



CHILDREN'S HEALTH AND THE ENVIRONMENT

Training Package for the Health Sector *Improving the capacity to diagnose, prevent and manage paediatric diseases linked to the environment*

A growing number of diseases in children from rural and urban areas are linked to unsafe, degraded environments. However, many health care providers are unable to recognize, assess, prevent and manage environmentally-related diseases in children.

How should this problem be addressed?

Enabling those "in the front line" - the health professionals dealing with children's and adolescents' health - to recognize and assess diseases linked to, or triggered by environmental factors. Paediatricians, family doctors, nurses, primary and other health care workers should be trained on the relationships between children's health and the environment through the use of harmonized training materials. These are adapted to the specific needs of countries and professional groups.

What are the benefits of training health care providers?

- Increased understanding about the influence of environmental factors on children's health
- Improved diagnosis, prevention and management of health and developmental effects
- Capacity to discuss environmental risks with patients, parents, educators and the media
- Advocacy skills for sensitizing decision-makers about high priority issues for action
- Enhanced potential for research and planning interventions

What is the WHO Training Package for Health Care Providers?

A collection of about 30 modules with internationally harmonized information and peer-reviewed materials that are used to train health care workers, and also enable them to become trainers. The modules include extensive notes, references and case studies. The modules are backed up by manuals and guidelines and also self-evaluation instruments. A selected team of experienced professionals from over 15 countries and selected NGOs participated in the preparation of these materials. **A sub-package on reproductive environmental health is also available for those health professionals dealing with reproductive health.** The initiative is supported by USEPA and other contributors, such as the UK Government.

What issues are covered?

- The special *vulnerability* of children and the fetus to environmental threats
- The health and developmental effects of specific *chemical, physical and biological hazards* (e.g. pesticides, persistent toxic pollutants –POPs–, lead, arsenic, radiation, noise, moulds, other) present in specific *settings* (e.g. home and surroundings, school, recreation areas, workplace, fields, other)
- Sources, routes and mechanisms of exposure (contaminants in air, water, food, cosmetics, objects, toys, medical devices, that may be inhaled, ingested or absorbed...)

How are the training programmes organized and by whom?

- According to the needs identified by the countries and/or scientific groups concerned and resources available
- From a 2-day "overview" event to a full 40-hour "intensive" course
- WHO and its partners provide the initial training and distribution of materials which are available in English and have been informally adapted by partners and users into Spanish and other languages.

Further information and selected modules available as PDF: www.who.int/ceh

List of training modules

I. CHILDREN ARE NOT LITTLE ADULTS 1) Why children 2) Children are not little adults 3) The paediatric environmental and health history 4) Global change and children (II. SPECIFIC EXPOSURES AND EFFECTS IN CHILDREN 5) Outdoor air pollution 6) Indoor air pollution 7) Pesticides 8) Lead 9) Mercury 10) Other heavy metals 11) Noise 12) Water 13) Food safety 14) Children and chemicals 15) Persistent Organic Pollutants 16) Second-hand tobacco smoke 17) Mycotoxins, plants, fungi and derivatives 18) Injuries 19) Ionizing and non-ionizing radiations 20) Occupational risks	III. SPECIFIC ADVERSE HEALTH EFFECTS AND SPECIFIC MANAGEMENT 21) Respiratory diseases 22) Childhood cancer 23) Immune disorders 24) Neurobehavioral and neurodevelopmental disorders 25) Endocrine disorders IV. NEW TOPICS 26) Bio-monitoring and environmental monitoring 27) Early developmental and environmental origins of disease 28) Indicators V. SUB-PACKAGE ON REPRODUCTIVE HEALTH AND THE ENVIRONMENT 29) Introduction to reproductive health and the environment 30) Female reproductive health and the environment 31) Case studies of female reproductive health and the environment 32) Male reproductive health and the environment 33) Case studies of male reproductive health and the environment 34) Prevention and action on reproductive health and the environment
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