Collection of environmental health data to monitor the European Environment and Health Process

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European Environment and Health Information System (ENHIS)

- Source of information on the European Environment and Health Process
- Country level indicator data
- Standardized factsheets
- Development plans
  - Sub-national data
  - New indicators for monitoring Parma Declaration implementation
  - New surveys – data warehouse
  - RUS interface and factsheets

www.euro.who.int/enhis
www.enhis.org
www.enhis.net
Data sources for ENHIS indicators

- EUROSTAT
- European Environment Agency (EEA)
- European Centre for Disease Control (ECDC)
- WHO databases (HFA MDB, GLOBOCAN)
- WHO/UNICEF Joint Monitoring Programme
- UN Economic Commission for Europe (UNECE)
- National data sources
- International surveys (WHO POPs, ISAAC, HBSC, GYTS)
- ENHIS network
Environment and Health Information System (ENHIS)

ENHIS is an evidence-based information system aiming to support public health and environmental policies in the WHO European Region. It produces indicator-based assessments of recognized environment and health priorities for the European Region as a series of comprehensive standardized fact sheets.

ENHIS fact sheets address the four Regional Priority Goals (RPG) identified and reaffirmed by the latest Ministerial Conferences on Environment and Health:

- ensuring public health by improving access to safe water and sanitation (RPG 1);
- addressing obesity and injuries through safe environments, physical activity and healthy diet (RPG 2);
- preventing disease through improved outdoor and indoor air quality (RPG 3);
- preventing disease arising from chemical, biological and physical environments (RPG 4).

Note: Some of the ENHIS features, such as interactive maps, may not be available on all operating systems or browsers.

Publications

- Health and environment in Europe: progress assessment

Countries

- Environment and health performance review: Belarus
European Environment and Health Information System (ENHIS)

Select indicator:

Please select!

- Outbreaks of waterborne diseases
- Public water supply and access to piped water sources
- Access to improved sanitation and wastewater treatment
- Bathing water quality
- Mortality from road traffic injuries in children and young people
- Mortality in children and adolescents from unintentional injuries
- Prevalence of excess body weight and obesity in children and adolescents
- Percentage of physically active children and adolescents
- Infant mortality from respiratory diseases
- Exposure to air pollution (particulate matter) in outdoor air
- Exposure of children to second-hand tobacco smoke
- Children living in homes with problems of dampness
- Proportion of children living in homes using solid fuel
- Policies to reduce the exposure of children to second-hand tobacco smoke
- Exposure to ozone in outdoor air
- Incidence of childhood leukaemia
- Incidence of melanoma in people aged under 55 years
- Persistent organic pollutants (POP) in human milk
- Exposure of children to chemical hazards in food
### European Environment and Health Information System (ENHIS)

**Select indicator:** 3.3 Exposure to air pollution (particulate matter) in outdoor air

**Select subindicator:** 1. Percentage of people living in cities with various PM10 levels in μg/m³

**Select type:** Bar

**Select period:** 2009

**Select area:** All selected

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Data sources:

EEA (PM10 monitoring)

EUROSTAT (population)
5th Ministerial Conference on Environment and Health (Parma, Italy, March 2010)

- Establishment of the European Environment and Health Ministerial Board (EHMB) and Environment and Health Task Force (EHTF)

- Commitment to Act:
  - A. Protecting children’s health
    - RPG 1 Water and sanitation
    - RPG 2 Obesity, injuries, physical activity
    - RPG 3 Outdoor and indoor air quality
    - RPG 4 Chemical, biological and physical environ.
  - B. Protecting health from climate change
  - D. Knowledge and tools for policy making:
    9. Support the development of ENHIS
    13. Affirm the need for participation of the public… in tackling envir. and health issues
Parma Declaration
RPG 3. Preventing disease through improved outdoor and indoor air quality

i. Decrease the incidence of respiratory diseases through reduction of exposure to ultrafine particles and ground level ozone

iii. Provide each child by 2020 with healthy indoor environment in child care facilities, kindergartens, schools..., implementing WHO’s indoor air quality guidelines and... ensuring these are smoke-free by 2015.
Use of monitoring data in support of the implementation of the Parma Declaration

Commitment to reduce EH risks

Use of monitoring results to facilitate evidence-based policy actions

Progress assessment and new targets

European environment and health process

Policy survey 1 shows a lack of adequate policies

Exposure survey 1 shows high exposure levels

Policy survey 2 reflects new policy actions

Exposure survey 2 shows a decline in exposure levels
Proposed policy action questionnaire for national EH focal points

- policy to improve sanitation/hygiene in schools and kindergartens
- policy to prevent injuries in children
- policy to improve indoor air quality in children’s facilities
- policy to prevent smoking in schools
- policy to prevent asbestos-related diseases
- policy to protect children from chemical hazards
- policy to ensure the security and safety of water supplies
- policy to prevent infectious diseases
- policy to prevent adverse health effects of hot weather
Exposure assessment survey in schools

Survey with stratified randomized clustered design
- Ventilation rate in classrooms (3 per school)
- Exposure to NO2, formaldehyde and benzene in classrooms (3 per school and outdoor sites)
- Exposure to mould/dampness (all school premises)
- Smoking in school and on school ground (questionnaire, 3 classes per school)
- Access to proper sanitary facilities
- Hygiene practices in pupils
- Mode of transportation to school

WHO role:
- Standardized methodology
- Facilitate training and technical assistance to national surveys
- International data compilation, data analysis and reporting

Role of Member States:
- Implementation of national surveys
- Use of results to support the implementation of Parma commitments
Pilot surveys in schools in ALB and CRO

- Survey 1: 12 schools in 3 clusters
- Survey 2: 2 schools in one cluster
- >850 questionnaires from pupils
- Air pollution monitoring in 42 classrooms and at 14 outdoor sites
- Major problems identified:
  - Low indoor temperature and poor ventilation in winter in some schools
  - Mould and dampness
  - Poorly maintained toilets
  - Smoking in schools
  - High benzene levels in classrooms with combustion-based space heaters
Examples - sampling sites in classrooms
Further survey development

• Training workshops (Jan and Oct 2013)
• Coordinated pilot surveys in three Baltic states (Lithuania, Latvia, Estonia) – Feb-Apr 2013
• National survey in Croatia
  – Dec 2012-Jan 2013: questionnaires and inspections in ~ 170 schools in 17 areas
  – Winter 2013-2014: ventilation and air pollution monitoring in a subset of schools
• Surveys in other countries (winter 2013-2014)
Plans for ENHIS development

• Data from existing sources
  – Links to national data sources
  – Sub-national data
  – Collaboration with a university to obtain access to raw EUROSTAT SILC data to characterize EH inequalities

• School survey data
  – Relational database with raw survey data
  – Password-protected access
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