

REGIONAL OFFICE FOR Europe

Health impact assessment (HIA) and health in environmental assessments – Enhancing HIA practice in the Czech Republic

Report on the workshop and the HIA readiness survey 25–26 October 2016, Prague, Czech Republic

by Gabriel Gulis

Keywords

HEALTH IMPACT ASSESSMENT ENVIRONMENTAL HEALTH ENVIRONMENTAL MONITORING CZECH REPUBLIC

Address requests about publications of the WHO Regional Office for Europe to: Publications WHO Regional Office for Europe UN City, Marmorvej 51 DK-2100 Copenhagen Ø, Denmark

Alternatively, complete an online request form for documentation, health information, or for permission to quote or translate, on the Regional Office website (http://www.euro.who.int/pubrequest).

© World Health Organization 2017

All rights reserved. The Regional Office for Europe of the World Health Organization welcomes requests for permission to reproduce or translate its publications, in part or in full.

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by either the World Health Organization or the European Public Health Association in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by the World Health Organization to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either express or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization be liable for damages arising from its use. The views expressed by authors, editors, or expert groups do not necessarily represent the decisions or the stated policy of the World Health Organization.

Contents

Aim and objectives of the workshop	4
Overall Objective	5
Participants	5
Programme	5
Overview of the workshop content	6
25 October 2016	6
26 October 2016	6
Major discussion points	7
Methodology	7
Exchange of good practice	7
Education, training for different groups	
Risk assessment and HIA	7
HIA and decision-making	
HIA legislation	8
Capacities for HIA	
Readiness for HIA implementation	8
Conclusions	9
Conclusions Evaluation of workshop	
	9
Evaluation of workshop	9 . 0
Evaluation of workshop Annex 1. List of participants1	9 .0 .2
Evaluation of workshop	9 .0 .2 .4
Evaluation of workshop	9 .0 .2 .4
Evaluation of workshop	9 .0 .2 .4 .4
Evaluation of workshop. 1 Annex 1. List of participants. 1 Annex 2. Programme of the meeting. 1 Annex 3. HIA preparedness analysis, Czech Republic 1 Introduction 1 Method 1	9 .0 .2 .4 .4 .5
Evaluation of workshop. 1 Annex 1. List of participants. 1 Annex 2. Programme of the meeting. 1 Annex 3. HIA preparedness analysis, Czech Republic 1 Introduction 1 Method. 1 Results 1	9 .0 .2 .4 .4 .5 .8
Evaluation of workshop. Annex 1. List of participants. 1 Annex 2. Programme of the meeting. 1 Annex 3. HIA preparedness analysis, Czech Republic 1 Introduction 1 Method 1 Results 1 Discussion	9 .0 .2 .4 .4 .5 .8
Evaluation of workshop. Annex 1. List of participants. 1 Annex 2. Programme of the meeting. 1 Annex 3. HIA preparedness analysis, Czech Republic 1 Introduction 1 Method 1 Results 1 Discussion 1 Conclusion	9 .0 .2 .4 .4 .5 .8 .8 .8
Evaluation of workshop. 1 Annex 1. List of participants. 1 Annex 2. Programme of the meeting. 1 Annex 3. HIA preparedness analysis, Czech Republic 1 Introduction 1 Method 1 Results 1 Discussion 1 Conclusion 1 Annex 4. HIA readiness assessment survey – extract 1 Annex 5. References and further information sources on HIA 2 References 2	9 .0 .2 .4 .4 .5 .8 .8 .8 .9 .2 .2
Evaluation of workshop	9 10 12 14 14 14 15 18 19 12 19 12 12 14 14 15 18 19 12 12 14 15 18 19 12 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 1

Aim and objectives of the workshop

It is widely recognized that there are many factors that determine the health of individuals and communities. Some of these factors are the responsibility of the health sector, such as the financing and provision of health care services. However, many of the factors that protect and promote health of populations are strongly influenced by the policies and actions of sectors beyond reach of the health sector. For example, there is a strong relationship between the physical environment and health outcomes (for example, air and water pollution) and often these issues are managed by environmental and other sectors, with limited or no direct involvement of health sector. Furthermore differences in health also follow a strong social gradient, which reflect an individual's or population group's position in society and subsequent differential access to and security of resources that are socially determined (e.g., education, employment, housing) as well as differential levels of participation in civic society and control over life.

Health Impact Assessment (HIA) is one of the approaches established in several countries in Europe and on other continents, to promote the necessary inter sectoral dialogue and ensure full consideration of the health implications of proposed policies and plans. HIA has evolved over the years to address key questions for informing and influencing policies, notably the question of health inequalities increasingly observed in contemporary society.

HIA is an approach to estimate the health consequences of projects, plans and policies. It plays a crucial role in governing health implications within whole-of-government and whole-of-society approaches like Health 2020. Health 2020, WHOs European health policy framework, adopted in 2012 by WHO European Member States, re-emphasizes the need for a whole-of-government and whole-of-society approach. HIA can play a crucial role by supporting decision-makers in and out of the health sector to address health impacts and inequalities, and ensure the health of future generations through the identification and estimation of possible impacts of proposed policies and activities. HIA can thus play an important role in achieving the Sustainable Development Goals (SDGs).

The importance of assessing the health implications of policies, plans, programmes and projects of different sectors has been long established. HIA has been promoted as a key approach for intersectoral work in several countries. In addition, in 2011, under the Polish Presidency of the Council of the European Union, the Chief Sanitary Inspectorate organized a ministerial conference "Solidarity in health – closing the health gap between European Union states" which included a workshop, "Implementing health impact assessments: Implications for national and EU level". HIA was (again) defined as an essential element of the Health in All Policies approach and as a tool that aims to inform decision-makers mostly outside of the traditional health sector on future consequences of current decisions.

Through HIA of policies, plans, programmes and projects there is great potential for health gains; the same potential exists in environmental impact assessments (EIAs) and strategic environmental assessments (SEAs), if environmental and social determinants of health are considered, and environmental justice issues are addressed. While HIA is mainly voluntarily conducted in the majority of WHO European Member States, EIAs and SEAs are usually based on legal provisions such as the European Directive on EIA (2014/52/EU), the European Directive on SEA (2001/42/EC) as well as the UNECE Espoo Convention on EIA in a Transboundary Context and its Protocol on SEA. Within these legal frameworks the impacts of different proposals on the health of the population must be assessed. Hence, public health authorities need to be prepared to engage in environmental assessments.

