

# 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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## EMRO Pilot Application of CEHI Initiative

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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**

## EMRO Pilot Application of CEHI Initiative

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### 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

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## 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

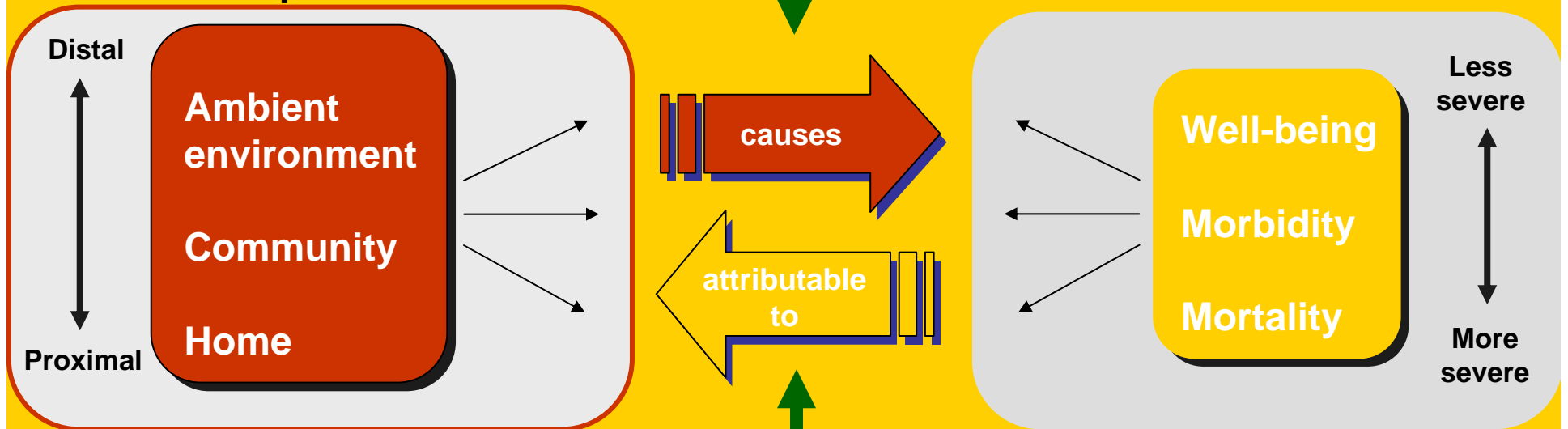
# The MEME Model

## Contexts

**Social conditions**  
**Economic conditions**  
**Demographic conditions**

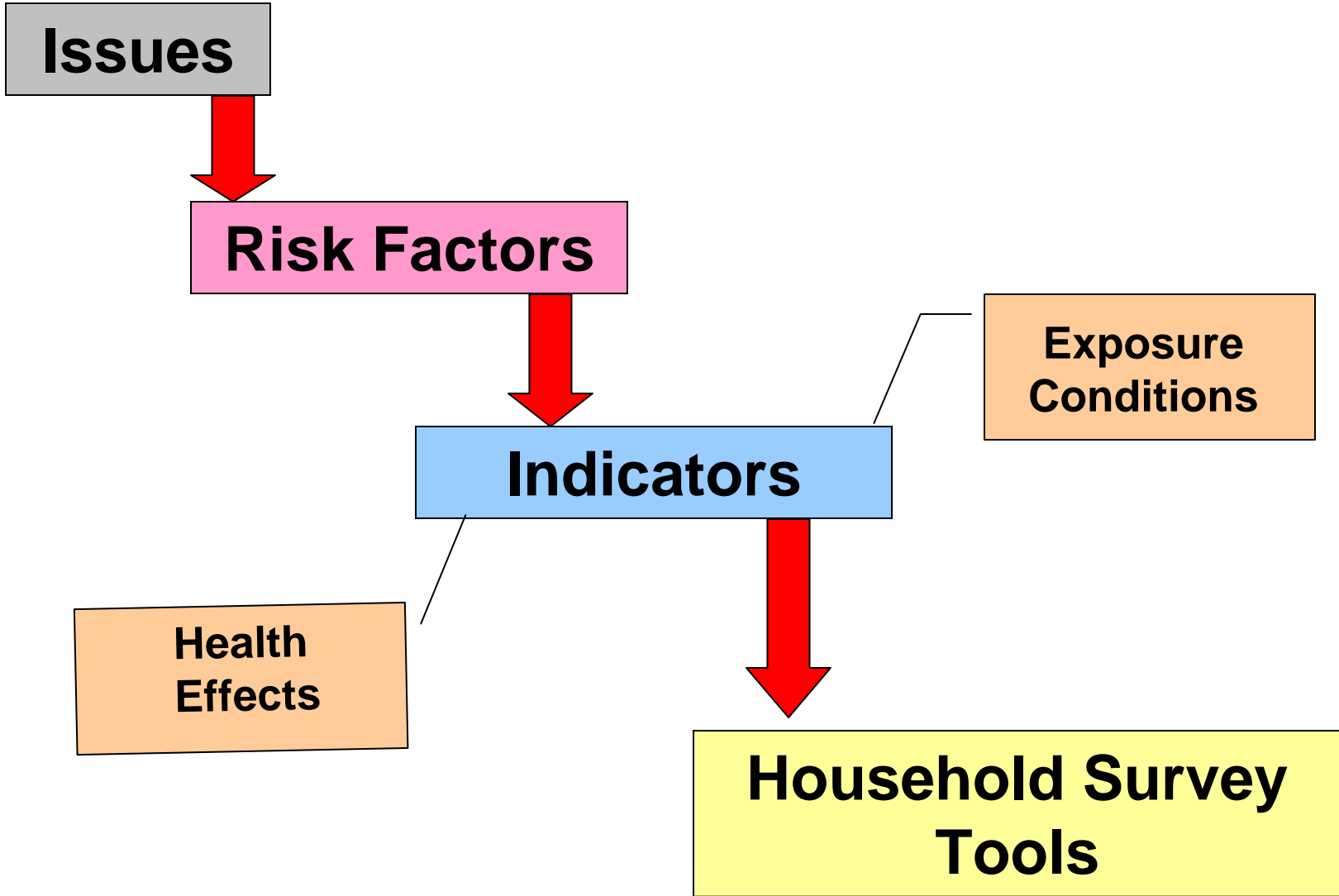
## Exposure

## Health outcome



## Actions

**Preventive actions**      **Remedial actions**





## Household Survey Tools

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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**



# Household Survey Tools

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## 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

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## Main Search Results (cont'd)

- **The Dwelling & its Environment: Jordan camp survey 1999 (Fafu/SPRC)**
- **ZAP Asthma Project: Health & Environment Survey Instrument**
- **Health Behaviour in School-aged Children (WHO Cross-National Study) Questionnaire 1993-1994**
- **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

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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**

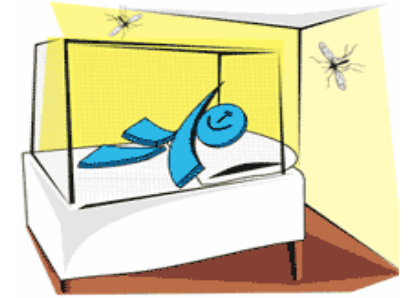


# Household Survey Tools



## 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)**,  
diarrohea 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

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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**