

Part I

Croatia 2015



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**Human Health and climate changes in
SEA, EIA**

ECRAN National workshop on SEA and
EIA, Osijek, Croatia, May 11-12, 2015

www.fno.cz



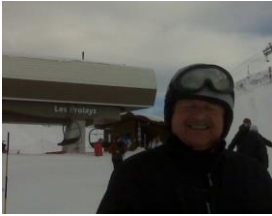
What I can to say?

- Who am I ?
- What means "health,,?"
- Why HIA?
- Something about HIA in SEA
- HIA in SEA CASE .
- Something about HIA in EIA
- Indicators of health.
- HRA in EIA
- Discusion

Jaroslav Volf

- M.D.,
 - Hygiene and epidemiology,
 - Occupational medicine
 - Public health
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 - Environmental epidemiology and risk assessment
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Something more about me



J.Volf 2012



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Disclosure of potential conflicts of interest

I declare that I have no conflict of interest; I have no affiliation or financial involvement with any organization with a financial interest, direct or indirect, in the subject material discussed in this presentation.

Do you know it?

- **Okoliš i zdravlje**
- Čovjek je svakodnevno pod utjecajem različitih čimbenika okoliša prilikom pijenja vode, konzumacije namirnica, udisanja zraka, dodira s tlom, otpadom, a ne treba podcijeniti ni svakodnevnu izloženost buci.
- Praćenjem, procjenom i promjenom štetnih čimbenika okoliša zaštićujemo svoje zdravlje.
- Na ovim stranicama saznat ćete kako kvalitetnije živjeti u vašem okolišu podržavanjem aktivnosti kojima se poboljšava njegova kvaliteta i tako ostvaruje zdraviji stil življenja.
- Source: Ministarstvo zdravlja Republike Hrvatske

Health definition WHO



- **Health** is a state of complete **physical, mental and social well-being** and not merely the absence of disease or infirmity.
- Source: Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference, New York, 19-22 June, 1946; signed on 22 July 1946 by the representatives of 61 States (Official Records of the World Health Organization, no. 2, p. 100) and entered into force on 7 April 1948.
- The Definition has not been amended since 1948.

Health, Human health, Public Health Terminology

- WHO, Kiev protocol SEA---- just **Health**
- European SEA Directive 2001/42/EC---
– **Human health**
- Some national legislation -----
– **Public health**

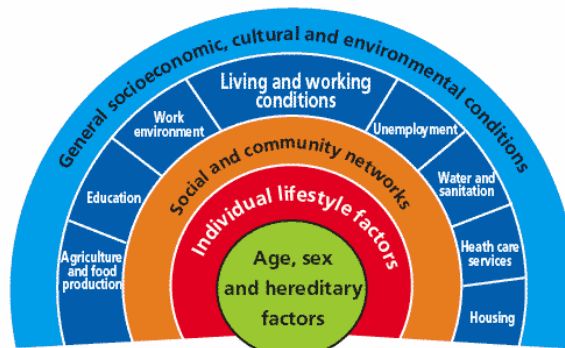


**HEALTH – WHAT DOES MEAN
HUMAN ENVIRONMENT**

Human environment

- Living in a healthy place means having adequate housing; a secure and meaningful livelihood; access to schools, parks, and public spaces; safety and freedom from violence; unpolluted air, soil, and water; and a society that promotes not only opportunity and innovation but also cooperation, trust, and equity.
- source:
<http://www.cdph.ca.gov/pubsforms/Guidelines/Documents/HIA%20Guide%20FINAL%2010-19-10.pdf>