Overall Objective

The overall objective of the workshop in Prague on 25–26 October 2016 was to further support the development and implementation the health impact assessment in the Czech Republic through:

- 1. introducing HIA as a tool to support of inter-sector cooperation;
- 2. reviewing the current situation of HIA implementation and the application of health assessments within environmental assessments;
- 3. discussing with national experts different options and strategies for HIA implementation;
- 4. identifying capacity and data needs for further implementation of HIA and integration of health into environmental assessments and strategic assessment; and
- 5. identifying steps and practical arrangements for further strengthening HIA and the health assessment in environmental assessments and strategic assessments.

Participants

The workshop was attended by 37 professionals from the health, environment and transportation sectors, including the Ministry of Health, Ministry of Environment, Ministry of Transportation, regional authorities, national and regional institutes of public health, and the National Healthy Cities Network, as well as consultants and university representatives. For a full list please refer to the list of participants in Annex 1.

Programme

The programme consisted of a 2-day workshop with technical intervention from the workshop organizers and practical case studies and presentations from the national participants. For the full programme please refer to Annex 2.

Overview of the workshop content

25 October 2016

- The workshop was opened by Alena Steflova, Head of the WHO Country Office, Czech Republic; Marco Martuzzi from the WHO European Centre for Environment and Health (ECEH), Bonn, Germany; Katerina Bathova from the Ministry of Health; and Helena Kazmarova from the National Institute of Public Health. Following a participant introduction round, Marco Martuzzi framed the workshop and HIA within the Regional Office's European Environment and Health Process and Health 2020 policy framework. He also mentioned the possibility of incorporating HIA into the programme of the 6th European Environment and Health Conference to be held in Ostrava, Czech Republic, in June 2017.
- Julia Nowacki ECEH, and Gabriel Gulis, University of Southern Denmark, led the general introduction to HIA and the comparison of HIA with other impact assessment techniques, EIA and SEA in particular.
- This was followed by presentations on the status of HIA and EIA/SEA in the Czech Republic with special focus on the risk appraisal part of HIA and the levels and types of application of HIA (local, regional, national) as well as case study presentations from the Czech Republic.
- Marco Martuzzi presented an exercise on risk assessment within HIA risk appraisal
- Jana Loosova, Regional Public Health Authority Liberec Region, reviewed the status of HIA and, to a smaller extent, EIA, in the Czech Republic, providing extensive information about legislation and established processes. Within this segment there was a presentation by Iveta Drastichova, National Authority on Public Health in Slovakia, on the HIA system established by the Public Health Act 355/2007 in Slovakia and a case study of its application.
- Frantisek Kozisek, National Institute of Public Health (NIPH), presented an HIA case study conducted at national level in the Czech Republic on water management issues. There was lively discussion around key issues in HIA such as the role of screening, limit values or individual risk assessment, enforcement of HIA results, effectiveness of HIA, ability to show the real impact of conducted action, and the use and misuse of the methodology.

26 October 2016

- The second day opened with a presentation by Eva Rychlikova, Ústí nad Labem Health Institute, on HIA application at local/municipal level in the Czech Republic. The presentation was followed by a discussion on potentially positive impacts in HIA, and compliance with recommendations with governance level responsibilities. Hence, HIA recommendations also would need to comply with responsibilities of local level governance, i.e. the HIA should recommend to local authorities only actions, which belong to portfolio of a local authority. It should not contain recommendations for actions, which are governed by regional or national administration.
- As availability of data is an often-discussed issue for any impact assessment a block on data availability was led by Helena Kazmarova,, NIPH, further presentations were provided by Jitka Bouskova, Healthy Cities of the Czech Republic, presenting a newly developed platform for sharing information on HIAs conducted in the Czech Republic, and Tereza Ponocna, Czech Environmental Information Agency). In general, there is a lot of available data both on demography and health and environment, often even at a local level.
- Further presentations and discussion were around stakeholder engagement and health equity within HIA, after which the workshop moved to HIA implementation. First, Gabriel Gulis provided a presentation on the theory of Diffusion of Innovation (Rogers) and the policy

implementation scheme by Mazmanian and Sabatier. After that he and Julia Nowacki reviewed different implementation strategies from around the globe, using examples from a WHO expert meeting on HIA held in 2015 in Bonn.

• The final part of the workshop involved group discussions on the most likely future of HIA implementation in the Czech Republic and the necessary steps for its progress. Results of the group discussions were presented and further addressed in plenary until the end of workshop.

Major discussion points

Methodology

HIA and EIA/SEA are almost the same in terms of methodology; methods, processes and practices are similar. Yet, while HIA is mostly done on a voluntary basis, EIA/SEAs are usually based on legal regulations and this has an impact on stages of the methodology. As presented at the workshop, HIA in the Czech Republic is mostly done as a kind of health risk assessment and part of EIA/SEA. Work is initiated based on inquiry and contract which makes the screening stage of HIA redundant. Even more importantly, scoping is either not done, or done to a limited extent, leading to rather broad risk appraisals. It was recommended that more detailed scoping should help to identify priorities for risk appraisal, and increase concreteness and quality of impact assessments. Participants also raised the issue of developing similar listings of examples when to do and when not to do a HIA as it is usually in annexes of EIA legislation. Due to a rather wide range of potential health determinants and health outcomes this is not to be expected in the near future; detailed screening, if completed, and even more scoping, can help with the decision to do HIA and to what extent.

Exchange of good practice

Participants discussed the need for a systematic national platform for exchange of methodology, good practice cases, experience in conducting HIAs, and use of its recommendations. It was suggested that, due to historical ties (used to be one country as Czechoslovakia) between the two countries, the Czech Republic and Slovakia could develop shared conferences, education programs, etc. The Visegrad platform (formal coordination and collaboration mechanisms of Poland, Czech Republic, Slovakia and Hungary, please see http://www.visegradgroup.eu) might be one option to support such collaboration. A shared internet platform can be hosted by Visegrad platform for example.

