

looking ahead

From Parma to Brussels

When the SEARCH I project results were presented in 2010 in Parma, a follow-up project was advocated to further the research undertaken in the first phase: thus SEARCH II was born. The follow-up was developed in line with the recommendations in the Parma Declaration, which envisages the continued and expanded monitoring of children's health and air quality.

Today, 28 months of project implementation later, the time has come to present the preliminary results of SEARCH II. Outcomes include the preliminary results from the three main components: environmental monitoring, including environmental health assessment; spirometry measurements in the four EECCA countries; and energy use and comfort assessments in the 10 project countries.

The SEARCH II closing event will highlight the joint efforts undertaken in the last few years, and at the same time will identify the next steps in the project implementation process, for completion by November 2013. The project coordinators' main goal is to transfer knowledge, provide assistance and pass on best practices to an area of the world that has only recently speeded up its approximation to the EU. Efforts so far have been greatly appreciated by the beneficiaries, and there is more to come as this interdisciplinary and multiregional project is finalised ■

Anita Kocic



SPREADING THE MESSAGE: Four new countries joined the second phase of the SEARCH initiative. Photos: iStock

A widening focus

The final event of the SEARCH II project takes place in Brussels during Green Week in June 2013. As the project draws to a close, it gives me great pleasure to look back over the many successful activities implemented since the project began in 2010.

During a side event at the Fifth Ministerial Conference on Environment and Health, held in Parma in 2010, the SEARCH II project was endorsed by many experts in the field. Today, it is true to say that the initiative has won wide-ranging appreciation. The results of SEARCH II will be presented at the international workshop "Integrated Education in One Health", to be held on June 5, 2013, in Budapest, an event that will be jointly promoted by the InterAcademy Medical Panel (IAMP) and the Federation of European Academies of Medicine (FEAM).

Since 2001, the Regional Environmental Center for Central and Eastern Europe (REC) and the Italian Trust Fund (ITF) have shared the

ambition of addressing the environmental issues affecting Central and Eastern Europe and beyond. For over 10 years, one of the main areas of collaboration between the REC and the ITF has been health and the environment.

The successful completion of the SEARCH I (2006–2010) and SEARCH II (2010–2013) projects is indicative of a growing focus on children's health. In the course of SEARCH II, the REC's cooperation with Italy was extended to Eastern Europe, the Caucasus and Central Asia (the EECCA region), with the addition of four new countries. With the newly integrated energy-saving component, the project has promoted changes in knowledge, perspectives and priorities in relation to energy efficiency.

I would like to take this opportunity to express the REC's gratitude to the Italian Government for its support in extending our activities in both geographical and thematic terms. ■

Marta Szigeti Bonifert

at a glance

6,758

children assessed
in the SEARCH II project

6

project countries
in Europe

4

project countries
in the EECCA region

Carrying on the good work

The SEARCH initiative was introduced in Bosnia and Herzegovina seven years ago with the launch of the SEARCH I project, aimed at improving children's health and the school environment. The follow-up project, SEARCH II, involved approximately 1,000 pupils from 10 schools in three cities (Sarajevo, Mostar and Banja Luka). Due to the complexities of the state constitution, a number of different institutions participated in project implementation: the ministries of education and ministries of health of the Federation of Bosnia and

Herzegovina and Republika Srpska, as well as educational and pedagogical institutes and institutes for public health from both entities.

Key stakeholders were the institutes of public health, which were engaged to carry out measurements in selected schools and to undertake a final statistical analysis of the achieved results. Preliminary results related to physical and chemical conditions in school environments were presented to the relevant ministries, institutions and schools in order to encourage discussion and the exchange of

information between stakeholders, aimed at identifying ways to ensure good-quality air in schools.

