



Global Initiative on Children's Environmental Health Indicators (CEHI)

[CEH indicators](#)

[HECA](#)

[Contact us](#)



Photos: F. Gore (WHO)

About this newsletter

CEHI newsletter has been set up to engage partners with the Global Initiative on Children's Environmental Health Indicators (CEHI). It aims to provide up-to-date information on relevant global, regional and national indicator activities. This newsletter does not intend to cover general Children's Environmental Health issues. We welcome your feedback and input.

To sign up or for further information, please contact us at:

cehindicators@who.int or visit: <http://www.who.int/ceh/indicators/en/>

Readers interested in receiving regular updates on children's environmental health may subscribe to:

- HECANET ([Healthy Environments for Children Alliance](#)) newsletter
- CEHN Community ([Children's Environmental Health Network](#)) newsletter
- INCHES ([International Research and Information Network on Children's Health Environment and Safety](#)) newsletter
- ISDE ([International Society of Doctors for the Environment, ISDE Latin America](#)) Newsletter

New publications

OECD - CHILDREN'S ENVIRONMENTAL HEALTH INDICATORS: A SURVEY

Environment and health indicators, and more particularly those focused on children, are a key policy tool. The objective of this report is to provide an overview of the existing projects and programmes developing children's environmental health indicators and examine their consistency with OECD guidelines on the development and measurement of indicators. So far, only a few sets of children's environmental health indicators are available. However, the level of comparability or transferability of these indicators is currently limited, because of the lack of suitable data, the disparities in definitions, methodologies and standards in each country. Efforts to achieve a higher level of harmonization should be pursued.

In order to address these issues, the use of a flexible model – *e.g.* the WHO Multiple-Exposures Multiple-Effects model – is highly recommended. Concerning selection criteria, those recommended by the OECD (namely: policy relevance; usability; analytical soundness; and, measurability) should be applied. Evidence of disparity among children suggests the definition of distinct age categories, for example: 0-1 year, 1-5 years, 5-10 years, 10-15 years, and 15-18 years. In addition, it is recommended to place the focus on priority children's environmental health concerns rather than on the actual indicators. Finally, priority areas should focus on health impacts arising from emerging environmental problems, such as asthma and allergies, air pollution and traffic.

OECD - Environment & Health webpage: <http://www.oecd.org/env/social/envhealth>

Children's Health and the Environment in North America - A First Report on Available Indicators and Measures

The first regional report under the Global Initiative on Children's Environmental Health Indicators (CEHI)—led by WHO, spearheaded by the US EPA and launched at the World Summit for Sustainable Development in Johannesburg— was launched in Montreal (Canada) on 26th January 2006.

The Commission for Environmental Cooperation (CEC), in partnership with the International Joint Commission, the Pan American Health Organization (PAHO), the World Health Organization (WHO) and the governments of Canada, Mexico and the United States released the first-ever [report on children's health and environment indicators in North America](#).

The report presents 13 indicators under three thematic areas: asthma and respiratory disease, effects of exposure to lead and other toxic substances, and waterborne diseases. It finds that North American children remain at risk from environmental exposures and that children's health reporting must be improved to address the data gaps identified in the report. These data show a rising number of childhood asthma cases across North America. One possible contributor is outdoor air pollution such as ground-level ozone and particulate matter, which remains a problem for all three countries. In Mexico, exposure to smoke from indoor burning of wood or charcoal is also a problem, as 18 percent of the country's population burnt biomass for cooking and heating in 2000. And while Canadian and American children are increasingly less likely to be exposed to environmental tobacco smoke, data from the United States shows that certain minority groups remain disproportionately affected. For lead exposure, case studies from all three countries demonstrate improvements in children's blood lead levels due to interventions such as the removal of lead from gasoline. However, there is little bio-monitoring data available in Canada since there has been no national blood level survey in the country since 1978. Other exposure pathways for lead remain a concern, such as older homes with lead-based paint. Recently collected data in the United States show that 25 percent of homes have a "significant lead-based paint hazard, which could be from deteriorating paint, contaminated dust or contaminated soil outside the house."

Mexico faces the region's largest challenges in the area of water and sanitation. Data from 2003 indicate that 17 percent of the Mexican population did not have water of appropriate bacteriological quality. However, advances in water and sanitation in Mexico have contributed to a decline in diarrhoeal diseases from a rate of 125.6 deaths per 100,000 children in 1990 to 20 deaths per 100,000 children in 2002.

A copy of the report, along with the national reports compiled by each of the three governments as source material for the report are available at: www.cec.org/children or <http://www.who.int/ceh/>

Pilot projects

Regional pilots and CEH indicator projects are already underway in Africa, Europe, Latin America and the Caribbean, the Middle East, and North America. Two regional pilots will be highlighted in each newsletter; news on other pilots is available on the [CEH web site](#) in the indicators section (regional pilots).

Environment and Health Information Systems in Europe

Following the Budapest Ministerial Conference (2004), a collaborative effort has been launched to establish a comprehensive information system for monitoring and evaluating the environmental health risks and effects of interventions focusing on children's health. The WHO–European Centre for Environment and Health, in collaboration with several Member States, is currently implementing projects to develop methodological and technical elements towards this system.

Children's environmental health indicators (CEHI) have been developed to serve the four regional priority areas of the Children's Environment and Health Action Plan for Europe (CEHAPE). The indicators encompass key environmental health risks and preventive interventions related to safe water and sanitation, injuries and adequate physical activity, clean outdoor and indoor air, and hazardous chemicals. Thirty indicators were selected as best candidates for the core set based on their policy relevance, scientific knowledge and feasibility, and are currently applied in participating Member States.

Together with the methodology, practical guidelines for information retrieval from existing international and national databases facilitate streamlining of data reporting.