Education, training for different groups

The current education and licensing system addresses recent practices as described under previous item; there is supplemental education on health risk assessment, but not on full scope HIA. Participants expressed interest in further training on HIA, from both the doers (the HIA experts) and evaluators/initiators (the hygiene service). An important target group is policy-makers, who could also be a target for HIA-related training; participants believe that such education could increase the demand for HIA and improve the use of recommendations.

Risk assessment and HIA

The similarities and differences between the two were discussed: risk assessment is a relatively narrow standard methodology used to estimate risks related to single pollutant or a mix of pollutants. It starts usually based on scientific interest or need for new knowledge. HIA on the other hand, is a broad, open process, which, at the risk appraisal stage, also includes risk assessment or findings of already completed

Enhancing HIA practice in the Czech Republic page 8

risk assessments. When HIA is initiated of a new policy or project, the decision-makers need more knowledge upon potential health impacts. In contrary, risk assessment is done when there is a gap in knowledge on how a single pollutant influences health.

HIA and decision-making

A conceptual document on HIA within the Czech Republic, prepared by Jana Loosova and Bohumil Havel, was presented to participants of the workshop as guidance on how to conduct HIA. It was recommended to add a linkage to decision-making systems, processes and responsibilities in the Czech Republic.

HIA legislation

There is a lack of legislative background for HIA implementation. Participants agreed that the Czech Republic should try to emulate the Slovak practice of HIA implementation. In order to ensure that HIA is done on a regular basis, legislative regulation could be considered. Such legislation should be carefully prepared and clear in terms of stages of HIA regulated and capacity development. In order to raise awareness of policy- and decision-makers, national HIA guidelines should be developed and disseminated. A specific focus should be on the added value to be gained through HIA and further integration of health in environmental assessments. Systematic training should be developed and conducted, targeting different groups. Such training requires acceptance of both biomedical and social/policy orientation of modern public health.

Capacities for HIA

In order to develop the needed human and institutional capacities there is also the need to identify the appropriate funding not only for training in the relevant authorities and for HIA assessors but also for maintaining knowledge as well as for conducting HIAs.

Readiness for HIA implementation

A survey on readiness for HIA implementation in the Czech Republic had been sent to the workshop participants beforehand. Gabriel Gulis explained the reasoning behind the survey and announced that findings would be published. Findings of the survey are found in Annex 3.

Conclusions

The workshop provided an excellent opportunity for participants and guest lecturers to discuss HIA and its implementation within the wider framework of the European Environment and Health Process and Health 2020. Furthermore the workshop raised interest among participants in:

- identifying the best and most suitable implementation methods existing in other public health systems to further implement HIA in the Czech Republic;
- developing tailored HIA guidelines at national, regional and municipal levels; and
- strengthening intersectoral collaboration especially with the education, environment and health ministries with the aim to closely link EIA, SEA and HIA.

Evaluation of workshop

In total 13 participants gave their feedback on the workshop. The main issues learned at the workshop according to the participants were the interlinkages of HIA and environmental assessments like EIA and SEA as well as the different HIA implementation strategies. Participants especially liked the open discussions, networking opportunities, the balance between theory and practice as well as the presentations, even though some slides were too comprehensive and some more practical examples would have added further to the workshop. Overall the workshop was rated as meeting very well the expectations (8.8 on a scale of 1-10 with 1 meeting expectations not at all and 10 meeting expectations very much.)

Annex 1. List of participants

Name	Institution
Hana Bártová	Regional Public Health Authority Karlovy Vary Region
Kateřina Baťhová	Ministry of Health of the Czech Republic
Jitka Boušková	National Healthy Cities Network
lveta Drastichová	Public Health Authority of the Slovak Republic
Pavel Dusílek	HIA Expert
Pavla Dušková	HIA Expert
Milada Eštóková	Public Health Authority of the Slovak Republic
Ondřej Fries	Ministry of Health of the Czech Republic
Eva Gottvaldová	Chief Public Health Officer, Deputy Minister of Health of the Czech Republic
Eva Javoříková	Regional Public Health Authority Zlín Region
Denisa Jenčovská Pelikánová	HIA Expert
Zuzana Kadlecová	Regional Authority of the Ústi Region
Helena Kazmarová	National Institute of Public Health
Květoslava Kotrbová	Regional Public Health Authority of South Bohemia Region
František Kožíšek	National Institute of Public Health
Jan Kresta	Regional Public Health Authority of Moravian – Silesian Region
Jana Loosová	Regional Public Health Authority Liberec Region
Dana Lupačová	Ministry of Health of the Czech Republic
Lenka Mařincová	Department of Development Studies of Palacký University Olomouc
Jana Mullerová	Ministry of Health of the Czech Republic
Tereza Ponocná	CENIA, Ministry of Environment of the Czech Republic
Petra Reichlová	HIA Expert
Jaroslav Říha	Regional Public Health Authority Pardubice Region
Eva Rychlíková	Health Institute in Ústí nad Labem
Eva Sedláčková	Regional Public Health Authority Zlín Region
Alexander Skácel	HIA Expert
Robert Spáčil	Ministry of Transportation of the Czech Republic
Roman Šťastný	Regional Public Health Authority Ústi nad Laben Region

Jaroslava Švarcová	Regional Public Health Authority of South Bohemia Region
Pavla Svrčinová	Regional Public Health Authority Prague
Monika Todtová	Regional Public Health Authority Hradec Králové Region
Hana Vokálová	Ministry of Health of the Czech Republic
Jaroslav Volf	HIA Expert
Magdalena Wantochová	HIA Expert
Vladimíra Zárubová	Regional Public Health Authority
Monika Zemancová	HIA Expert
Magdalena Zimová	HIA Expert

Workshop organizers and facilitators

Gabriel Gulis	University of Southern Denmark, Esbjerg
Pavla Kortusová	WHO Country Office, Czech Republic
Marco Martuzzi	WHO Regional Office for Europe
Julia Nowacki	WHO Regional Office for Europe
Alena Šteflová	WHO Country Office, Czech Republic