The project team from REC Bosnia and Herzegovina, in collaboration with the national energy expert, organised promotional meetings in each school in order to present the project to the school board and to stress the importance of indoor air quality, energy efficiency and health measurements. Energy consumption and health comfort assessments were carried out in parallel in 10 schools in the cities of Sarajevo, Mostar and Banja Luka (December 2011 to April 2012) and questionnaires were completed by 654 pupils. Project activities were implemented smoothly due to the fact that the schools had already participated in the SEARCH I project. Personal meetings and regular communication contributed to the high level of cooperation with schools in carrying out field activities. Students, teachers and administrators all participated enthusiastically in the project, and school directors welcomed the initiative. What was most appreciated was the practical information on how to improve school health and comfort levels, while awaiting the final results of the measurements that will support further undertakings and similar activities in the future. ■



ACTIVE ENGAGEMENT: Children in Bosnia were keen to contribute to SEARCH activities. Photo: iStock

Lejla Suman

spotlight

Analysing SEARCH I project data in Serbia

The main goal of the SEARCH I research in Serbia was the implementation of EU strategies on environment and health, mainly through the Children's Environment and Health Action Plan for Europe, adopted by the Serbian Parliament in 2009. This was achieved by developing efficient tools through cooperation between stakeholders, including the Institute of Public Health of Serbia, which is engaged in environmental monitoring and the final statistical analysis of results. A more thorough analysis was undertaken of the school-specific results of IAQ measurements undertaken within SEARCH I in Serbia in order to assess correlations between school environment and the emergence of respiratory disorders in children.

The key criterion for selecting schools to participate in the project was location — that is, distance from the central urban zone: peri-urban settlement without busy roads; wider

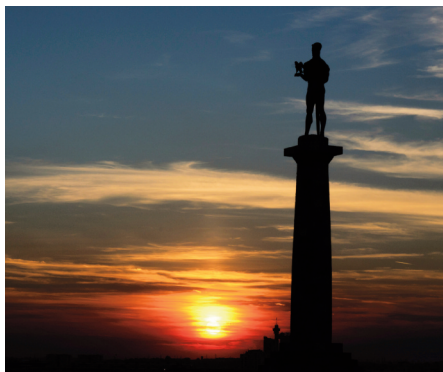
urban area with busy traffic; or city zone with busy traffic.

The key criterion in classroom selection was room orientation, either towards a street with heavy traffic, or towards the schoolyard. Children were selected using random sampling methods, and according to the classroom they used.

From the statistical analysis of potential risk factors influencing the respiratory health of children attending 10 selected primary schools in Belgrade, conclusions can be drawn regarding further steps to improve the entire school environment. These conclusions are linked to a set of recommendations and focus on ventilation, cleaning practices and school location. ■

Branislava Matic





YEAR OF SUCCESS: Progress in sustainable energy use was achieved in 2012 in Serbia. Photo: iStock

Efficient energy use

The SEARCH II project in Serbia continued its successful cooperation with the 10 schools that had participated in the earlier SEARCH I project. With the support of environmental health and energy experts, all measurements, data collection and analyses were carried out in 2012 — a year of significant developments in terms of energy efficiency in Serbia. Among other things, obligatory “energy passports” were introduced for newly constructed buildings, and experts were trained to issue these passports at national level.

The SEARCH II project was launched in Serbia with a visit by the REC’s country office team to the participating schools in Belgrade. The team approached the school principals to present the project plans and the newly introduced energy project component. After the first visit, preparations began for the measurements, survey and data collection. Obtaining the technical information about the school buildings required for the energy use assessment turned out to be a challenging task in some cases. Some of the school buildings were 50 to 60 years old and documentation was incomplete. However, due to additional efforts on the part of the energy audit expert, these issues were overcome. Another challenge arose due to the forces of nature: measurements during the field studies were interrupted by severe winter temperatures at the beginning of 2012.

The SEARCH II results will eventually be communicated to the relevant schools, which will be given valuable information on how to improve the school environment and energy efficiency. Recommendations will refer mainly to improving heating systems and heat insulation and better controlling indoor temperatures at night and during weekends. ■

Zorica Korac

expert view

Directions for research

My first professional involvement in environment and health issues was during the preparations for the Fifth Ministerial Conference on Environment and Health, (Parma, 2010). SEARCH II provides very positive input to IAQ research. For most of our lives we are involved in indoor activities, “enclosed” inside buildings, and most countries do not give sufficient consideration to the links between environment and health when dealing with IAQ.

