

Creating a toolkit for a proportionate consideration of health in SEA

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Abstract

Health assessment requirements in SEA are usually not explicitly outlined in the environmental laws. The scope and approach of health assessment are subjected to case-by-case interpretations, resulting in a high diversity of assessment outcomes. In the vision of creating a toolkit to guide health in SEA practice, work is required in four major areas: interpretation of health, scoping for different types of SEA, assessment approach and stakeholder engagement.

Introduction

Incorporating health considerations in Strategic Environmental Assessment (SEA) practice has become a hot topic. On the one hand, there has been rising awareness of the potential human health impact associated with environmental changes among the human health and impact assessment communities (Bond *et al.*, 2011; WHO Regional Office for Europe, 2022b). On the other hand, requirements for the consideration of human health have been implemented in international and local laws, such as the UNECE Protocol on Strategic Environmental Assessment to the Convention (United Nations Economic Commission for Europe, 2017) and The EU SEA Directive (European Parliament and Council of the European Union, 2001).

It is observed that there are many inconsistencies and divergencies in the considerations of human health impacts in SEA practices (WHO Regional Office for Europe, 2022b). In advancing SEA practices for better protection of human health, it is necessary to find a balance between the ideal coverage of human health impact and what could be delivered. In this short paper, I identified the contexts for including human health in SEA practice and suggested the key areas of work in developing a toolkit to guide health assessments in SEA. While it primarily references the European context, the arguments would also apply to other regions.

The connection between environment and human health impacts

Human health is defined as a “State of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (p.1, WHO, 2020), and the physical environment have long been recognised as a determinant of health (WHO, 2017). Environmental pollution is confirmed to be linked to the risk of developing various non-communicable diseases and premature death (European Environment Agency, 2019).

In recent years, the agendas regarding the relationship between the physical environment and health have much been expanded. WHO is promoting the One Health approach to address human health threats associated with human interactions with the physical environment (WHO Regional Office for Europe, 2022a). In addition to the disease risks caused by environmental pollution, One Health emphasises that the stress of the physical environment is closely related to threats and the benefits of human health. For example, the quality of ecosystem services and the flow of pathogens (WHO Regional Office for Europe, 2022a).

The broadened environmental and health agendas also highlighted the need for a change in the approaches to addressing the impacts on human health. The conventional approach of the source-pathway-receptor model is good at addressing impacts that have clear, identifiable sources and pathways. However, issues raised in the One Health initiatives illustrate that stressors caused by environmental changes have cumulative impacts and can impact human health directly and indirectly.

The requirements for assessing health impacts in SEA

Assessment of the impact of human health in SEA is required by international and local laws. The most notable one would be the EU SEA Directive (Directive 2001/42/EC), which has been transposed to all EU countries. Annex 1 of the EU SEA Directive stated that environmental factors, human health, and their interrelationships should be assessed in SEA (European Parliament and Council of the European Union, 2001). In more recent international legislation, the UNECE Protocol on Strategic Environmental Assessment to the Convention on Environmental Impact Assessment in a Transboundary Context extensively put environment and health together in the text, which required health to be assessed and considered as part of the environmental impact (United Nations Economic Commission for Europe, 2017).

While the legislation requires human health to be assessed together with environmental impacts, the requirements of health assessment “emphasise the need for broad and comprehensive information on the factors and their interrelationship” (p. 30 European Commission, 2016). The laws leave much room for interpretations, particularly in two areas. First, the environmental laws do not define how the environment works as a health determinant, i.e. does it include the wider aspects of health, such as mental health and well-being or its interrelations with the social and economic determinants? Second, the scope or depth of the health assessment is not outlined. Numerous environmental subjects were identified in the law, e.g. Air, water, landscape, etc. It is not a fixed list, and the assessment is described to cover other environmental and health subjects if applicable to the specific context (European Commission, 2016). It is up to the authorities and practitioners to identify what environmental and health impacts need to be assessed and how.