Annex 2. Programme of the meeting

Tuesday, 25 October 2016

• -	
09.00 - 09.15	Registration/Welcome coffee
09.15 – 10.15	 Welcome (WHO, Ministry of Health, and National Institute of Health of the Czech Republic) Information on the 6th European Ministerial Conference on Environment and Health 2017, Ostrava, Czech Republic Introduction to the Workshop and the underlying policy frameworks (M Martuzzi) "Tour de table"
10.15 - 11.00	Overview on Health Impact Assessment (HIA) Part I – A brief introduction to HIA (J Nowacki/G Gulis)
	 What types of HIA exists? What are the steps? Health determinants including social and economic determinants The Essential public heath operations with focus on HIA
11.00 - 11.30	Coffee break
11.30 - 13.00	Overview on HIA Part II – Linking HIA to Environmental Impact Assessment (EIA) and Strategic Environmental Assessment (SEA) (J Nowacki/G Gulis)
	Why health in Environmental Assessments (EAs)?
	Overview on HIA, EIA and SEA in the Czech Republic including legislation (representative of Czech HIA group – J Loosová, L Mařincová)
13.00 - 14.00	Lunch break
14.00 - 14.45	Exemplary HIA case study – Screening and scoping (G Gulis/J Nowacki)
	 In which cases HIA should be performed and who should decide upon this? Who should be responsible for and who should perform screening? Who should be involved in the HIA?
14.45 – 15.30	Case study 1 – Czech HIA on national level (F Kožíšek) Facilitated discussion (Facilitators: G Gulis/J Nowacki)
	 Analysis and feedback on the case studies: Discussion of the experience from the HIA (Facilitators: G Gulis/J Nowacki)
15.30 - 16.00	Coffee break
16.00 - 17.30	Exemplary HIA case study – the appraisal stage (G Gulis/J Nowacki) An example for data analysis – the air pollution case (M Martuzzi)

Wednesday, 26 October 2016

09.00 – 09.45	Question and Answers from Day 1 (G Gulis/J Nowacki) Case study 2 – Czech HIA on municipal level (E. Rychlíková) Facilitated discussion with participants (Facilitators: G Gulis/J Nowacki)
	 Analysis and feedback on the case studies: Discussion of the experience from the HIA
09.45 – 10.30	Data for HIA (H. Kazmarová) Data for environmental assessments (representative of Ministry of Environment or Environmental Protection Agency)
	 Which data sources are available in the Czech Republic to inform the HIA and the health assessment within EIA and SEA?
	Facilitated discussion with participants (Facilitators: G Gulis/J Nowacki)
	 Accessibility of data (who, which level?) Existing data lacks? How to access and/or integrate socioeconomic data? What data is needed? How shall data collection be organized?
10.30 - 11.00	Coffee break
11.00 - 11.30	Presentation of Czech software for HIA implementation (Healthy Cities Network J Bouskova)
11.30 - 12.00	Exemplary HIA case study – options for stakeholder engagement (G Gulis/J Nowacki)
12.30 - 13.30	Lunch break
13.30 - 14.15	Case study 3 – Czech HIA on regional level (E Rychlikova) Facilitated discussion with participants (Facilitators: G Gulis/J Nowacki)
	 Analysis and feedback on the case studies: Discussion of the experience from the HIA
14.15 – 15.00	HIA implementation – theories and principles and application for, review of different ways of implementation of HIA (G Gulis)
	 How to organize HIA conduct? Who is recruited? Who is responsible for each step? How to evaluate health? Readiness for implementation concept; Discussion should include practical experience from Czech case studies presented the previous day
15.00 - 15.15	Coffee break
15.15 - 16.00	Training on environment and health in the Czech Republic (H Kazmarová)
	Who, where, how long, licensing
	Lessons learned, needs and options for capacity building in environment and health in the Czech republic (Facilitators: leader of Czech HIA group/G Gulis)
16.00 - 16.30	Conclusion and next steps (H Kazmarova/A Steflova/J Nowacki/G Gulis)

16.00 – 16.30 Conclusion and next steps (H Kazmarova/A Steflova/J Nowacki/G Gulis)

Annex 3. HIA preparedness analysis, Czech Republic

Introduction

The Czech Republic is one of several countries considering implementation of health impact assessment (HIA) to support existing public health systems and further improve quality of life and well-being.

The country's public health system is, according to "Health Systems in Transition; Czech Republic"¹ largely based on operation of the National Institute of Public Health in Prague, two regional public health institutes in Ústi nad Labem and Ostrava, and 14 Public Health Authority institutes. This network was reorganized into the current structure in 1993. It is based on the former network of public health authorities, similar to those in other countries in central and eastern Europe after the Second World War. The system's primary mandate is to protect the health of the population from infectious disease, environmental conditions and occupational health hazards. These functions are still the core functions of the public health authorities, whereas the National Institute of Public Health and the two regional public health institutes focus more on methodological development. A detailed description of the system including responsibilities is available in the above-mentioned report.

The Czech Republic shows long-term interest in implementing HIA. The country, represented by different institutions, has participated in several European Union funded research projects related to HIA, the "Effectiveness of Health Impact Assessment" (Wismar et al., 2007), among others was also very active in negotiations of the UNECE Protocol on Strategic Environmental Assessment (SEA) to the Espoo Convention on Environmental Impact Assessment (EIA) in a Transboundary Context, especially focusing on the health part of it (Volf J. – personal communication). On local and regional level the Czech Republic actively includes HIA within both Healthy Cities and Regions for Health networks of the WHO Regional Office for Europe (Valenta V. and Loosová J. – personal communication). Experts from the Czech Republic are also members of the HIA section of the European Public Health Association (Mařincová L – personal communication). The interest of the country in conducting a workshop on HIA in Prague could therefore be considered as a part of a logical process to move towards full implementation of HIA in the Czech Republic. The workshop conducted on 25–26 October 2016 at the Ministry of Health in Prague gathered 37 participants and provided an excellent forum for discussing both content of HIA and implementation needs. Four sectors were represented: Ministry of Health, Ministry of Environment, regional administration and private consultancy companies.

This report summarizes the development and conducts of an online survey to assess level of preparedness for full implementation of HIA in Czech Republic and brings the results of it followed by brief discussion and recommendations.

Method

A survey tool, developed by the author of this report in 2015 to conduct a similar survey in Poland, was used to collect data (Gulis, 2015, internal report of WHO country office in Warsaw, Poland). The original survey tool was translated into Czech and was reviewed by a small group of experts (author of the report and two Czech HIA experts, Jana Loosová and Lenka Mařincová). The original full survey tool can be found in the annex of this report.