As well as being contaminated by outdoor air, IAQ is affected by harmful emissions from building materials, paints, cleaning products, furniture, and heating and ventilation systems. Ecological certificates are related only to product lifecycle and do not take into account emissions from final products. Health is an indirect consideration, and there are specific criteria for primary materials. A recent step forward is the EU Construction Products Regulation (305/2011), which contains requirements related to hygiene, health and environment. ■

Alessandra Burali



Work in progress: The Italian expert team

Having completed the experimental part of the project (data collection on energy and school building characteristics; and the distribution and collection of questionnaires on children’s comfort), the Italian expert team is drafting an international working document on targeting IAQ in sustainable patterns, based on the experience gained during the SEARCH II project. In order to compile the working document, background information is needed. We are using questionnaires to gather information from SEARCH II participating countries on existing tools such as legal and voluntary certification, guidelines, and projects that deal with emissions from building materials and consumer goods. Special attention will be devoted to investigating whether such tools include an assessment of the hazardousness of the emissions released by such products into the indoor air. This information will make it possible to address the links between the sustainability of consumer product use (usually in construction work), health protection and environmental policies. ■

Francesca De Maio



INTERNATIONAL BENEFITS: An Italian expert team is compiling a set of recommendations based on SEARCH project results. Photo: iStock

Modelling, Monitoring and Managing Air Pollution: International conference

Siena, Italy, June 3–5, 2013



CLEAR IMPACTS: The Siena conference will explore the contribution of scientific knowledge to policy making on air pollution. Photo: iStock

Air pollution is widespread and increasing and has clear and known impacts on health and the environment. Human requirements in terms of transportation, manufactured goods and services are often accompanied by unintended impacts on the atmospheric environment at scales that range from the local to the global.

Science remains the key to identifying the nature and scale of air pollution impacts, and scientific knowledge is essential in the formulation of policies and in producing information for regulatory decision making. Continuous improvements in our knowledge of the fundamental science of air pollution and in the application of that knowledge are vital if we are to properly predict, assess and mitigate the air pollution implications of emissions into the atmosphere.

This important conference will cover a rich variety of topics and will feature contributions by scientists from around the world who will present their recent work on various aspects of air pollution. Presentations of case studies from specific regions and cities, including those in emerging countries, are particularly encouraged.

Further information is available on the conference website: www.wessex.ac.uk/air2013 ■

Bridging North, South, East and West

Basel, Switzerland, August 19–23, 2013

The International Society for Environmental Epidemiology, the International Society of Exposure Science and the International Society of Indoor Air Quality and Climate are organising a conference in Basel in summer 2013. The aim of the event, which will be hosted by the Swiss Tropical and Public Health Institute, is to present recent scientific achievements in the field of exposure science and environmental health from relevant disciplines and covering a broad range of topics.

Key conference topics will include:

- assessment of exposure to indoor and ambient air pollution, noise,

chemicals, toxic waste and electromagnetic fields, and the evaluation of their long-term health impacts;

- environmental risks in the context of rapid urbanisation in resource-poor settings;
- linking science and policy through impact assessment;
- indoor and outdoor environmental interventions to improve health; and
- linkages between water, sanitation and health.

Further information is available on the conference website:

<http://www.ehbasel13.org/> ■

Eva Csobod

calendar

► June 5, 2013

SEARCH II at the international workshop "Integrated Education in One Health", Budapest, Hungary

► June 6, 2013

SEARCH II closing event, Brussels, Belgium

► June 6, 2013

Green Week Satellite Event "Clean Air and Healthy Environment for Children: European Actions — SEARCH II and SINPHONIE", Brussels, Belgium

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 first issue of the project newsletter *Aspire!* focuses on field studies in Albania and Central Asia, which include indoor air quality monitoring and health testing in schools. It also introduces new project partners, shares the insights of participating experts, and outlines project-related European news.

Newsletter of the SEARCH II project

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PUBLISHER: The Regional Environmental Center for Central and Eastern Europe

PHOTOGRAPHS: iStock, IMELS project partners

This newsletter is financed by the Italian Ministry for the Environment, Land and Sea. The views expressed herein represent those of the contributors and not those of the ministry.

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