Human environment and health determinants



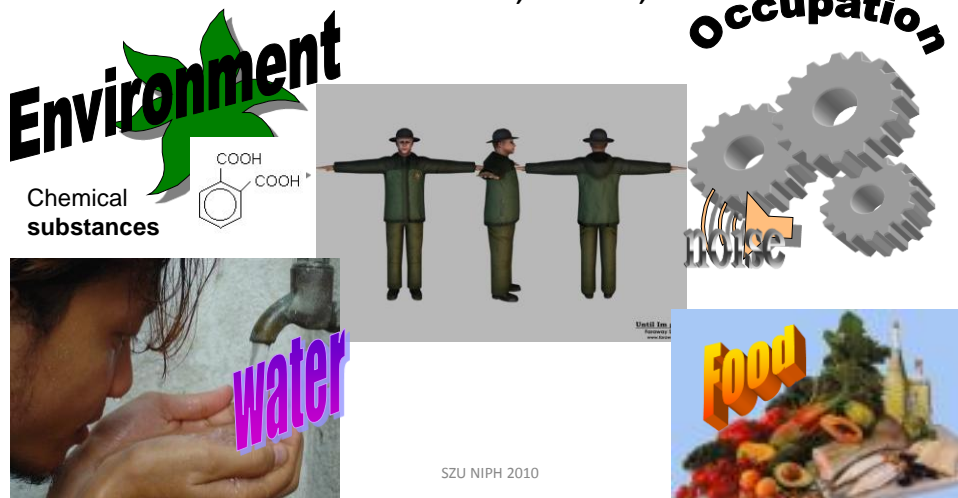
Source: Dahlgren & Whitehead, 1991



HEALTH IMPACT ASSESSMENT EXPLAINED

Why we feel the Health impact as complex
more powerful

Man is in the centre, in risk, in action



EU-funded project 'Strengthening capacities for Strategic environmental assessment
at regional and local level'

Opće metodološke preporuke za izradu strateških studija Zagreb, lipanj 2014.



- **Razmatranje značajnih zdravstvenih pitanja**
- **Protokolom o SPUO zahtijeva se procjena utjecaja na okoliš i zdravlje, no u njemu se ne navodi definicija zdravlja.** Umjesto toga postavlja se zahtjev da se važna zdravstvena pitanja ili čimbenici razmatrani u SPUO utvrde za svaki SPP i pritom da se uzmu u obzir rezultati savjetovanja s tijelima nadležnim za okoliš i zdravlje.
- **Koncept zdravlja prema Svjetskoj zdravstvenoj organizaciji**
- Čimbenike koji se odnose na uvjete u okolišu i uvjete rada: onečišćenje zraka, voda i tla, buka, vibracije i izloženost opasnostima
- Čimbenike koji utječu na zdrav stil života: olakšavanje hodanja i vožnje biciklom, dostupnost javnih prostora za vježbu i rekreaciju, osiguranje javnog prijevoza i odvratanje od uporabe osobnih automobila, dostupnost zdravstvenih proizvoda itd.
- Čimbenici koji se odnose na društvene mreže ili mreže zajednice: propadanje ili fragmentacija zajednice, društvena podrška ili izolacija, sastajališta i objekti zajednice, dostupnost zdravstvenih usluga (npr. tradicionalna tržišta itd.)
- **Socijalno-gospodarski čimbenici bitni za zdravlje: prihod, vrijednosti tradicionalnog stila života, vjerske vrijednosti ili mjesta od kulturne ili duhovne važnosti.**
- **Razmatranje socijalno-gospodarskih aspekata**
- **Gospodarske se aspekte može razmotriti i pojednostavljenom analizom koristi i troškova.** Prilogu II. ovog dokumenta.
- Opća slabost pristupa povezanih s analizom koristi i troškova jest da ne uzima u obzir sve vanjske nematerijalne koristi i troškove te ne objašnjava kako su koristi i troškovi raspodijeljeni unutar različitih društvenih skupina.

Health Impact Assessment (HIA) „definition“



**A combination of procedures,
methods and tools by which a policy,
programme or project may be judged
as to its potential effects on the
health of a population, and the
distribution of those effects within
the population**

WHO, European Centre for Health Policy. Gothenburg Consensus Paper,
Health Impact Assessment- main concepts and suggested approach.
Brussels, 1999.

Why use HIA?



- We **have to think** about the effects PPP **have on health**, and in particular, how they can alter the health of ***all* people** in the population.
- **Non-health sector proposals**, where health is not the main objective, may have major effects on the **health and well-being of people, particularly vulnerable groups**.

