



Strategic Approach
to International
Chemicals Management



Republic of Serbia
MINISTRY OF HEALTH



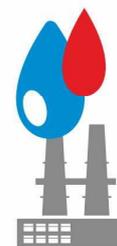
INSTITUTE OF PUBLIC HEALTH OF SERBIA
"Dr Milan Jovanovic Batut"



Republic of Serbia
MINISTRY OF
ENVIROMENTAL PROTECTION

Environment and health impact assessment in industrially contaminated sites

Training workshop, 10-11 October 2018
Institute of Public Health of Serbia "Dr Milan Jovanovic Batut"
Belgrade - Serbia



Rationale

The UNEP-QSP Project "Strengthening Serbian national capacities and inter-sectorial synergies for safe management of contaminated sites and related hazardous substances to prevent negative impact on human health and the environment" is being implemented in 2018. The project aims at supporting the development of resources for dealing with the health implications of industrial contamination in Serbia, including technical capacities for assessing the health impacts and their distribution. The project also includes a case study in the city of Bor.

Besides contributing to the project's implementation, this training workshop is in line with the major policy frameworks of the WHO, including the 2030 Sustainable Development agenda, the 2017 Ostrava Declaration and Health 2020.

Objectives

Industrially contaminated sites involve a variety of hazards, risks, exposures and health consequences that are ideally addressed through Environment and Health Impact Assessment (IEHIA), whose outcomes can inform concrete policies. This requires, *inter alia*, good quality data, the application of sophisticated methods of analysis and appropriate tools, expert skills in interpreting and communicating results with different counterparts.

EHIA is a multidisciplinary approach and instrument that draws from disciplines such as public health, the social and political sciences, environmental science, epidemiology, economics and statistics. Its remit is broad in scope to protect and promote population health by analysing and estimating potential health impacts of projects, programs and policies and informing decision-makers about those potential impacts.

In order to strengthen country capacities in this area, this training workshop aims to present the EHIA rationale and process, describe its application to the case of industrially contaminated sites (including using data from Bor, so as to progress the Project's case study). Special attention is paid to practical tools and resources for quantifying and analysing health impacts and their spatial distribution.

Contents of the workshop

- Environmental and Health Impact Assessment: rationale
- Dose response relationships
- Relative and attributable risks
- Exposure assessment
- Estimating health impacts and burden of disease
- Spatial variation in risk
- Disease mapping
- Tools: the R open source software, GIS
- Health inequalities
- Communicating results to policy makers and the public

The workshop involves practical sessions, where participants working in groups and carry out:

- Calculate the health impact
- Create disease maps
- Plan public presentations of results

Participants will be encouraged to formulate questions and gather relevant data well in advance of the workshop and to share it with the workshop organizers, in order to develop practicals.

Target audience, format

The 2-day workshop is intended for practitioners of public health, environmental health, and for practitioners and officers in all sectors who have responsibilities or interests in environmental health-related matters.

The workshop will consist of lectures, work done in small groups (2-4 people each), and open discussion sessions. Participants will be encouraged to actively engage in interactive discussions and exchanges.

Faculty

Marco Martuzzi (workshop coordinator), WHO

Gavin Shaddick, University of Exeter, UK

Matthew Thomas, University of Bath, UK

Kees de Hoogh, Swiss Tropical and Public Health Institute, Switzerland

Ivano Iavarone, National Health Institute, Italy

Programme

DAY 1, 10 October 2018

9:30 ó 10:00	<i>Registration</i>
10:00 ó 10:30	Welcome, introduction (Batut, WHO)
10:30 ó 11:00	Health Impacts of environmental factors (MM)
11:00 ó 11:45	Industrially contaminated sites and health; inequalities (II)
11:45 ó 12:30	Estimating impacts: the basics (Establishing dose-response; variability in risk; exposure assessment; combining exposures). Lecture and practical (MM)
12:30 ó 13:30	<i>Lunch</i>
13:30 ó 15:00	Exposure assessment, monitoring and modelling. Using QGIS Lecture and practical (KdH)
15:00 ó 15:30	<i>Break</i>
15:30 ó 17:30	Using R in environmental epidemiology ó an appetiser. (GS, MT)

DAY 2, 11 October 2018

09:00 -10:00	Reporting findings and visualising data (maps etc) (KdH)
10:00 ó 11:00	Geographical analysis and disease mapping in R. Lecture and practical (GS, MT)
11:00 ó 11:30	<i>Break</i>
11:30 ó 12:30	Geographical analysis (continued)
12:30 ó 13:30	<i>Lunch</i>
13:30 ó 15:00	Map smoothing; dealing with small counts. Lecture and practical (GS, MT)
15:00 ó 15:30	<i>Break</i>
15:30 ó 17:00	EHIA in action; communicating results; stakeholdersø negotiation. Groupwork and presentations/role play (MM, II)
17:00	<i>Close</i>