CEHI Risk Assessment Tools

applied in Oman & Tunisia for assessing environmental risk factors affecting children’s health within the home environment

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Main objectives

- Assess the availability, accessibility, accuracy and reliability of information on CEH.
- Assess and prioritize the environmental health risk factors affecting children within the home environment and its immediate surroundings.
- Refine CEH indicators in view of regional conditions and promote their use as a tool for decision making to improve environmental conditions for children.
- Establish a monitoring system of EH risk factors affecting children in pilot countries.
CEHI Risk Assessment Tools

EMRO Pilot Application of CEHI Initiative

The Approach

- Generate preliminary report on the state of children environmental health using existing information sources

- Undertake household surveys of the EH risk factors affecting children to fill information gaps and assess & prioritize risks to children’s health

- Prepare report on the assessment including analysis of findings and trends and present it to a national seminar

- Generate the national report on the State of Children Environment Health
Household Survey Tools

Purpose

➢ To report the status of exposure and health effects

➢ To assess and prioritize the risk factors affecting children within the home environment and its immediate surroundings

➢ To provide data for investigative analysis of the risk factors
The MEME Model

Contexts
- Social conditions
- Economic conditions
- Demographic conditions

Exposure
- Ambient environment
- Community
- Home

Health outcome
- Well-being
- Morbidity
- Mortality

Actions
- Preventive actions
- Remedial actions

Distal
- More severe
Proximal
- Less severe
Household Survey Tools

A comprehensive search was conducted to identify survey tools and questionnaires used to assess each of the proposed issues.

Search included:

- Contacting concerned entities in member states & worldwide
- Reviewing publications
- Searching the internet
Main Search Results

- World Health Survey (WHS) 2002
- Iraq Draft Questionnaire (Iraq Multiple Indicator Rapid Assessment)
- Environmental Health Indicators in A Danish Health Interview Survey
- Jordan Survey (Health & Environment Status) 2002-2003
- Jordan DHS Survey 2002
- London School of Hygiene & Tropical Medicine, Vision 21 field trials Kenya 2003
- Oman Environmental Survey 2000-2001
- MEASURE DHS+ Model “B” Questionnaire
Household Survey Tools

Main Search Results (cont’d)

- The Dwelling & its Environment: Jordan camp survey 1999 (Fafo/SPRC)
- ZAP Asthma Project: Health & Environment Survey Instrument
- EPA Factsheet on Sources of Indoor Air Pollution
- Applied Poverty-Environment Indicators: the Case of Nigeria
- Definition of Crowding & Effects of Crowding on Health: A Literature Review
- Sources of Noise
- Health & Sanitary Elements of A Housing Inspection
- Protect your children by poison proofing your home
Household Survey Tools

Hundreds of questions were identified, screened, and categorized (by issue) and three survey modules were developed:

**Module I:** Roster of People & Health  
**Module II:** Housing Quality  
**Module III:** Water, Hygiene & Sanitation
Household Survey Tools

**Module I: Roster of People & Health**

- It includes the Household Roster (Name, Age, Education, Occupation, etc.)
- It reports on health outcomes indicators:
  - ARI morbidity (20), incidence of physical injuries (43), diarrhoea morbidity (29), physical injuries mortality (42)
- It reports on Permanent Income Indicators (socioeconomic context)
Household Survey Tools

Module II: Housing Quality

Reports on the following indicators:

- **Overcrowding** (14)
- **Housing Quality** (13 & 15) including physical characteristics, infrastructure & surroundings, light, dust, play area, household safety margins..etc.
- **Indoor Air Quality** (17 & 18) including heating, cooking, cooling, indoor smoking, animals & pets,..etc.
- **Disease Vectors & household Insects** (35)
- **Household Food Safety & Hygiene**
- **Household Chemical Safety**
Household Survey Tools

Module III: Water, Hygiene & Sanitation

Reports on the following indicators: (drinking water quality (25), children without basic services for water, sanitation & hygiene (27), children without access to piped water (41))

- Water Supply Services
- Water Consumption & Cost
- Water Supply Continuity & Reliability (including water handling and water quality)
- Hygiene Practices & Facilities
- Sanitation
- Waste Disposal
Household Survey Tools

The three Modules were:

✓ Pilot tested in Oman & Tunisia on small scale
✓ Refined & adapted for Oman & Tunisia surveys
✓ Finalized
✓ Available for further adaptation by countries
✓ To be annotated, published & distributed