

looking ahead

Safeguarding our children's health



With the growing emphasis on environmental protection in Central and Eastern Europe and Central Asia over the last two decades, there is

an increasing awareness of the impacts of air quality, water quality, and pollution from heavy metals and other chemicals on public health and well-being. Children are one of the most vulnerable population groups, as they spend a considerable amount of time indoors in the school environment. Children are also the most sensitive indicators of the relationship between environmental risk factors and the health of the general population.

The Italian Ministry for the Environment, Land and Sea (IMELS) has developed targeted projects in response to these challenges. The SEARCH initiative, launched by IMELS in 2006, is an important contribution to the much-needed international and transboundary activities aimed at improving targeted research on the links between environment and health. By exploring the impacts of energy consumption and by proposing feasible means to overcome risks arising in indoor educational environments, SEARCH has furthered innovation and developments in the fields of environment and health, thus contributing to safeguarding present and future generations. ■

Dr. Corrado Clini



Schoolchildren in Kazakhstan

Bridging research and policy

National efforts, international analysis, local actions

After three years of project implementation, various activities marking the completion phase of SEARCH II are now under way. The project has reached 10 countries – six in Europe and four in the EECCA region (Eastern Europe, the Caucasus and Central Asia). Each country joined the project back in 2010 with a different perspective and a different set of expectations. As the project draws to a close, it is time to summarise activities, review outcomes, and look ahead to future impacts. Among the outcomes is a set of final recommendations for improving school environments. These recommendations were compiled on the basis of the analysed SEARCH I and II environment, health and energy data obtained via environmental health and energy use assessments.

In terms of publicity, endorsements and visibility, the participating countries

still have a great deal to offer. Around 45 events have been announced for the coming months, with the main goal of attracting stakeholders, clients and beneficiaries. High-level conferences, targeted ministerial events, and meetings with municipalities, national authorities, assemblies, associations and teachers are among the future activities that the countries have identified as being the most valuable way to publicise the project in their region.

In this context, any follow-up activity must forge links between research and policy making, since the goal of all the national efforts undertaken within the project is to translate scientific outcomes into positive practice, ultimately integrating results into national legislation.

As the principal aspiration is to protect children's health, it is my hope that the countries will succeed in this endeavour. ■

Anita Kocic



Ms. Marta Szigeti Bonifert, REC Executive Director and Dr. Corrado Clini, former Italian Minister for the Environment, Land and Sea

A decade of cooperation on E&H

The Italian Ministry of the Environment, Land and Sea and the Regional Environmental Center for Central and Eastern Europe have worked together on environment and health issues since 2003.

Cooperation on health and the environment between IMELS and the REC began in 2003 in the framework of preparations for the Fourth WHO Ministerial Conference on Health and Environment, held in Budapest, Hungary, in 2004. The pilot project "Cleaner Environment, Better Future for Our Children" was the first activity jointly implemented by the two organisations. The aim of the pilot project was to improve indoor air quality in schools and reduce the prevalence of respiratory diseases among children. Research carried out by experts from the National Environmental Health Institute of Hungary and the Maugeri Foundation in Italy showed that the outdoor and indoor school environment, family lifestyle and parental attitudes to childhood health issues are strong determinants of the prevalence of respiratory diseases. An important component of the pilot project was to build the capacity of school staff in relation to safeguarding school building occupants from the impacts of indoor air pollution.

The outcome of the pilot project was presented at the ministerial

conference, which marked a milestone in the European environment and health process with the launch of the Children's Environment and Health Action Plan for Europe (CEHAPE). The 53 member states confirmed their engagement and the need for concrete measures to reduce respiratory diseases among children.

The success of this pilot project motivated further international research into indoor air quality and children's health, in the form of the SEARCH initiative. Phase I of the initiative ran from 2006 to 2010, and Phase II from 2010 to 2013.

The SEARCH II recommendations for improving the quality of school environments, school buildings and energy usage will be presented at a conference for the mid-term review of the Parma Declaration and the CEHAPE in 2014. SEARCH II was an example of successful pan-European collaboration among the participating countries in health and environment, and collaboration between IMELS and REC was also strengthened. ■

Eva Csobod

Belarus: Positive experience

The participation of the school sector in international research is a new responsibility in Belarus, and we were privileged to take part in SEARCH II. Ten schools in Minsk were selected, based on outdoor air quality. The project drew positive feedback from the Republic Scientific-Practical Centre for Hygiene and school staff. We were particularly pleased at the enthusiastic response from the children to our request for their involvement. The air quality measurements carried out during the school day, for example, attracted a great deal of interest. When critical values appeared on the measuring devices and the children saw for themselves that the values for CO₂, PM₁₀ and temperature were above the recommended levels, they asked the experts and teacher to open the windows and doors. One child even suggested leaving the room. It was a positive, memorable experience in terms of the children's interest and involvement.

The schools are proud of their participation and school administrators are keen to see the comparative results between individual classrooms and the school as a whole. They look forward to receiving recommendations for improving school IAQ in order to create a healthier environment. ■

Tatsiana Pronina

Minsk, Belarus



Ukraine: Using outcomes

The first comprehensive study in Ukraine of links between the school environment and children's health was carried out within SEARCH II. The O.M. Marzeiev Institute for Hygiene and Medical Ecology of the National Academy of Medical Sciences was the base for implementation.

Project goals and preliminary results were presented to school officials and teachers, who supported the project team. Information was distributed, and a series of meetings was held with parents on actual IAQ problems in schools and impacts on children's health.

