



# Responding to Specific Environmental Threats: Challenges and Opportunities

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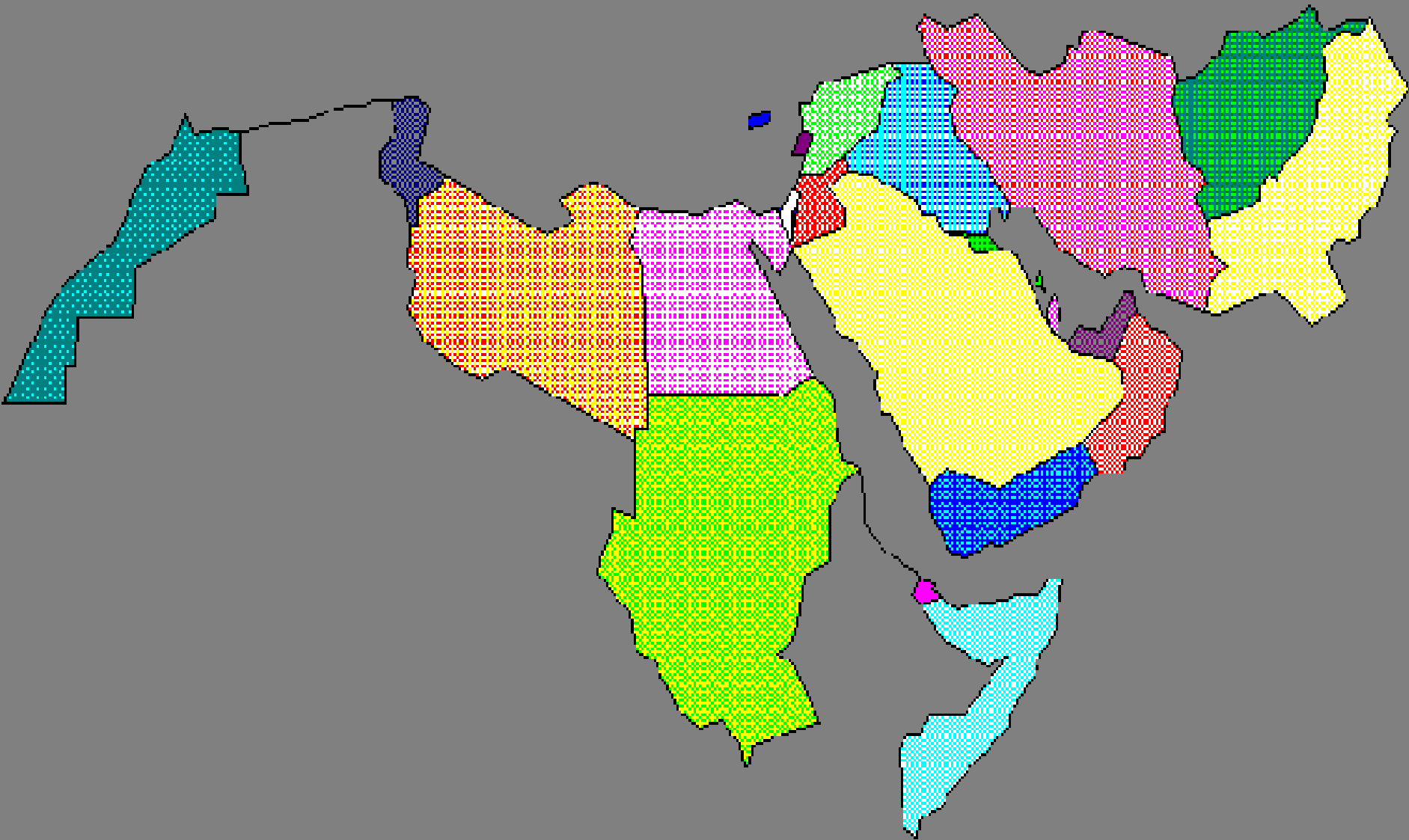
World Health Organization

