

Vision for creating a toolkit for proportionate considerations of health in SEA

(Abstract 285)

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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 creating a toolkit to guide health in SEA practice, work is required in four major areas: interpretation of health, scoping for different levels and 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 were 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 think piece, I examined 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, World Health Organization, 2020), and the physical environment has long been recognised as a determinant of health (World Health Organization, 2017). Environmental pollution is confirmed to be linked to the risk of developing various non-communicable diseases and premature death (European Environment Agency, 2020).

In recent years, the agendas regarding the relationship between the physical environment and health have 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 is 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). Another international legislation, the UNECE Protocol on Strategic Environmental Assessment to the Convention on Environmental Impact Assessment in a Transboundary Context, explicitly puts environment and human health together in the text, which requires human 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 law leaves much room for interpretation, 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 text, including air, water and landscape; however, 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.

The inclusion of health in current SEA practice

Case studies revealed that there has been a significant variation in the assessment of health impact in SEA. A study by the WHO Regional Office for Europe (2022b) found that SEA cases had 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 was suggested to be linked

to the requirements of the countries and regions, as well as the types of policies, plans and programmes that the SEAs were applied to.

Several observations were 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 were commonly assessed, but there was limited discussion of the analysis and determinants other than biophysical health (WHO Regional Office for Europe, 2022b). Overall, every SEA case developed 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 and other indirect health impacts.

Without further in-depth investigations, it is unclear how each SEA case determines its scope of health assessment. The variations seem to reflect the space of interpretation in the legislative requirements. While many of the cases have broadened the interpretation of health determinants, many 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.

Vision for the creation of a toolkit

The goal of creating a toolkit for assessing human health impacts in SEA is to support healthy Policies Plans and Programmes (PPPs) by providing guidance on assessing health, delivering health objectives and incorporating health in the decision-making process. Four main areas 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 identify the connection between 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 interpretations of health determinants fall into a spectrum, from 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 be essential for both the authority and the practitioners to identify the health determinants and outline the criteria of the assessment.

Second, there is an ample need to create scoping guidelines for health assessment for different levels and sectors of PPPs. 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 the case studies by the WHO Regional Office for Europe (2022b) and other cases on the Impacts Hub website, the level of SEA (i.e. national, regional or local) and sectors (e.g. land use, transport, energy) are key elements in diverging the scope of health

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

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 to fit the needs of the different types of SEA, particularly the health objectives and scale of health impacts they apply.

Third, the assessment approaches of environmental and health impacts should be revised. The environmental and health impacts conventionally adopt a source-pathway-receptor model. This model would not be sufficient to assess 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 (DPSEEA) framework on more complex health assessments while keeping the overall approach balanced (United Nations Economic and Social Council, 2023). The DPSEEA framework is commonly used in Health Impact Assessment practice (Briggs, 1999), but there are limited empirical studies on designing or adopting the different assessment approaches in SEA. Finding a proportionate and balanced approach requires further research studies and discussions between authorities and practitioners.

Fourth, there needed to be extended engagements with stakeholders, including the authorities and the public. 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 Aarhus Convention protects the individuals' rights to access to information, public participation in decision-making, and access to justice in environmental matters. The content of the convention should also be interpreted as applying to health issues (Ebbesson *et al.*, 2014). With wider health determinants to be assessed in SEA, a corresponding extension of public engagement would be necessary.

Conclusion

There has been growing concern about the wider connection between environmental and human health. It is challenging for SEA to extend its scope and apply appropriate assessments of human health impacts. While international laws require the assessment of human health in SEA, there is much room for interpretation, and case studies found a high degree of diversity in the definition and scope of health in current SEA practice. Creating new guidelines and toolkits is essential in effectively addressing health impacts in SEA. It is suggested that much work is needed in the interpretation of health, scoping for different levels and types of SEA, assessment approach and stakeholder engagement.

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