Addressing health in current SEA practice

Case studies reveal that there is a significant variation in the assessment of health impact in SEA. A study done by the WHO Regional Office for Europe (2022b) found that SEA cases have a high degree of diversity in the interpretation of health, such as the health determinants, analysis of health impact and discussion of health relationships. This diversity is suggested to be linked to the requirements of the countries and regions, as well as the types of policies, plans and programmes that the SEA is applied to.

Several observations are made in the cases described in the WHO Regional Office for Europe (2022b) case study report and the Impacts Hub website¹. The environmental impacts on biophysical health are commonly assessed, but there is only limited discussion of the analysis and determinants other than biophysical health (WHO Regional Office for Europe, 2022b). Overall, every SEA case develops its own scope of health and has different subjects covered in the assessment. In addition to the health risks associated with environmental pollution, the broader impacts identified could include safety, quality of life, education, employment, health services, etc.

Without further studies, it is unclear how each SEA case determines their scope of health assessment. It seems to reflect the space of interpretation in the legislative requirements. While many of the cases have broadened the interpretation of health determinants, many of the subjects in the latest health initiatives are still missing or have rarely been included, such as actions of health equity, antimicrobial resistance and further pandemic prevention.

Notes for the creation of a toolkit

The goal of creating a toolkit for assessing human health impacts in SEA is to drive good practices by providing guidance on the assessment methods and delivering desirable health outcomes. There are four main areas that need to be worked on:

First, it needs to have an agreed interpretation of the environmental determinant of health. The foundation of health assessment is to define the environmental and health impacts. While most of the SEA follows the health definition in the WHO constitution (WHO Regional Office for Europe, 2022b), the role of the physical environment in the physical, mental and social well-being is not explicitly defined. Cases show that the interpretation of health determinants falls into a spectrum of narrowly limited to biophysical to wide determinants of mental and social health. There is currently no standard on where health in SEA should be placed in this spectrum, and health is interpreted on a case-by-case basis. An agreed interpretation would help both the authority and the practitioners to identify the determinants and outline the criteria of the health assessment.

¹ https://www.impactshub.com/case_studies/

Second, there is an ample need to create scoping guidelines for health assessment for different types of SEA. In SEA practice, health assessments should be proportionate. As such, scoping of health assessments should consider the requirements, local context and nature of the specific SEA. As shown in case studies by the WHO Regional Office for Europe (2022b) and other cases on impacts hub website, the level of SEA (i.e. national, regional or local) and sectors (e.g. land use, transport, energy, etc) are key elements in diverging the scope of health assessments in the cases. Currently, the SEA guidelines tend to be generic in providing arching principles (e.g. the guidance of the EU Directive). These arching principles should be transposed and tailored to fit the needs of the different types of SEA.

Third, the assessment approaches of environmental and health impacts should be reviewed. As mentioned in the previous section, the environmental and health impacts conventionally adopt a source-pathway-receptor model. This model may not be sufficient to assess the complex or communicative impacts of environmental changes. The latest drafted notes for the implementation of the UNECE SEA Protocol suggested the use of the Driving Force, Pressure, State, Exposure, Effect, and Action framework on more complex health assessments while keeping the overall approach balanced (United Nations Economic and Social Council, 2023). There are limited empirical studies on designing or adopting the assessment approach in SEA. Finding a proportionate and balanced approach requires further studies and discussions between authorities and practitioners.

Fourth, arrangements should be made for extended engagement with stakeholders. With SEA taking into consideration broadened health subjects and social aspects of the health impacts, it requires a wider range of information and expertise. The latest drafted notes for the implementation of the UNECE SEA Protocol highlighted the need for consulting with extended environmental and health authorities to establish cross-sector involvement in the SEA process (United Nations Economic and Social Council, 2023). The need for further public involvement is less discussed. The assessments of the impacts on social health and the quality of life require communities' input. Provisions to support the further engagement of the public are also necessary.

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