WHO/Europe Activities on Environment and Health Information System

World Health Organization Regional Office for Europe
European Centre for Environment and Health
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This presentation

Background

About ENHIS - the EH information system
ENHIS products and services

EH indicators, assessments, institutional mechanisms

Current status and examples
Priority data needs

EH information systems and prospects

Looking back – moving forward
Towards the 5th Ministerial Conference (Italy, in the fall of 2009)
About ENHIS: Environment and Health, and a Focus on Children

Methodology for 26 core indicators
International and national data bases
Data from surveys

Environment and health issues

Click on the issues to get indicators and information on the situation across the European Region.

**Air quality**
- Emission of air pollutants from transport, industry, heating and other sources can be harmful to health. Indoor air pollution can also pose risks to health.

**Food safety**
- Contamination by microbiological or chemical agents can occur in many points of the food chain, causing a wide range of acute and chronic diseases.

**Chemical safety**
- Hazardous chemicals, naturally occurring or man-made, can reach our body through different routes (e.g., food, air, water) and cause a variety of health effects.

**Water and sanitation**
- Sanitation and access to clean water are a basic requirement for health. Poor water quality or lack of access to water have major public health impacts.

**Mobility and transport**
- Transport-related health effects can be direct (injuries) and indirect (through air pollution, noise and climate change related to emissions from traffic, but also through reduced physical activity).

**Housing**
- A number of environmental risk factors, such as dampness and radon, can make dwellings unhealthy. Household safety is also a concern as many injuries occur at home.

**Chemical safety**
- Contamination by microbiological or chemical agents can occur in many points of the food chain, causing a wide range of acute and chronic diseases.

**UV and ionizing radiation**
- High exposure to solar and other types of radiation can cause cancer. Children are most at risk from excess exposure to UV radiation.

**Occupational hazards**
- Accidents, dust, chemicals, noise, violence or stress at work can cause a wide range of effects from premature death and injuries to occupational diseases.
ENHIS Products and Services

Analysis and assessment (including HIA)

26 FACT SHEETS

EUROPEAN ENVIRONMENT AND HEALTH INFORMATION SYSTEM

www.ENHIS.org
This presentation

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### EH Indicators: Overview of core set & data sources

<table>
<thead>
<tr>
<th>No.</th>
<th>Title</th>
<th>Code</th>
<th>Data source</th>
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<tbody>
<tr>
<td></td>
<td><strong>RPG I</strong></td>
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<tr>
<td>1.1</td>
<td>Outbreaks of waterborne diseases</td>
<td>RPG1_WatSan_E1</td>
<td>Case studies</td>
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<tr>
<td>1.2</td>
<td>Public water supply and access to improved water sources</td>
<td>RPG1_WatSan_Ex1</td>
<td>a) Eurostat</td>
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<td></td>
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<td>b) WHO/UNICEF JMP</td>
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<tr>
<td>1.3</td>
<td>Wastewater treatment and access to improved sanitation</td>
<td>RPG1_WatSan_P1</td>
<td>a) Eurostat</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>b) WHO/UNICEFJMP</td>
</tr>
<tr>
<td>1.4</td>
<td>Bathing water quality</td>
<td>RPG1_WatSan_S1</td>
<td>European Environment Agency (EEA)</td>
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<td><strong>RPG III</strong></td>
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<tr>
<td>3.1</td>
<td>Prevalence of asthma and allergies in children</td>
<td>RPG3_Air_E1</td>
<td>International Study of Asthma and Allergies in Children (ISAAC)</td>
</tr>
<tr>
<td>3.2</td>
<td>Infant mortality from respiratory diseases</td>
<td>RPG3_Air_E2</td>
<td>WHO HFA MDB</td>
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<tr>
<td>3.3</td>
<td>Exposure of children to outdoor air pollution (particulate matter)</td>
<td>RPG3_Air_Ex1</td>
<td>EEA AirBase, Eurostat</td>
</tr>
<tr>
<td>3.4</td>
<td>Exposure of children to environmental tobacco smoke</td>
<td>RPG3_Air_Ex2</td>
<td>Global Youth Tobacco Survey (GYTS)</td>
</tr>
<tr>
<td>3.5</td>
<td>Children living in homes with problems of damp</td>
<td>RPG3_Hous_Ex2</td>
<td>Eurostat European Community Households Panel</td>
</tr>
<tr>
<td>3.6</td>
<td>Proportion of children living in homes using solid fuel</td>
<td>RPG3_Hous_Ex3</td>
<td>World Health Statistics</td>
</tr>
<tr>
<td>3.7</td>
<td>Policies to reduce the exposure of children to environmental tobacco smoke</td>
<td>RPG3_Air_A1</td>
<td>WHO/Europe Tobacco Control Database</td>
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</tbody>
</table>

Information support to the Children’s Environment and Health Action Plan for Europe (CEHAPE) and its 4 Regional Priority Goals (RPG)
## EH Indicators: Overview (cont’d)

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<td></td>
<td>RPG IV</td>
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<tr>
<td>4.1</td>
<td>Incidence of childhood leukaemia</td>
<td>RPG4_Rad_E1</td>
<td>Automated Childhood Cancer Information System IARC</td>
</tr>
<tr>
<td>4.2</td>
<td>Incidence of melanoma in people aged under 55 years</td>
<td>RPG4_UVRd_E1</td>
<td>GLOBOCAN</td>
</tr>
<tr>
<td>4.3</td>
<td>Persistent organic pollutants (POPs) in human milk</td>
<td>RPG4_Food_Ex2</td>
<td>WHO POPs survey</td>
</tr>
<tr>
<td>4.4</td>
<td>Exposure of children to chemical hazards in food</td>
<td>RPG4_Food_Ex1</td>
<td>WHO Global Environmental Monitoring System GEMS/Food</td>
</tr>
<tr>
<td>4.5</td>
<td>Levels of lead in children’s blood</td>
<td>RPG4_Chem_Ex1</td>
<td>Case studies</td>
</tr>
<tr>
<td>4.6</td>
<td>Radon levels in dwellings</td>
<td>RPG4_Rad_Ex1</td>
<td>EC DG JRC case surveys</td>
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**Country coverage for each of the 26 core EH indicators**