¹ <u>http://www.euro.who.int/ data/assets/pdf_file/0005/280706/Czech-HiT.pdf</u>

An evaluation scale was set using the "stages of community readiness" developed by Edwards et al. (2000):

- 0 = strongly disagree, no awareness, not an issue
- 1 = some recognition of the problem but it is confined to a small group
- 2 = some recognition, some notion of doing something
- 3 = clear recognition of the problem, something needs to be done, leaders emerge, but not specifics yet
- 4 = active planning with a focus on details, leadership is active, resources are being assessed and expanded
- 5 = enough preparation has been done to justify efforts, policies and actions are underway and still seen as new, enthusiasm is high
- 6 = strongly agree, programs are up and running with support from administrators and leaders, staff have been trained and are experienced

Key categories to assess were identified by the author of this report as awareness on impact assessment on general, existence of personnel capacities, good public health culture, existence and accessibility of data, existence of other resources such as infrastructure, and practice of intersectoral work. These categories were addressed through 21 questions and respondents were asked to score the community's readiness according to their own perception.

The survey itself was conducted online using SurveyXact. All together 29 HIA practitioners were contacted.

Results

The response rate was 76%: out of 29 invited participants 22 responded. Fifteen respondents came from the health sector, among them 8 from regional public health authorities (Krajská hygienická stanice), 3 from the environmental sector, 1 from regional administration (Krajský uřad) and 3 from private consultancies dealing with impact assessment.

Awareness of impact assessment

There were three questions on awareness of impact assessment including HIA: the mean response score is presented just after the question:

- 1. The notion that activities of most of sectors affect the health determinants and health is recognized in your country 3.1
- 2. The need for impact assessment as such is recognized in my sector -3.7
- 3. It is recognized that health and well-being considerations should be included in conducted impact assessments 2.7

Participants commented that there is good knowledge on determinants of health among health professionals and some NGOs dealing with public health. However, this knowledge and awareness is rarely translated into policy and regulation. Often it is only the physical environmental determinants of health which are considered (water, air, noise, etc.). This has a consequence on impact assessment practice. Although there is a high recognition of the need for impact assessment, respondents commented that practice is often restricted to health risk assessment of environmental and social determinants of health. There is very limited assessment with regard to well-being. Most of the assessment work is done within the framework of EIA/SEA.

Enhancing HIA practice in the Czech Republic page 16

Level of public health culture

The second set of questions assessed the level of public health culture in the country. A high public health culture was defined as one in which experts are aware of the Essential Public Health Operations (EPHOs) defined by the WHO Regional Office for Europe, and the public health sector works completely according to the EPHOs. The higher the public health culture, the easier would be the implementation of inter sectoral tools and methods such as HIA. The following two questions were asked (mean scores of responses included):

- 4. The Essential Public Health Operations (EPHO) of WHO are acknowledged, recognized and followed? in the country 3
- 5. Importance of the exchange of experience with conduct of EPHOs including impact assessment within the country (seminars, continuous lifelong learning, etc.) is recognized 3.8

Respondents commented that most of the EPHOs are included in policy documents and legislation, but, for example, the issue of inequalities and health is very formally dealt with. The National Health Strategy 2020 and its 13 action plans contain most of the EPHOs, but implementation is lagging slightly behind. There was a wide consensus on the existence of exchange activities such as seminars and career-long training, yet transfer of knowledge into policy documents and practice is very slow. Respondents unanimously asked for more training activities.

Personal capacities including training

The third assessed category was personal capacities including training; the following three questions were asked (mean scores of responses included):

- 6. It is recognized that public health training should cover both medical and socio-political model of health -2.3
- 7. A need for a specialized education on health in impact assessment is acknowledged in your country 2.8
- 8. A need for a specialized education on risk assessment is acknowledged in your country 3.4

Most of the respondents commented that public health education is available at post-graduate level but in the majority of cases the focus is on the biomedical model. They expressed a need to widen education to include the social model of health. The need for specialized training both on HIA and on risk assessment was highlighted, with comments that it is not just lack of training but also lack of experts to conduct training

Availability and accessibility of data

The fourth assessed category was on availability and accessibility of data, with only one question (mean score of responses included):

9. It is recognized that data is needed to conduct impact assessment and such data is available for use to experts conducting health impact assessment – 3.3

There are many data available in the Czech Republic though often not at the necessary level (local, regional, state) and access is often limited. One respondent suggested development of a guidance document on the use of data within HIA which would summarize existing sources of data and ways of access.

Other resources

The fifth assessed category was on other resources. The following seven questions were asked (including mean scores of responses):

- 10. The need for institutions (departments, unit, resource centers) to support impact assessment is recognized in your country 3
- 11. A legal mandate (law, act, ordinance) is seen as important to support conduct of impact assessments in your country 3.6
- 12. Systematic mechanisms within administration to support impact assessment are considered important 2.4
- 13. A need for funding mechanisms to support research and conduct of impact assessment is recognized in your country -2.8
- 14. The importance of guidance documents developed for conduct of impact assessment in the national language is recognized in your country -3.3
- 15. A need for a web-based platform or any similar forum to exchange experience on impact assessment and present best practice examples is recognized in your country 2.4
- The need for systematic knowledge translation mechanism related to public health and impact assessment processes to ensure systematic research-practice-policy communication is recognized in your country – 2.9

Respondents felt that the National Public Health Institute in Prague could be considered as the leading organization for HIA, and that if impact assessment techniques were strengthened it could become a highly recognized leader in the field. Legal implementation of HIA is currently only within EIA/SEA and it is considered positive. Systematic intersectoral mechanisms to conduct HIA could be much stronger if the Health in All Policy approach is more widely recognized and applied in the Czech Republic, especially within non-health sectors. Funding mechanisms are missing which leads to a lack of research on HIA. There are some methodologies available, mostly for health risk assessment, and an update of those would be highly relevant according to comments of respondents. There was agreement upon the need for an HIA platform in Czech where experts can exchange experience and consult practical issues around impact assessment. Systematic research-practice-policy translation mechanisms are not strongly developed in country.