Along with the indicators, quantifying the impact of environmental risks on children's health informs us of potential benefits in support of the decision-making process. Health impact assessment of outdoor air pollution has been applied in participating countries and development of methods for quantifying pollutants in indoor air and noise is underway.

Main national and European policies on air and water quality, housing conditions, traffic accidents and safety, noise and radiation are currently being analysed for the presence of accountability mechanisms regarding population health. First results of accountability mechanisms reveal the predominance of monitoring the environmental situation without explicitly considering health aspects and an occasional follow-up of the effects of public policies on health.

Beyond the methodological developments, a network of collaborating partners in the Member States has laid the foundations for an operational mechanism for monitoring and reporting.

The progress towards the establishment of the information system based on a common set of indicators will be reported at the Intergovernmental Conference on Environment and Health in Austria in 2007. Preparation of the assessment report of the environmental health situation resulting from the policy actions across the entire WHO European Region has begun. The 'Children's health and the environment in Europe: first assessment' report uses the methodological advances in the information system to demonstrate its usefulness in supporting public policies and actions to protect children's health.

For further information, please contact: Dafina Dalbokova at DDA@ecehbonn.euro.who.int

CEH Indicators at the US - Mexico Border

The CEHI project on the United States - Mexico (US/M) border was initiated by establishing a set of relevant, feasible and appropriate children's indicators for the US/M border region. This set of indicators was derived by cross-referencing general environment and health indicators selected in the regional workshops held by the PAHO field office in El Paso, Texas, with existing data. Building on this work, the aim has been to concentrate on core indicators that focus on exposure and health outcomes that especially affect children in this particular region.

It is envisaged that many indicators from the previous work can easily be adapted to focus on children and be used in the CEHI project. However, other indicators will have to be selected or developed to cater for this especially vulnerable population group. Border residents suffer disproportionately from many environmental health problems, including water-borne diseases and respiratory problems. The elderly and children are especially at risk. We expect to find that respiratory diseases and gastrointestinal disease are the most common amongst children, due to exposure to airborne dust and particulate matter, pesticide use and inadequate water supply and waste treatment facilities. Acute Respiratory Infections (ARIs) in infants is among the top four causes of death on either side of the border. We expect our study to corroborate the results of other pilot project currently under way, but the focus on children will add a new dimension. Results are likely to become available during the course of 2006.

For more information, contact: Sally Edwards edwardss@fep.paho.org

Children's Environmental Health Indicators in South America

Measuring the Environmental Impact on Children's Health in the Southern Cone

The Asociación Argentina de Médicos por el Medio Ambiente (AAMMA) and the Canadian Institute of Child Health (CICH), in cooperation with the Ministry of Health and Environment of Argentina, Health Canada, the University of Ottawa and the Argentine Society of Pediatrics (SAP) are working together to complete a profile that collects and compiles information on the state of Children's Environmental Health in Argentina. The project has been developed with support from the Canadian government through the Canadian International Development Agency (CIDA-ACDI). The goal of the project is to assist in the protection of Argentine children's health by decreasing environmental hazards, resulting in healthier children and healthier environments.

In order to achieve this goal, the following data collection activities are taking place: a survey has been distributed to over 13,000 pediatricians who are members of the Argentine Society of Pediatrics; two field case studies are being undertaken to address unique environmental health issues faced in different settings: one case study examines a rural community where children are exposed to agricultural chemicals (pesticides) and the second looks at an urban setting where children are exposed to industrial pollution (lead). In addition, CEH information is compiled through a review of literature that takes into account Argentine as well as international publications and key informant interviews. For this purpose, the different project partners have been working on the development of a framework for the definition and selection of National Children's Environmental Health Indicators to be considered in the project literature review/data gathering process. The potential indicators of context, environmental exposure, outcome and action indicators within the framework are being used to organize the Children's Environmental Health Profile in Argentina.

In collecting and analyzing the data, networks have been created, bringing together stakeholders from different parts of society; including medical professionals, decision-makers, government officials, non-governmental organizations, academia, industry and the general public. The Profile is to become an educational tool which highlights gaps, problem areas and points towards solutions. The Profile operates on the premise that knowledge and understanding precede action and that any action must take place in partnership with all stakeholders. The ultimate rationale for the project is: "Once the issues are recognized and understood, the issues can then be addressed".

For further information, please contact: Veronica Monti at vaamma@arnet.com.ar
or visit: <http://www.aamma.org/ceh/ceh.htm>

Indicators for the Global Strategy on Diet and Physical Activity

Call for comments on the approach to measure the implementation of framework

WHO developed, at the request of WHO's Member States at the World Health Assembly in May 2002, the Global Strategy on Diet, Physical Activity and Health (DPAS), which was endorsed by the 57th World Health Assembly in May 2004. This population-wide, prevention-based strategy addresses two main risk factors for chronic diseases: diet and physical activity.

DPAS has requested WHO to "*set up a monitoring system and to design indicators for dietary habits and patterns of physical activity.*" Hence, WHO supported by the Spanish government and various experts, started to draft a framework to monitor and evaluate DPAS implementation. This document aims to provide an approach to measure the implementation of DPAS, in coordination with ongoing monitoring and surveillance initiatives, and to assist Ministries of Health, other government offices and agencies, as well as other stakeholders to identify specific indicators to monitor the progress of their activities in the area of promoting a healthy diet and physical activity.

The draft version of this document "Framework and Indicators for the Global Strategy on Diet, Physical Activity and Health" is now available on-line for comments by 15th April 2006 from all stakeholders involved in DPAS implementation.

For further information go to: www.who.int/dietphysicalactivity/DPASIndicators/en/ .
Please send your comments to: DPASIndicators@who.int