Some aspects of environmental monitoring, health studies and school building assessments were restricted due to the limited data on IAQ during the heating period, inefficient or non-existent ventilation systems, and outdated heating systems.

Forty classrooms in 10 schools were investigated, spirometry tests were carried out on 673 children, and 687 questionnaires were completed by parents. The results will be used to develop recommendations for Ukrainian schools. ■

Olena Turos

Slovakia: Looking ahead

From 2013 onwards, Slovakia has set itself the task of monitoring the impacts of harmful substances on IAQ in schools and on children's health. The immediate goal is to build human and technical capacities using the knowledge and experience gained during SEARCH I and II and the SINPHONIE project. Monitoring IAQ in primary schools in various regions of Slovakia will serve as a tool for the verification and further development of environmental health indicators specifically designed to illustrate progress towards the goals of the WHO Europe Children's Environment and Health Action Plan for Europe. The task will be implemented in three stages: project development; field work implementation during the heating season (November 2013 to April 2014) and subsequently; and data analysis. The project output will complement existing databases for the evaluation of IAQ in schools and the respiratory health and comfort of children in different regions of Slovakia. Other outcomes will include reports, public information materials, recommendations for the education sector, environment and health indicators, and strengthened capacities for carrying out similar surveys in public buildings in the future. ■

Henrietta Savinova

Children's learning performance can be affected by indoor air quality



spotlight

A view of the project by a representative of the management of the Lachova Street Elementary School, Bratislava

How did your school feel about its involvement in the international SEARCH project? What was the teachers' response to the project?

We saw our involvement as a very positive step. A few years ago our school joined the project "Health-Promoting Schools", so we welcomed an opportunity to participate in an international project focusing on environmental health issues.

Why do you think the project is valuable?

I think it will be beneficial for schools, and as a result of the project the school environment will be better for the children.

What was your experience of the fieldwork?

Cooperation with the fieldworkers was very good; we did our best to create suitable conditions in our school for the project realisation.

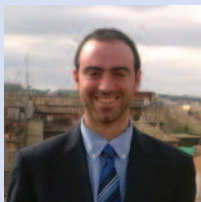
Why do you think it important to focus on the environment where children spend so much of their time?

We believe that a more comfortable environment will have a positive effect on the results and behaviour of students in the classroom. ■

Henrietta Savinova



expert view

**Dr. Andrea Poscia**

Public Health Resident,
Institute of Public
Health, Catholic
University of the Sacred
Heart, Rome

"SEARCH II is a great opportunity to remind everyone that the health and well-being of young students is closely related to how comfortable the environment is in which they grow."

**Eva Csobod**

Senior Expert
Health and Environment,
Regional Environmental
Center

"SEARCH II is a unique pan-European environment and health project that builds up the capacity of partner countries to provide a healthy and sustainable school environment for their children."

**Anita Kocic**

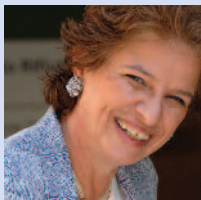
SEARCH II Project
Manager,
Regional Environmental
Center

"SEARCH II elevated not only the individual performance of national experts, but also the nationwide potential of all the participating countries."

**Prof. Umberto Moscato**

Public Health Professor,
Institute of Public
Health, Catholic
University of the Sacred
Heart, Rome

"SEARCH II represents a milestone for Europe in that research on the environment and energy is combined with health education and the prevention of chronic degenerative diseases, which in turn empowers the population to achieve environmental sustainability and well-being."

**Luciana Sinisi**

National Institute for
Environmental Protection
and Research,
Environmental
Determinants of Health
Unit

"Apart from assessing indoor air quality and comfort in schools, SEARCH II gives an insight into the importance of indoor sources of harmful pollutants and shows the way ahead to counteract them also through sustainability policies already in place."

**Alessandra Burali**

Ministry for the
Environment, Land and
Sea, Department for
Sustainable Development,
Climate Change and
Energy

"SEARCH II is a project with a focused impact on research-policy gaps. It combines different areas of expertise and management through indoor air quality assessments and investigation of potential prevention measures for healthier air in schools."

at a glance

2 finalised projects in the SEARCH initiative **4** project countries in the EECCA region **6** project countries in Europe **5** months of project field activity **7** national and international project events **9** international SEARCH II awareness-raising activities **45** national SEARCH II awareness-raising activities **11** months of project analysis **37** months of project implementation **55** international experts **101** schools involved **6,758** children assessed in SEARCH II **7,860** children assessed in SEARCH I and II

calendar

► October 22-23, 2013

SEARCH II at a workshop of the National Reference Centres for Environment and Health of the European Environment Information and Observation Network (Eionet), European Environment Agency, Copenhagen

► October 22, 2013

SEARCH II at the second ATOPICA project progress meeting "Pollen and air quality: Overview of recent past birch, Ambrosia pollen, ozone and particulate matter concentrations and their statistical analysis", Paris

► November 2013 Closing of the SEARCH II project

aspire!

The SEARCH II project is a continuation of the **School Environment and Respiratory Health of Children** initiative that was first launched in 2006. The research project is implemented within the international frameworks of the EU Action Plan on Environment and Health and the World Health Organization's Children's Environment and Health Action Plan for Europe. This fourth issue of the project newsletter looks back over three years of project implementation. It focuses on activities in Belarus, Slovakia and Ukraine and celebrates 10 years of cooperation on environment and health issues between the REC and the Italian Ministry for the Environment, Land and Sea.

Newsletter of the SEARCH II project

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