HIA explained



- HIA is **an approach** that gets people to think about what they are doing, and how it may alter people's health. It promotes health – and in the long term contributes to the **health of local people**
- Imagine someone was **planning to build a new motorway**. An HIA would answer '**How would this new development affect people's health?**'

HIA types

<http://www.harrisroxashealth.com/2014/08/the-impact-and-effectiveness-of-equity-focused-health-impact-assessment-in-health-service-planning>

- **Mandated**
 - Within Environmental Impact Assessment
- **Scientific report**
 - Public health duty
- **Decision- support**
 - On a voluntary basis
- **Advocacy**
 - To support a point of view
- **Community- led** To give citizens a voice

HIA history, frame

- What is of particular importance with regards to SEA potential for improving the consideration of health in policy -plan-and programme -PPP-making procedures is its **statutory status in over 40 countries, based on, for example, the European SEA Directive and the SEA (Kiev) Protocol** to the Espoo Convention and development bank/organization requirements in many developing countries. This means that for any initiatives there are formal requirements to use it, thus making it different from many other impact assessment instruments, which are often applied voluntarily.
- **Negative health impacts** could thus be systematically avoided in many policies, plans and programs and **positive health outcomes** be enhanced through SEA.

Protocol

- The objective of this Protocol is to provide for a high level of protection of the environment, including health,
- “Environmental, including health, effect” means any effect on the environment, including human health, flora, fauna, biodiversity, soil, climate, air, water, landscape, natural sites, material assets, cultural heritage and the interaction among these factors.⁸.

Health impact assessment partners

- The **county public health institutes** provide services (for their respective populations) in the following areas: epidemiology and quarantine of communicable diseases; epidemiology of noncommunicable diseases; water, food and air safety services; immunizations (including overseeing the compulsory immunization programmes); mental health care (prevention and out-of-hospital treatment of addictions); sanitation; health statistics; and health promotion

HIA in SEA, The aim of HIA



- HIA is intended to produce a **set of evidence-based recommendations** to inform decision-making
- HIA **seeks to maximise the positive health impacts and minimise the negative health impacts of proposed policies, programs or projects.**
- The procedures of HIA are **similar to those used in other forms of impact assessment**, Identification and assessment of impacts - determining the magnitude, nature, extent and likelihood of potential health impacts, using a variety of different methods and types of information
- HIA has also been identified as a **mechanism by which potential health inequalities can be identified and redressed prior to the implementation of proposed policy, program or project**
- <http://www.who.int/bulletin/volumes/83/6/472.pdf?ua=1>

An HIA would ask....



- Would the motorway increase or decrease noise, air or light pollution?
- How would the motorway affect local businesses and jobs?
- Would the new motorway reduce or increase the stress for local people?
- How would a new motorway change the local infrastructure needs - and would this be good or bad for local people?

What we are looking for in PPP

- Inequalities
- Respiratory diseases
- Employment
- Obesity
- Safety (physical, mental, social)
- Housing
- Physical activity (walking, cycling, gym....)

Social determinants

http://www.who.int/social_determinants/themes/en/

http://apps.who.int/iris/bitstream/10665/84213/1/9789241548625_eng.pdf?ua=1&ua=1

- **MONEY HDP**
- **Education**
- **Safety ...**
- **Physical activities.....**
- [Employment conditions](#)
- [Social exclusion](#)
- [Priority public health conditions](#)
- [Women and gender equity](#)
- [Early child development](#)
- [Globalization](#)
- [Health systems](#)
- [Urbanization](#)
- [Measurement and evidence](#)



Key values of HIA

- Democracy
- Equity
- Sustainable Development
 - Physical environment.. Very well known
 - **Social environment**
- Ethical Use of Evidence
- A **Holistic** Approach to Health
- A **prospective assessment** - during the formulation of the PPP



