Industrially Contaminated Sites and Health Network (ICSHNet): an ongoing EPHT experience

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Foreword

◆ In Europe, earlier industrialization and poor environmental management practices have left a legacy of thousands of contaminated sites.

◆ Past and current activities can cause local and diffuse contaminations to such an extent that they might threaten human health and the environment.

◆ Both scientific and policy circles express concern on the possible health impact of these sites.

◆ Health, environment, and social aspects related to contaminated sites are strongly interconnected and local communities are often alarmed.
Environmental and social inequalities (ethical aspects)

Health, environment, and social aspects related to contaminated sites are strongly interconnected. Low-income populations often live in areas with high pollution and poor-quality housing, near industrial and waste dumping sites with limited access to a good quality green space.

*EEA Report No 5/2013: Environment and human health*
Environmental and social inequalities in Italian polluted sites

About 60% of the 300 municipalities included in 44 Italian National Priority Contaminated Sites (IPSs) studied in SENTIERI Project belong to the highest deprivation groups (quintiles).
The Italian Institute of Health has joined forces with a network of Italian scientific institutions operating on a national and regional level to develop the SENTIERI Project (Epidemiological Study of Residents in National Priority Contaminated Sites)

- **Health profile of populations living in the 44 Sites**
- **Environmental characterization of emission sources and pollutants**
- **Focus on children**
«SENTIERI approach» is sanctioned by the World Health Organization among those to conduct an initial description of the health status of residents of contaminated sites.

Multi-outcome descriptive approach based on mortality, morbidity and cancer incidence data.

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Industrially Contaminated Sites and Health Network (ICSHNet)

Notwithstanding the increasing available evidence, research and risk management activities in the EU context concerning the health impact of living in industrially contaminated sites is not sufficiently addressed.

We submit a preliminary proposal for a specific Action at COST (European Cooperation in Science and Technology), a European framework supporting cooperation among scientists and researchers across Europe, aimed at:

• bringing together European scientists and institutions with a multidisciplinary expertise but common interests and duties on this topic, and engaged in providing information and advice on the health impact of contaminated sites and their remediation

• establishing harmonized datasets of environmental and health data and research methods for the EU Member States
Area for potential partnership

The possibility to establish and to consolidate a European network on environmental health in contaminated sites is highly desirable since the social and environmental health issues associated with industrial contamination and poor environmental management practices have been receiving great attention both from local communities, and from the research and the public health sectors across Europe.

Industrially contaminated sites are identified as all sites hosting (or having hosted) production and processing plants and facilities for: chemicals, petrochemicals, manufacturing, waste disposal and/or treatment, cement, power generation, mining and metals.
Promotion of public health in contaminated areas is a central theme of a collaborative work between WHO and the Italian National Institute of Health carried out by sharing experiences in *ad hoc* workshops among researchers on environmental health topics.

Identifying key potential partners and promoting the Industrially Contaminated Sites and Health Network (ICSHNet)

http://www.euro.who.int/
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**Training and dissemination activities**

WHO European training course on Capacity Building in Environment and Health (CBEH) Project: An inter-sectoral training package for environment and health experts

*A training package was produced as a result of an international training workshop on environment and health (19–23 March 2012 Riga, Latvia) Copenhagen, WHO Regional Office for Europe, 2013. © World Health Organization 2013*

The Italian Institute of Health developed a specific Module C.1 – Methods for risk assessment related to contaminated sites

The training package aimed to build significant capacity in addressing environment and health matters among key stakeholders such as individuals working in public health, policy-makers from Eight EU Member States participated in the project: Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia.
We proposed, as delegates of the Ministry of Health, “Environmental health in contaminated sites, with a focus on children” as a priority issue for the agenda of the Sixth Ministerial Conference on Environment and Health to be held in 2016.

Several countries supported our proposal and were invited to join the network.
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Activities of the WHO Collaborating Centre for Environmental Health in Contaminated Sites in collaboration with the European Centre for Environment and Health (Bonn, Germany)

In 2013 WHO has designated a WHO Collaborating Centre for Environmental Health in Contaminated Sites at the National health institute, with the specific aim to establish a permanent system to monitor the health status of populations residing in contaminated sites.
ORGANISATION: strategies to build and sustain partnership

- identification and environmental characterization of industrially contaminated sites in participating countries;
- review and critical analysis of environmental health studies on contaminated sites in participating countries;
- creation of a suitable system to collect environmental and health data;
- review and critical analysis of available methodology on exposure and health impact assessments suitable for contaminated sites;
- define guidelines for health risk and health impact assessments, and communication
Expected results

- creation of a strong technical expert network on contaminated sites and health
- identification of priorities on how to collect relevant environmental data and assess environmental health risks in contaminated sites, with special consideration on vulnerable population groups (e.g. children and deprived people)
- clarification of the role of a participatory approach and of information and communication on environmental health risks in contaminated areas
- identification and dissemination of research resources and tools on how to assess environmental health risks in contaminated sites including consideration of health and social inequalities
- provision of guidance and resources on risk communication on environmental health risks in contaminated areas, including the transfer of scientific findings into the policy making process