

United Nations Economic Commission for Europe
&
Regional Environmental Center for Central & Eastern Europe

Protocol on SEA

Health chapter/annex

**Resource Manual to
Support Application of
the UNECE Protocol on
Strategic Environmental
Assessment**

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Annex/Chapter A7: Health

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ANNEX/CHAPTER A7: HEALTH

[The Meeting of the Signatories is expected to decide whether this is an annex to or a chapter of the Resource Manual.]

A7.1 INTRODUCTION TO THE CHAPTER

1. This Chapter provides guidance on the consideration of human health as part of SEA, as required by the Protocol. Section A7.2 discusses why health matters and the provisions of the Protocol with regard to health. Section A7.3 goes on to look at possible practical arrangements.
2. This Chapter is intended to be useful both to SEA practitioners wishing to understand the potential effects on human health of plans and programme, and to environmental and health authorities from whom information and advice may be sought (e.g. as ‘statutory consultees’) or which wish to ensure that health issues are fully addressed. Like the Manual as a whole, however, it does not constitute formal legal or other professional advice, or serve as interpretative guidance for the Protocol.
3. Parties might use the ideas in this Chapter to explore how health can be considered in their national setting, undertaking pilot studies, developing procedures to satisfy the requirements of the Protocol and drafting guidance meeting their own institutional needs and context.

A7.2 WHY HEALTH MATTERS

4. As the European Environment and Health Action Plan 2004-2010 notes,¹ “Good health is something which everyone wants – for themselves, their children and for the wider economic and social benefits it brings to our society. It plays a major role in long-term economic growth and sustainable development – there is increasing evidence showing that it is not so much the cost of health that is high, but rather the cost of ill-health (in terms of healthcare, medicines, sick leave, lower productivity, invalidity and early retirement).”
5. Evident links between the state of the environment and the state of health led to the launching of the intergovernmental “Environment and Health” process. The 1999 *London Declaration on Environment and Health* provided a major stimulus to the development of the Protocol on SEA, and the follow-up declaration in Budapest in 2004 confirmed the commitment to take health into account in the assessment of strategic proposals under the Protocol.²
6. As a result, the Protocol provides for the consideration of health as an integral part of the SEA of plans and programmes.

¹ Commission of the European Communities, COM(2004) 416 final. Brussels, 9.6.2004.
<http://ec.europa.eu/environment/health/pdf/com2004416.pdf>.

² Declaration of the Third Ministerial Conference on Environment and Health (London, 1999)
<http://www.euro.who.int/Document/E69046.pdf> and declaration of the Fourth Ministerial Conference (Budapest, 2004) <http://www.euro.who.int/document/e83335.pdf>.

A7.3 POSSIBLE PRACTICAL CONSIDERATIONS

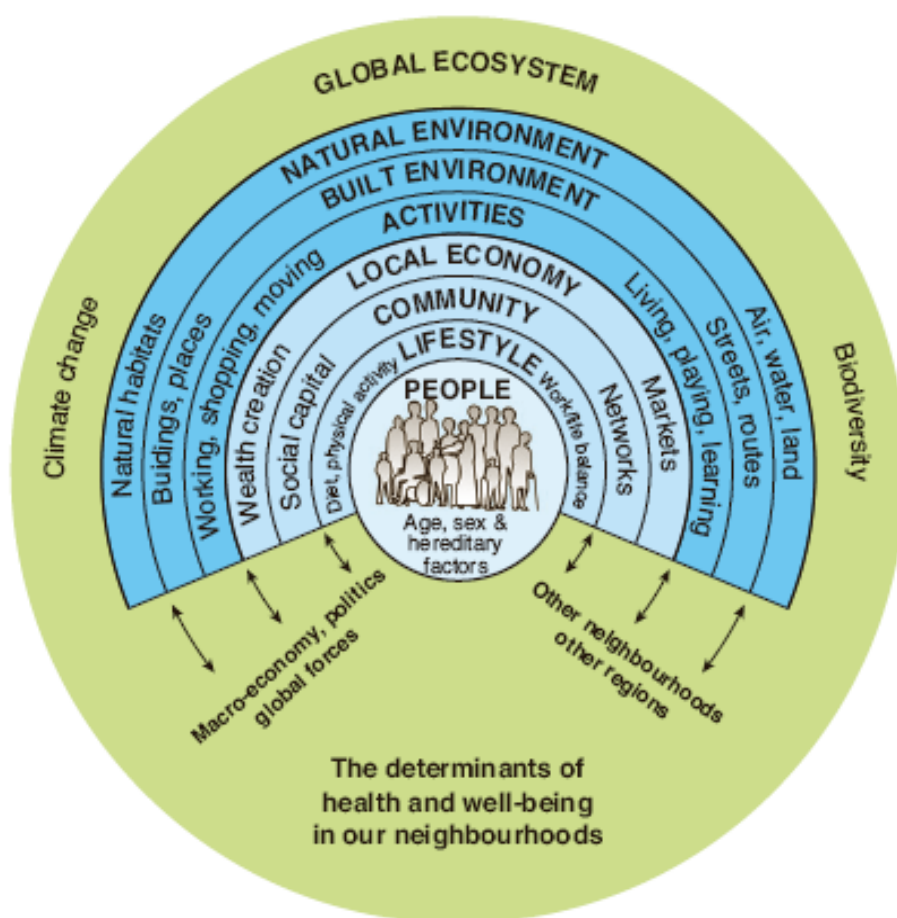
7. This section examines interpretative and methodological challenges, as well as practical approaches to the consideration of health as part of SEA, focusing on:
 - The determination of significant health effects ([subsection A7.3.1](#))
 - Consulting environmental and health authorities ([subsection A7.3.2](#))
 - Assessing the expected impacts on health, including both qualitative and quantitative assessment of health effects ([subsection A7.3.3](#))
 - Scoping and preparation of the environmental report ([subsection A7.3.4](#))

