Global Initiative on Children’s Environmental Health Indicators

Eva Rehfueß², Fiona Gore², David Briggs¹, Carlos Corvalan²

¹ Imperial College of Science, Technology and Medicine, London
² World Health Organization, Geneva
Why do we need children’s environmental health indicators?

- To show time trends
  - to provide early warning of problems
  - to monitor effects of intervention

- To show spatial patterns
  - to highlight hotspots
  - to identify who is at risk
  - to compare between countries

- To define and motivate action
  - to specify causes
  - to attribute source
  - to prioritise issues
  - to identify and assess choices
  - to inform those who need to know
What are children’s environmental health indicators?

An expression of the link between the environment and children’s health, targeted at an issue of specific policy or management concern, and represented in a form that facilitates interpretation for effective decision-making.
Examples of children’s environmental health indicators

- **Accidents**: Children aged 0-4 years living in proximity to heavily trafficked roads – an exposure indicator for health risks from road traffic

- **Respiratory illness**: Mortality rate for children aged 0-4 years due to acute respiratory illness - a health outcome indicator

- **Sanitation**: Annual rate of change in number of households lacking improved sanitation – an action indicator in relation to unsafe sanitation
Launching a global initiative at the World Summit on Sustainable Development

- **Main objectives:**
  - Increase collaboration to protect children from environmental threats to their health
  - Develop and promote use of CEH indicators
  - Improve assessment of CEH and monitor the success or failure of interventions
  - Facilitate the ability of policy-makers to improve environmental conditions for children

- **Partners:**
  - Governments of Canada, Italy, Mexico, South Africa, United States
  - WHO, UNICEF, UNEP, CEC, OECD
  - PSR, ISDE, INCHES
Process for regional and national indicators pilots

Identification of regions and countries

Information needs at the regional, national and local level

Implementation of indicator collection and reporting
Prioritizing what matters

Priorities at the regional and national level could be determined based on:

- Environmental burden of disease
- Settings
- Public concern
- Available interventions
- Resources

An explicit, clear rationale is important!
### Prioritizing environmental health risks at the global level

<table>
<thead>
<tr>
<th></th>
<th>Perinatal diseases</th>
<th>Respiratory illness</th>
<th>Diarrhoeal diseases</th>
<th>Insect borne diseases</th>
<th>Physical injuries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing and shelter</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water supply and quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food safety &amp; supply security</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sanitation and hygiene</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solid wastes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outdoor air pollution</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indoor air pollution</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hazardous chemicals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accidents</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural hazards</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disease carrying vectors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social/work environments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Options for implementation

- Use of existing international data sources, e.g. World Health Survey (WHS)
- Complementary collection of new data through international surveys, e.g. Demographic and Health Surveys (DHS)
- Country-based provision of existing data into a common framework, e.g. approach of the North American Commission on Environmental Cooperation (CEC)
- Complementary collection of new data at the national level, e.g. Thai school survey
Regional indicator pilots

- North American pilot
  (Lead: Commission on Environmental Co-operation, Montreal)
  Countries: Canada, Mexico, United States

- European pilot
  (Lead: WHO European Centre for Environment and Health, Rome)
  Countries: Armenia, other countries to be identified

- Eastern-Mediterranean pilot
  (Lead: WHO Centre for Environment and Health, Amman)
  Countries: Pakistan, Yemen, Jordan, Oman, Tunisia, Iran

- Pan-American pilot
  (Lead: PAHO, Washington)
  Provisional countries: Canada, Brazil, Chile, Mexico, Nicaragua, Jamaica

- African pilot
  (Lead: WHO Regional Office for Africa, Brazzaville)
  Provisional countries: Kenya, Ethiopia
Expected outcomes and challenges

**Expected outcomes (2003-2007):**

- Evaluation of different implementation mechanisms
- Continued collection and reporting
- Global clearing house on children’s environmental health indicators
- Report on the state of children’s environmental health

**Challenges:**

- Making sure that each partner on the initiative has a clear role and contribution to make
- Securing additional funding
- Building capacity at the regional and national level
- Establishing the importance of information on children’s environmental health against competing needs