Recognition of importance of working across sectors

The last category assessed the recognition of importance of working across sectors. The following four questions were asked (mean scores of responses included):

- 17. My sector has agreements about intersectoral collaboration focused on health 2.2
- 18. When my sector participates in inter sectoral collaboration on health this is structural or long-term (systematic) 2.3
- 19. Meetings take place regularly between my sector and health sector workers (or between the health sector and other sectors if health sector employee is the respondent) 2.4
- 20. My sector has key persons who are responsible for collaboration with the health sector (or other sectors) 2.5

The relatively low scores on intersectoral collaboration reinforces the statements made by respondents earlier on a lack of implementation of the Health in All Policies principle, as well as the orientation toward a biomedical model of health. In addition, one must consider that some respondents were representing their own private consultancy companies and the questions were not relevant to them. One respondent mentioned a former intersectoral collaboration committee as a good example, but unfortunately that committee no longer exists.

Enhancing HIA practice in the Czech Republic page 18

Summarizing the assessed categories we see the following range of mean scores:

•	Awareness about impact assessment	2.7 – 3.7
•	Public health culture	3.0 - 3.8
•	Capacity building	2.3 – 3.4
•	Data	3.3
•	Other infrastructure	2.4 - 3.6
•	Practice of intersectoral work	2.2 – 2.5

These scores mean that the readiness for HIA implementation in the Czech Republic is on the level of "active planning with a focus on details, leadership is active, resources are being assessed and expanded" (Edwards et al., 2000). The lowest scores were given for practice of regular intersectoral meeting mechanisms.

Discussion

The survey provides an interesting and inspiring insight into readiness for implementation of HIA in the Czech Republic. A closed group of HIA workshop participants served as respondents. They came from three sectors; health, environment and private consultancy business. Results seem to produce realistic estimate of recent level of implementation of HIA in the Czech Republic. There is a high level of preparedness for full implementation due to existing tradition and knowledge on health risk assessment, availability of data and a leading institution, the National Public Health Institute in Prague. Yet, more work needs to be done on additional training, methodology and guidance development work, widening public health curricula toward the social model of health and application of the Health in All Policies approach.

Conclusion

The survey identifies priorities to enhance implementation of HIA in a systematic way in the Czech Republic. Those priorities should focus on enlarging the scope of public health work, capacity building in terms both of human capacities and securing systematic funding for implementation and conduct of HIA. To get more objective information it is recommended to repeat the survey and include more respondents who work in the field of public health and impact assessment (especially from academic settings and other sectors). A follow-up interview process can also help to increase the validity of results; a document and policy analysis could be also conducted.

Based on the results and taking into account all potential biases it can be concluded that the Czech Republic is in the phase of "active planning with a focus on details, leadership is active, resources are being assessed and expanded" (Edwards et al., 2000).

Annex 4. HIA readiness assessment survey - extract

We kindly ask you to complete the following survey from your own point of view. Please take into consideration your country as administrative unit.

The statements can be answered assigning a numerical value on a scale from 0-6. The values represent the following:

- 0 = strongly disagree, no awareness, not an issue
- 1 = some recognition of the problem but it is confined to a small group
- 2 = some recognition, some notion of doing something
- 3 = clear recognition of the a problem, something needs to be done, leaders emerge, but not specifics yet
- 4 = active planning with a focus on details, leadership is active, resources are being assessed and expanded
- 5 = enough preparation has been done to justify efforts, policies and actions are underway and still seen as new, enthusiasm is high
- 6 = strongly agree, programs are up and running with support from administrators and leaders, staff have been trained and are experienced

You are welcome to comment and further explain your score if needed in the comment window provided after each statement.

I am employed in following sector:

(1)	health
(2)	education
(3)	social affairs and labour
(4)	environment
(5)	other, please specify:
(6)	

- 1.A. The notion that activities of most of sectors affect the health determinants and health is recognized in your country.
- 1.B. Comment
- 2.A. The need for impact assessment as such is recognized in my sector.
- 2.B. Comment
- 3.A. It is recognized that health and well-being considerations should be included in conducted impact assessments.
- 3.B. Comment

- 4.A. The Essential public health operations by WHO (EPHO) are acknowledged, recognized and conducted in country.
- 4.B. Comment
- 5.A. Importance of the exchange of experience with conduct of EPHO's including impact assessment within country (seminars, continuous lifelong learning, etc.) is recognized.
- 5.B. Comment
- 6.A. It is recognized that public health training should cover both medical and socio-political model of health.
- 6.B. Comment
- 7.A. A need for a specialized education on health in impact assessment is acknowledged in your country.
- 7.B. Comment
- 8.A. A need for a specialized education on risk assessment is acknowledged in your country.
- 8.B. Comment
- 9.A. It is recognized that data is needed to conduct impact assessment and such data is available for use to experts conducting health impact assessment.
- 9.B. Comment
- 10.A. The need for institutions (departments, unit, resource centers) to support impact assessment is recognized in your country.
- 10.B. Comment
- 11.A. A legal mandate (law, act, ordinance) is seen as important to support conduct of impact assessments in your country.
- 11.B. Comment
- 12.A. Systematic mechanisms within administration to support impact assessment are considered important.
- 12.B. Comment

- 13.A. A need for funding mechanism to support research and conduct of impact assessment is recognized in your country.
- 13.B. Comment
- 14.A. The importance of guidance documents developed for conduct of impact assessment in national language is recognized in your country.
- 14.B. Comment
- 15.A. A need for a web based platform or any similar forum to exchange experience on impact assessment and present best practice examples is recognized in your country.
- 15.B. Comment
- 16.A. The need for systematic knowledge translation mechanism related to public health and impact assessment processes in country to ensure systematic research-practice-policy communication is recognized in your country.
- 16.B. Comment
- 17. My sector has agreements about intersectoral collaboration focused on health.
- 18. When my sector participates in inter sectoral collaboration on health this is structural or long-term (systematic).
- 19. Meetings take place regularly between my sector and health sector workers (or in opposite between health sector and other sector workers if health sector employee is the respondent).
- 20. My sector has key persons who are responsible for collaboration with health sector (or with other sectors if health sector employee is the respondent).
- 21. Comments to questions 17-20

Thank you for completing the survey!