![Graph showing country coverage for each EH indicator]
Data availability per country (53 WHO/Euro MS) for six core indicators (international)

### 3 on water & sanitation:
1. Public supply/ access to improved water sources;
2. Wastewater treatment/ access to improved sanitation;
3. Bathing water quality

### 3 on air quality:
1. Exposure to outdoor air pollution: PM10;
2. Exposure to indoor air pollution: mould and dampness;
3. Exposure to indoor air pollution: solid fuel use
Examples (1/3)
Population/children’s exposure to outdoor airborne PM (urban)

Population exposure to outdoor air ozone: under way!

- PM10 level > AQG for 90% of children in Europe
- No improvement in urban AQ in the current decade
- EH inequalities

No data on air quality for 43% of the population in the Region
Examples (2/3) Access to improved drinking water at home

Access to improved water sources at home remains low in the east despite increasing coverage

Stark inequities

Less than 40% of population of rural areas in 11 MS are served

For every person without improved drinking water in urban centres, there are 4-5 people un-served in rural areas

The disparities increase towards the east (NIS countries) with a difference of 45-50% between urban and rural dwellers

Only a crude indication of population exposure to drinking water-health risks despite intensive reporting
Examples (3/3) Environmental chemicals


Levels decrease: lowest safety margins

Data gaps: systematic human bio-monitoring for priority chemicals is needed in the Region

Decrease of lead exposure due to unleaded fuels (but plumbing and local industries continue to be of concern)
Institutional mechanisms: The ENHIS network (1/3)

The ENHIS network, participating MS and mode of involvement

WHO mobilized 13 MS formally not participating in ENHIS project:
- 2 – volunteers in the network
- 11 – data/ information input

Activities

- Maintaining communication links getting “everybody on the same page”
- Creating and maintaining an IT platform for e-networking and information sharing
Institutional mechanisms: The ENHIS network (2/3)

Main tasks: information retrieval and preparation of indicator-based assessments (fact sheets)

- Creating a multi-country teams
- Distribution of EH issues: country priorities and expertise
- Partners to “network” & be supported in their own countries
- Data and information input from volunteering countries
- Involvement of academia in fact sheets review
- Strong coordination and support (on “micro” and “macro” level)
- Partners provide input to different work packages and at the same time involved in common work on dissemination

ENHIS Network Outcomes

23 out of 26 indicator-based assessments - prepared

Increased capacity for preparation and use of EH information in policy debate in a national context

www.euro.who.int/EHindicators
### Indicator-based assessments

<table>
<thead>
<tr>
<th>Country</th>
<th>Issues</th>
</tr>
</thead>
</table>
| **Czech Republic** | - Children's exposure to air pollution in outdoor air  
                 | - Prevalence of asthma and allergies in children  
                 | - Blood lead levels in children                                    |
| **Estonia**   | - Public water supply and access to improved water sources  
                 | - Bathing water quality                                              |
| **Hungary**   | - Prevalence of asthma and allergies in children                     |
| **Lithuania** | - Mortality from road transport injuries in children  
                 | and young people                                                      |
| **Poland**    | - Infant mortality from respiratory diseases                          |
| **Romania**   | - Mortality from road transport injuries in children  
                 | and young people                                                      |
| **Slovakia**  | - Bathing water quality                                               |

### Assessment of policy information needs

<table>
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<tr>
<td><strong>Bulgaria</strong></td>
<td>- Environmental tobacco smoke control</td>
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<tr>
<td><strong>Finland</strong></td>
<td>- Indoor radon</td>
</tr>
<tr>
<td><strong>Italy</strong></td>
<td>- Road transport safety</td>
</tr>
<tr>
<td><strong>Spain</strong></td>
<td>- Tobacco control</td>
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Health-related environmental conditions around 2004-5:

**Big inequalities in health and exposure:**
- between various parts of the European Region of WHO
- between various population groups within the Member States

**Substantial differences in policy addressing the risks**

**Data availability:**

International *reporting* (WHO, EEA, EUROSTAT) *facilitates* access of the MS to standardized data for national and international analysis

Internationally coordinated *population-based surveys* are important source of several relevant data

**Institutional mechanisms:**

Network: well-grounded in the MS, of high-expertise and responsive to the EH information needs is crucial for the system

Positive developments in countries and some parts but *sustainability is and will remain a challenge!!*
ENHIS – main reporting tool!

Maintenance of the system -> its ability for policy monitoring & evaluation

- Information update -> “first” assessment
- Improvement of geographical coverage (53 WHO/EURO MS)
- National extensions of the system & the EH information network

Extension of thematic scope to address emerging issues (e.g. climate change)

Further transfer of ENHIS to the east (e.g. SEE countries): a challenge!!

Environment and Health Performance Reviews (e.g. Slovakia, Poland, Estonia, Lithuania, Czech Republic)

Tools for policy review

- Close links and cooperation with the WGEMA

Strengthening Environmental Monitoring and Assessment in particular in the east of the Region urgently needed!
Acknowledgements

www.euro.who.int/EHindicators
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Questions