Eastern Mediterranean Regional Office

# Outline



- The region
- Identifying the threats
- The threats
- Responding to the threats



# GLOBAL ENVIRONMENT

## COMMUNITY

### HOME



**Social environment**

**Vector-borne diseases**

**Air pollution**

**Housing and shelter**

**Water supply**

**Natural hazards**

**Noise**

**Road traffic**

**Food**

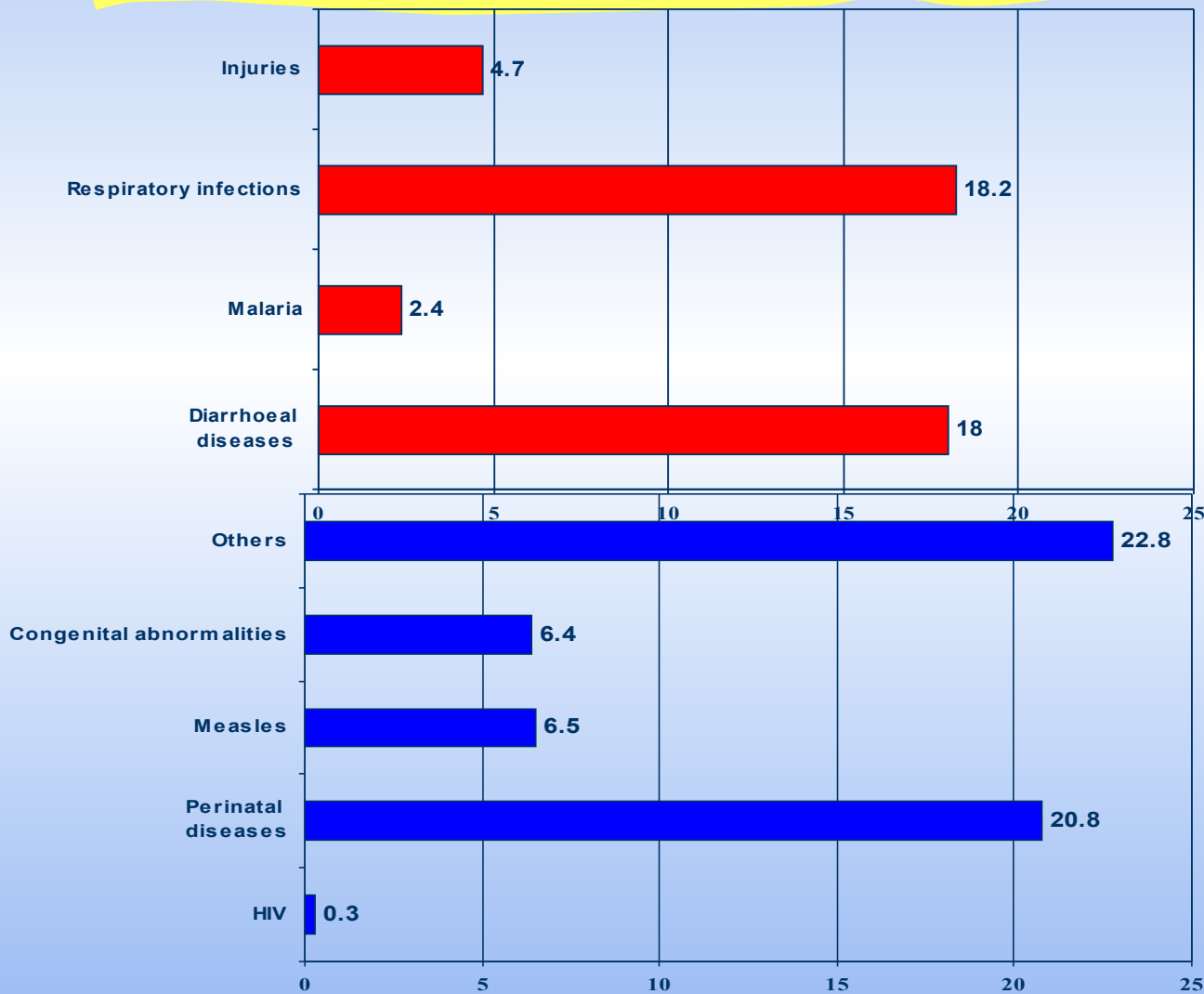
**Solid waste**

**Sanitation and hygiene**

**Hazardous chemicals**

**Radiation**

# Leading Causes of death amongst children (U5) in the EMR



43% of deaths are due to environmental related diseases: injuries, ARI, malaria, diarrhea

# Identifying and ranking the threats

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- The taskforce on children environmental health was established October 2003
- WHO Consultation with experts and opinion leaders in December 2003
- Review of Knowledge was commissioned in 2004 (published work in peer reviewed journals )
  - Childhood lead exposure
  - Childhood unintentional injuries
  - Indoor air quality and children health
  - Water scarcity and health of children
- Survey of opinion of Health Ministries: 15 of 22 countries reported

# The threats ranked

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1. Water supply, hygiene and sanitation
  2. Injuries (road and domestic)
  3. Air pollution & lead
  4. Chemical hazards and poisonings
  5. Food hygiene and safety
  6. Diet and physical activity
- Poverty, housing and shelter, vector diseases,
  - **School environment**
  - Social environment
  - Work places
  - **Aggression, conflicts and environmental emergencies**

# Population based assessments in Tunisia and Oman confirmed

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## **Main findings** of Tunisia assessment

### Exposure indicators

- High exposure to indoor air pollution (SFU for heating and indoor smoking HS at home)
- High exposure to road traffic injuries
- Water quality (urban) and water access (rural) problems

### Health indicators

- High prevalence of respiratory infections
- Prevalence of diarrhoea

# Responding to the threats




- Identification and quantification of environmental health risk factors within the homes, schools, and communities, determine their impact on children's health
- Monitoring the threats and strengthening information systems with indicators for decision making
- Support and strengthen the health services to develop their capacity in identifying and managing childhood diseases that have environmental causes
- Community based action for creating healthy environments for children at schools, homes and communities.
- Updating national standards and legislation (e.g. on water, air, leaded fuel use)

# National population based assessment in Tunisia and Oman

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- 2000 households reaching 4000 children under 5 in each country
- Exposure to risk factors within the home environment: water, sanitation, indoor air, personal and food hygiene, living space, shelter quality, physical safety, household chemicals, socioeconomic characteristics
- Health outcomes: injuries, diarrhea diseases, & respiratory diseases
- Prevention strategies based on evidence in the two countries

# Healthy schools physical environment projects



- Jordan, Syria, Yemen, Lebanon, and Pakistan
- Community based action to assess and improve schools' physical environment for better learning and health.

# Development of guidance on minimum water requirement for health

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- Expert group meeting convened end 2004
- Global evidence gathered and reviewed
- Research water quantity and health commissioned in Lebanon, Morocco & Jordan
- Draft guidance document planned end 2008 to be finalized end 2009.

# Evidence for policy development on childhood lead exposure

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- Jordan's policy on phasing out leaded gasoline: assessment of exposure, burden of disease and economic cost of the impact of leaded gasoline
- Syria: Assessment of lead exposure in children
- Saudi Arabia, & Pakistan: Research on children exposure in

# Planned work on Children Environmental Health in EMRO 2008-2009



healthy 4.6  
environments  
for children

national profiles for children environmental health 4.6.1

national action plans for healthy environments for children 4.6.2

children environmental health indicators 4.6.3