Annex 5. References and further information sources on HIA

References

Rogers EM (1995). Diffusion of innovation. New York: The Free Press

- Mazmanian DA, Sabatier PA (1989). Implementation of public policy. New York, London: University Press of America, Lanham
- Edwards RW, Jumper-Thurman P, Plested BA, Oetting ER, Swanson L (2000). Community Readiness: Research to Practice, Journal of Community Psychology, Vol. 28, No. 3, 291-307
- Wismar M, Blau J, Ernst K, Figueras J, eds. (2007). The Effectiveness of Health Impact Assessment: Scope and limitations of supporting decision making in Europe, Copenhagen: WHO Regional Office for Europe.

Webpages on HIA

Terminology & key concepts

International Association for Impact Assessment (IAIA)

- Health section <u>http://www.iaia.org/sections/health.aspx</u>
- Best practice principles <u>http://www.iaia.org/publicdocuments/special-publications/SP5.pdf</u>
- IAIA health section blog <u>http://healthimpactassessment.blogspot.com</u>

HIA Connect

- What is HIA <u>http://hiaconnect.edu.au/resources/about-hia/</u>
- Health Impact Assessment. A practical guide <u>http://hiaconnect.edu.au/wp-content/uploads/2012/05/Health_Impact_Assessment_A_Practical_Guide.pdf</u>

WHO HIA sites

- About HIA <u>http://www.who.int/hia/about/en/</u>
- Glossary of key terms used <u>http://www.who.int/hia/about/glos/en/index.html</u>
- Capacity building and health in environmental assessments www.euro.who.int/healthimpact
- A toolkit for cities <u>www.euro.who.int/en/health-topics/environment-and-health/urban-health/activities/health-impact-assessment</u> this toolkit contains a detailed description what is HIA, a short brochure for politicians on why is HIA needed, a training manual for HIA including a screening tool developing table and reports of two case studies from testing the toolkit in a municipality in Slovakia and in Italy;
- Environmental health and HIA <u>www.enhis.org/object_class/enhis_healthimpact</u> <u>assessment.html</u> – this web site contains a tool to conduct risk assessment on environmental health issues including selection of indicators;

The HIA Gateway

- Glossary of terms, guides, reports, tools, related references, causal diagrams are enclosed (but since 2016 not updated anymore):
- http://www.apho.org.uk/resource/view.aspx?RID=48175
- HIA Guides <u>http://www.apho.org.uk/default.aspx?RID=44538</u>

Further support units/blogs

- IMPACT International Health Impact Assessment Consortium, Institute of Psychology Health and Society, University of Liverpool – <u>http://www.liv.ac.uk/psychology-health-and-</u> <u>society/research/impact/about/</u>
- The Welsh HIA Support Unit <u>www.wales.nhs.uk/sites3/home.cfm?orgid=522</u> –a leader of HIA work in Wales;
- Australia, New South Wales HIA project <u>www.hiaconnect.edu.au/nsw_hia_project.htm</u> and <u>www.hiaconnect.edu.au/;</u>
- Asian-Pacific HIA information system, Republic of Korea <u>http://hia.kihasa.re.kr/eng/index.jsp</u>; and
- Spanish HIA information system (in Spanish) <u>http://www.creis.es/</u>.

Reports of completed HIAs

- HIA Connect site <u>http://hiaconnect.edu.au/reports/</u>. If you are interested in an equity focused HIA suggest you review either the *Marang Dhali Eating Well EFHIA* or the *Equity Focused HIA of the Review of Goodooga Health Service*
- IMPACT International Health Impact Assessment Consortium, Institute of Psychology Health and Society, University of Liverpool – <u>http://www.liv.ac.uk/psychology-health-and-</u> society/research/impact/publications/
- WHO HIA site <u>http://www.who.int/hia/examples/en/</u> –
- The HIA Gateway <u>http://www.apho.org.uk/default.aspx?RID=44538</u>

Selected publications

Books on HIA

- Birley M (2011). Health Impact Assessment: Principles and Practice. London: Routledge.
- Gulis G, Mekel O, Adam B, Cori L, editors (2014). Assessment of Population Health Risks of Policies. New York, Heidelberg, Dordrecht, London: Springer.
- Kemm J, editor. (2012)Health Impact Assessment: Past achievement, current understanding, and future progress. Oxford: Oxford University Press.
- Kemm J, Parry J, Palmer S, editors. (2004). Health Impact Assessment: Concepts, theory, techniques, and applications. Oxford: Oxford University Press.
- O`Mullane M, editor. (2013). Integrating Health Impact Assessment with the Policy Process: Lessons and experiences from around the world. Oxford: Oxford University Press.
- Wismar M, Blau J, Ernst K, Figueras J, editors. (2007). The effectiveness of Health Impact Assessment. Scope and limitations of supporting decision-making in Europe. Copenhagen: WHO Regional Office for Europe, on behalf of the European Observatory on Health Systems and Policies; (<u>http://www.euro.who.int/__data/assets/pdf_file/0003/98283/E90794.pdf</u>, accessed 16 September 2014)