HEALTH STRATEGIES

Health strategy



Health2020

- **Priority areas**
- The Health 2020 policy framework proposes four priority areas for policy action based on the global priorities set for WHO by its Member States, and aligned to address the special requirements and experiences of the European Region. These areas also build on relevant WHO strategies and action plans at the regional and global levels.
- The four priority areas are to:
 - invest in health through a life-course approach and empower citizens,
 - tackle Europe's major disease burdens of noncommunicable and communicable diseases;
 - strengthen people-centred health systems and public health capacity, including preparedness and response capacity for dealing with emergencies; and
- **create supportive environments and resilient communities.**
 - These are not isolated areas of action but are frequently interdependent and mutually supportive. Addressing them requires combining governance approaches – hierarchical, dispersed and participatory – **to make health and well-being possible for everyone.**

EU Health strategy

http://ec.europa.eu/europe2020/index_en.htm

- http://ec.europa.eu/europe2020/pdf/csr2015/cr2015_croatia_en.pdf Country Report Croatia 2015???
- <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:2020:FIN:EN:PDF>
- The Commission is proposing five measurable EU targets for 2020 that will steer the process and be translated into national targets: for **employment**; for research and **innovation**; for **climate change** and energy; for education; and for **combating poverty**. They represent the direction we should take and will mean we can measure our success.

What is HIA in SEA of PPP



- Applying a health lens to a PPP project developed for other reasons than health
- Applying a health lens to a policy or project developed by a public authority for reasons other than health



STEPS IN HIA BIG PARALLEL WITH SEA

Steps in HIA I



- Identifying if an HIA should occur (**screening**) - systematically deciding if an HIA necessary.
- Identifying what to do and how to do it (**scoping**) - reviewing the issue in more detail, setting the boundaries for the HIA, and considering how the HIA appraisal stage should be undertaken
- **Identifying health hazards and considering evidence of impact** - considering a range of evidence between the determinants of health and key elements of the proposal.

Steps in HIA II



- Developing recommendations to reduce hazards and/or improve of health - set of recommended changes to the proposal to the decision makers.
- **Evaluation and monitoring:**
 - whether the HIA has influenced the decision making process (and the subsequent proposal);
 - monitoring the implementation of the proposal to ensure that any recommendations that decision-makers agreed to, actually occur;
 - longer term monitoring of the health of populations is sometimes a component of larger proposals.

Screening – expert team work



- What is known about -Literature review
- Expert and community involvement e.g.:
 - Workshop with participants representing public health experts and community groups.
 - Public consultation Website
 - Public meetings
 - Survey e.g- Telephone survey , internet...

What and Who ?

- **Health determinants that could be negatively or positively affected:**
 - Environmental factors
 - Economic factors
 - Social and cultural factors
- **Vulnerable groups:**
 - Children, toddlers and infants
 - The elderly
 - Individuals with existing health conditions
 - Low-income groups



Health „lens“ in screening phase

- To have a „**phantasy**“ to look which **determinants** can be impacted by PPP and likelihood of them.
- What is a **population** (majority, minority, workers, tourist etc.) impacted
- Not to read PPP as a bureaucrat!!!
- Read them as a facilitator, helper of the submitters

Screening - what do do

HCC HSP Internal Tool
Health Impact Assessment (HIA) Screening Grid

Determinants of health	Yes Negative impact	Yes Positive impact	No impact	Affected populations	Comments
Lifestyle and behaviour					
Diet					
Physical activity					
Tobacco					
Alcohol					
Sexuality					
Others					
Environment					
Air					
Water					
Soil					
Noise					
Odour					
Waste					
Landscape					
Others					
Built environment					
Green spaces					
Connectivity					

Scooping (logistic model)

- Laying out your hypothesis as to how the project is linked to health impacts.
 - Looking for details, determinants and indicators

Appraisal I

- **Community Profile**
- **Literature Review**
- **Expert and stakeholder consultations**
- **Citizen participation (*contextualization of data*)**

Appraisal II

- Characterization of impacts
 - **Negative versus positive**
 - Subpopulation, vulnerable groups (pedestrians children...
 - quantification How big, how many people....

