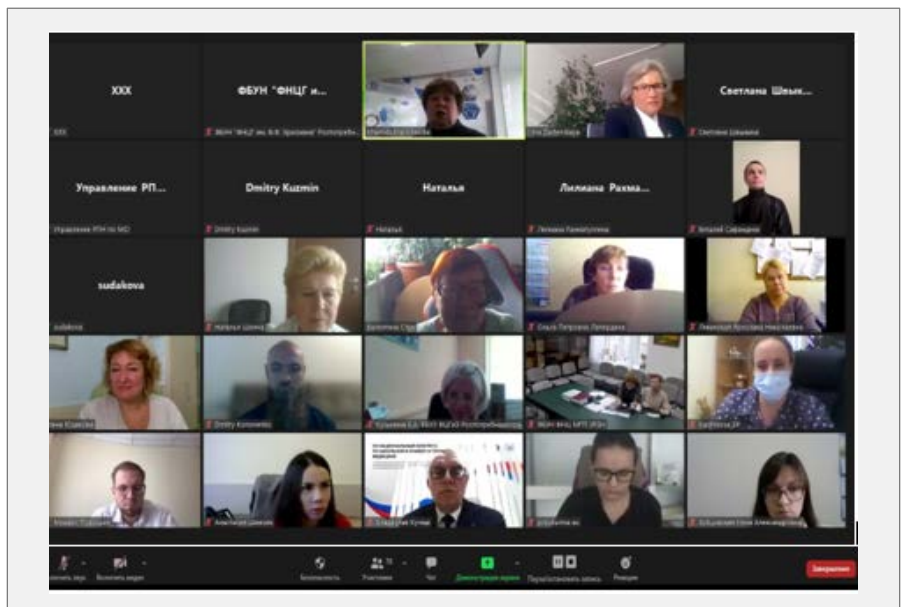
The project aimed to promote the use of the tool and to accelerate the transition from assessing risk from single chemicals to assessing risk from chemical mixtures.

Activities

- Sharing information about the tool's development process to demonstrate the approach
- Introducing the methodology of risk assessment for combined exposure to multiple chemicals in indoor air
- Demonstrating the software and its functional characteristics
- Presenting the results of pilot risk calculations using the tool
- Discussing next steps for promoting risk assessment from combined exposure to multiple chemicals in indoor air

Engagement of partners/stakeholders

About 85 national experts, university lecturers and representatives of local authorities attended the meeting. They included 72 specialists and executive staff of subordinate institutions and organizations of the Federal Service for Surveillance on Consumer Rights Protection and Human Well-being of the Russian Federation (Rospotrebnadzor), and 12 professional and teaching staff of Pirogov Russian National Research Medical University, the Federal State Budgetary Educational Institution of Further Professional Education "Russian Medical Academy of Continuous Professional Education", and I.M. Sechenov First Moscow State Medical University.



Outcomes

- Participants gained new knowledge through a summary of information on indoor air pollution.
- Awareness was raised on the effect on children's health of indoor air pollution in schools.
- The presentation of the screening tool for assessment of health risks demonstrated possibilities for more objective health risk assessment.
- The practical exercise in prioritizing public settings for risk assessment and in calculating risk using the IAQRiskCalculator tool increased understanding of the need for risk assessment of chemical mixtures.
- Discussions yielded new proposals to update the IAQRiskCalculator, which will contribute to WHO's work on developing the tool.

Acknowledgements

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Key achievements

The training generated strong interest among participants. The group expressed appreciation for the link to the IAQRiskCalculator tool for calculating health risks and the accompanying documents, including the educational course on indoor air pollution and children's health. Participants highly evaluated the training and encouraged WHO to organize more trainings on chemical risk assessment.

Lessons learned

Building on the country's prioritization of children's health, the use of the screening tool for assessing health risks will support more realistic evaluations of risk from combined exposure to multiple chemicals in indoor air in public settings for children. This will help to mitigate the risks of chemical pollution.

Key messages and steps forward

Collecting feedback from users is key to the further development of the IAQRiskCalculator software. Participants made the following proposals for updating the tool.

- The program settings could enable users to increase the scale, or a version of the tool for the visually impaired could be created.
- The red background that appears when calculating the hazard index could be adjusted to make the text easier to read.
- The IAQRiskCalculator could be shared alongside links to the accompanying documents (the literature review, the screening tool for assessment of health risks and the methodology for sampling).
- The tool could include a Russian-language user guide and set of methodological recommendations for its application.
- A function could be built into the tool to enable users to save their history (the results obtained) and introduce new substances at a later date.