Enhancing HIA practice in the Czech Republic page 24

HIA methodology

- Diwan V, Douglas M, Karlberg I, Lehto J, Magnússon G, Ritsatakis A, editors (2000). Health Impact Assessment: from theory to practice. Report on the Leo Kaprio Workshop, Gothenburg, 28-30 October 1999. Göteborg: Nordic School of Public Health.
- Gulis G, Fujino Y (2015). Epidemiology, Population Health, and Health Impact Assessment. Journal of Epidemiology, 25(3):179–180; doi:10.2188/jea.JE20140212.
- Gulis G, Zeegers D. (2014). What is and what is not Health Impact Assessment. European Journal of Public Health24(6):875. doi:10.1093/eurpub/cku132.
- Harris P, Spickett J (2010). Health impact assessment in Australia: A review and directions for progress. Environmental Impact Assessment Review, 31(4):425–432.
- Harris-Roxas B, Harris E (2011). Differing forms, differing purposes: A typology of HIA. Environmental Impact Assessment Review, 31(4):396–403.
- Harris-Roxas B, Viliani F, Bond A, Cave B, Divall M, Furu P et al. (2012). Health impact assessment: the state of the art. Impact Assessment and Project Appraisal, 30(1):43–52.
- Krieger N, Northridge M, Gruskin S, Quinn M, Kriebel D, Davey-Smith G et al. (2003). Assessing health impact assessment: multidisciplinary and international perspectives. Journal of Epidemiology and Community Health, 57:659 https://icen.bmj.com/content/57/9/659.full.pdf+html, accessed 4 April 2014).
- Mahoney M (2009). Imperatives for Policy Health Impact Assessment: perspectives, positions, power relations. Unpublished PhD thesis. Victoria, Australia: Deakin University.
- Quigley R, den Broeder L, Furu P, Bond A, Cave B, Bos R (2006). HIA International Best Practice Principles. Fargo: International Association for Impact Assessment (Special Publication Series No. 5; <u>https://www.iaia.org/publicdocuments/special-publications/SP5.pdf</u>, accessed 4 April 2014).
- St-Pierre L (2015). When to Perform a Health Impact Assessment (HIA)? Montréal: National Collaborating Centre for Healthy Public Policy. (http://www.ncchpp.ca/133/publications.ccnpps?id_article=1457, accessed 20 October 2015).
- Vohra S (2007). International perspective on health impact assessment in urban settings. NSW Public Health Bulletin, 18(9 10):152
 (http://www.publish.csiro.au/?act=view_file&file_id=NB07085.pdf, accessed 4 April 2014).
- WHO European Centre for Health Policy (1999). Health Impact Assessment: main concepts and suggested approach. Gothenburg consensus paper. Brussels: WHO Regional Office for Europe on behalf of the European Centre for Health Policy.
- Winkler MS, Krieger GR, Divall MJ, Cissé G, Wielga M, Singer BH et al. (2013). Untapped potential of health impact assessment. Bull World Health Organ, 91:298–305 (<u>http://www.who.int/bulletin/volumes/91/4/12-112318/en/</u>, accessed 4 April 2014).

HIA and environmental assessments

- Bhatia R, Wernham A (2008). Integrating human health into environmental impact assessment: an unrealized opportunity for environmental health and justice. Environmental Health Perspectives, 116(8):991–1000. doi: 10.1289/ehp.11132.
- Fehr R, Viliani F, Nowacki J, Martuzzi M, editors (2014). Health in Impact Assessments: Opportunities not to be missed. Copenhagen: WHO Regional Office for Europe. (<u>http://www.euro.who.int/health-in-IA</u>, accessed 20 October 2015).
- Hilding-Rydevik T, Vohra S, Ruotsalainen A, Pettersson Å, Pearce N, Breeze C et al. (2005). Health aspects in EIA. D 2.2 Report WP 2. IMProving the IMPlementation of Environmental IMPact Assessment. Vienna: Österreichisches Institut für Raumplanung (Sixth Framework Programme; http://bit.ly/MpuV2v, accessed 15 September 2014).

- Mindell J, Joffe M (2003). Health Impact Assessment in relation to Other Forms of Impact Assessment. Journal of Public Health Medicine, 25(2):107–13
- Morris SC, Novak EW (1976). Environmental health impact assessment. Journal of Environmental Engineering, (102):549–54.
- Nowacki J, Martuzzi M, Fischer TB, editors (2010). Health and strategic environmental assessment. WHO consultation meeting, Rome, Italy, 8–9 June 2009. Background information and report.. Copenhagen: WHO Regional Office for Europe (<u>www.euro.who.int/___data/assets/__pdf_file/0006/112749/E93878.pdf</u>, accessed 1 April 2014).
- UNECE (2003). Protocol on Strategic Environmental Assessment to the convention on Environmental Impact Assessment in a transboundary context. Geneva: United Nations Economic Commission for Europe (<u>http://www.unece.org/env/eia/sea_protocol.htm</u>, accessed 1 March 2014).

HIA guidance documents

- IFC (2009): Introduction to Health Impact Assessment. Washington, DC: International Finance Corporation (<u>www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_</u> <u>corporate_site/ifc+sustainability/publications/publications handbook_healthimpactassessment_w</u> <u>ci_1319578475704</u>, accessed 4 April 2014).
- Scott-Samuel A, Birley M, Ardern K (2001). The Merseyside Guidelines for health impact assessment. 2nd Edition. Liverpool: IMPACT. (<u>http://www.liv.ac.uk/psychology-health-and-society/research/impact/publications/</u>, accessed 20 October 2015).
- Vohra S, Birley M, Ball J (2010). Good Practice Guidance on Health Impact Assessment. London, United Kingdom: International Council on Mining and Metals (ICMM). (<u>http://www.icmm.com/publications/good-practice-guidance-on-health-impact-assessment</u>, accessed 20 October 2015).

Standards and quality assurance in HIA

- Bhatia R, Farhang L, Heller J, Lee M, Orenstein M, Richardson M, Wernham A. (2014). Minimum Elements and Practice Standards for Health Impact Assessment (HIA). Version 3. Oakland, California, United States: North American HIA Practice Standards Working Group. (<u>http://www.humanimpact.org/news/hiapracticestandards/</u>, accessed 20 October 2015)
- Fredsgaard MW, Cave B, and Bond A (2009). A review package for Health Impact Assessment reports of development projects. Ben Cave Associates Ltd. 2009. <u>http://bit.ly/k63NtC.</u>

The World Health Organization (WHO) is a specialized agency of the United Nations created in 1948 with the primary responsibility for international health matters and public health. The WHO Regional Office for Europe is one of six regional offices throughout the world, each with its own programme geared to the particular health conditions of the countries it serves.

Member States

Albania Andorra Armenia Austria Azerbaijan Belarus Belgium Bosnia and Herzegovina Bulgaria Croatia Cyprus Czechia Denmark Estonia Finland France Georgia Germany Greece Hungary Iceland Ireland Israel Italv Kazakhstan Kyrgyzstan Latvia Lithuania Luxembourg Malta Monaco Montenegro Netherlands Norway Poland Portugal Republic of Moldova Romania **Russian Federation** San Marino Serbia Slovakia Slovenia Spain Śweden Switzerland Tajikistan The former Yugoslav Republic of Macedonia Turkey Turkmenistan Ukraine United Kingdom Uzbekistan

WORLD HEALTH ORGANIZATION

Regional Office for Europe

UN City, Marmorvej 51, DK-2100 Copenhagen Ø, Denmark Tel.: +45 45 33 70 00 Fax: +45 45 33 70 01 Email: euwhocontact@who.int Website: www.euro.who.int

WHOLIS number Original: English