Recommendation

- **Informing the decision maker: How to improve this proposal?**
 - How to minimize its negative impacts on health,
 - How **foster the positive ones?**

Evaluation

- Of the **process** E.g. – public relation
 - Resources used
 - Time frames
 - **Satisfaction with the HIA among project partners**
- Of the **effects - health determinants (epidemiologi, statisc data, surevey, model evaluation...)**
 - Changes according to the recommendations
 - Decision makers gain new knowledge on determinants of health
- Intersectoral collaboration

Health indicators

http://ec.europa.eu/health/indicators/echi/list/index_en.htm

- **Demography and socio-economic situation**
 - 1. [Population by sex / age - Old-age-dependency ratio \(I\)](#)
 - 2. [Birth rate, crude \(I\)](#)
 - 3. [Mother's age distribution \(I\)](#)
 - 4. [Total fertility rate \(I\)](#)
 - 5. [Population projections \(I\)](#)
 - 6. [Population by education \(I\)](#)
 - 7. [Population by occupation \(D\)](#)
 - 8. [Total unemployment \(I\)](#)
 - 9(a). [Population below poverty line \(I\)](#)
 - 9(b). [Income inequality \(I\)](#)
- **Health status**
 - 10. [Life expectancy \(I\)](#)
 - 11. [Life expectancy by educational attainment \(I\)](#)
 - 12. [Infant mortality \(I\)](#)
 - 13. [Perinatal mortality \(I\)](#)
 - 14. [Disease-specific mortality \(I\)](#)
 - 15. [Drug-related deaths \(I\)](#)
 - 16. [Smoking-related deaths \(D\)](#)
 - 17. [Alcohol-related deaths \(D\)](#)
 - 18. [Excess mortality by heat waves \(D\)](#)
 - 19. [Selected communicable diseases \(I\)](#)
 - 20. [European health indicator on communicable diseases](#)
 - 21(a). [HIV/AIDS \(I\)](#)
 - 21(b). [Cancer incidence \(D\)](#)
 - 22(a). [Diabetes: self-reported prevalence \(I\)](#)
 - 22(b). [Diabetes: register-based prevalence \(D\)](#)
 - 23(a). [Dementia: self-reported prevalence \(I\)](#)
 - 23(b). [Dementia: register-based prevalence \(D\)](#)
 - 24. [Acute myocardial infarction \(AMI\) \(D\)](#)
 - 25. [Stroke \(D\)](#)
 - 26(a). [Asthma: self-reported prevalence \(I\)](#)
 - 26(b). [Asthma: register-based prevalence \(D\)](#)
 - 27(a). [Chronic obstructive pulmonary disease \(COPD\): self-reported prevalence \(I\)](#)
 - 27(b). [Chronic obstructive pulmonary disease \(COPD\): register-based prevalence \(D\)](#)
 - 28. [Low birth weight \(I\)](#)
 - 29(a). [Injuries: home, leisure, school: self-reported incidence \(I\)](#)
 - 29(b). [Injuries: home, leisure, school: register-based incidence \(D\)](#)
 - 30(a). [Injuries: road traffic: self-reported incidence \(I\)](#)
 - 30(b). [Injuries: road traffic: register-based incidence \(D\)](#)
- **European health indicator on road accidents**
 - 31. [Injuries: workplace \(I\)](#)
 - 32. [Suicide attempt \(D\)](#)
 - 33. [Self-perceived health \(I\)](#)
 - 34. [Self-reported chronic morbidity \(I\)](#)
 - 35. [Long-term activity limitations \(I\)](#)
 - 36. [Physical and sensory functional limitations \(D\)](#)
 - 37. [General musculoskeletal pain \(D\)](#)
 - 38. [Psychological distress \(D\)](#)
 - 39. [Psychological well-being \(D\)](#)
 - 40. [Health expectancy: Healthy Life Years \(HLY\) \(I\)](#)
 - 41. [Health expectancy: others \(I\)](#)
- And more see [http](http://ec.europa.eu/health/indicators/echi/list/index_en.htm).

THANK YOU FOR ATTENTION