A7.3.1 Determination of significant health effects

8. The Protocol does not provide a definition of health. Instead, it requires that relevant health issues or factors that need to be considered within an SEA are identified for each plan or programme, taking into account the results of consultation of relevant environmental and health authorities.
9. During such determination, relevant authorities may find it useful to consider the framework of determinants of health outlined in [Figure A7.1](#) below. It will be important to identify which determinants of or factors influencing health may be significantly affected by the implementation of a plan or programme. It may then be useful to consider how the plan or programme may, for example, protect and promote health in line with relevant environmental, including health, objectives.
10. The World Health Organization (WHO) broad concept of health – well-being, not merely the absence of disease – in itself suggests that plans and programmes may influence health in many ways. Some of their effects are direct and self-evident, and many are already well recognized in practice. But others are indirect and difficult to predict. As with many types of environmental effect, the pathways between factors in the physical environment and health outcomes can be complex and take place over long timescales. It is also important to be aware that the effects of plans and programmes on health will often be synergistic, with different types of impact combining to bring about both beneficial and adverse effects.
11. In addition, there are significant issues in relation to the relevance to SEA of available data on health, which are collected for different purposes and are often at too high a level of generality to be useful in SEA. Statistics on rates of illness and death do not necessarily provide illuminating baseline data or a sound basis for monitoring the effects of implementing a plan or programme.
12. Though there is uncertainty about the relative importance of various determinants and their complex interactions, the determinants presented in [Figure A7.1](#) are recognized as being the main factors that influence health. As such, they can be used as a starting point for assessment of the likely significant health effects of a plan or programme.

13. For example, plans and programmes may influence transport, housing, employment, education and social services and so promote social cohesion, ease access to community facilities, encourage exercise and reduce the need to drive. So a transport plan may affect the following health determinants: individual lifestyle (e.g. through encouraging or discouraging levels of physical activity); social and community networks and influences (through altering community facilities or changes in fragmentation of communities); living and working conditions (e.g. through changes in the number of road traffic accidents); and environmental conditions (e.g. through air pollution and noise).³ A further, practical, example is provided in Box A7.1 below.

Figure A7.1: The main determinants of health⁴



³ Adapted from Margaret Douglas, Martin Higgins and Sheila Beck. *Strategic Environmental Assessment and health* Briefing paper for the Scottish HIA Network, 2005. Available at <http://www.healthscotland.com/documents/1250.aspx>

⁴ Hugh Barton and Marcus Grant (2006), drawing on Whitehead and Dahlgren (1991) and Barton (2005). Sources: (a) Barton H (2005) 'A Health Map for Urban Planners: towards a conceptual model for healthy, sustainable settlements' in *Built Environment* Vol 31, No 4, pp 339-355. (b) Barton H and Grant M (2006) 'A health map for the local human habitat' in *Journal of the Royal Society for the Promotion of Health* Vol 126, No 6. (c) Whitehead M and Dahlgren G (1991) 'What can be done about inequalities in health?' *The Lancet* 338 pp1059-1063

Box A7.1: Assessment of health effects within the SEA of the Czech Operational Programme for 2007-2013 for “Enterprise and Innovation”⁵

Selected health determinants:

- Environmental factors: Air quality, noise and toxic substances in the environment
- Socio-economic factors: Employment and education
- Social and community networks/influences: None
- Living and working conditions: Safety of commonly-used products and of construction materials
- Individual lifestyle factors: Healthy ways of spending leisure time (e.g. agro-tourism, bicycle riding, etc.).

The specific tasks performed by the SEA team included:

- Clarification of why health matters were addressed within this SEA instead of being assessed separately
- Carrying out a brief overview of the state of health in the Czech Republic
- Carrying out an overview of the main methodological issues in analyzing impacts of policies, plans and programmes on health, including explanation of the need to analyze health impacts that are caused both by changes in the state of the environment as well as by socio-economic factors
- Explanation of the chosen approaches for assessing the impacts of the programme on health, combined with an overview of health-related policies, plans and programmes that were relevant to this Operational Programme
- Assessment of the actual health effects, primarily through: (a) the SEA team outlining the possible direct effects (positive and negative) of individual interventions proposed in this programme; and (b) the SEA team determining those interventions pursued by the programme that might have positive or negative impacts on relevant health determinants
- Making proposals for implementation of this programme including: (a) criteria or conditions for selection of future projects that would be promoted by this programme (including environmental and other conditions); and (b) proposed indicators to monitor effects on health
- Drawing overall conclusions

These assessments were done on the basis of collective expert judgement by recognized health experts in the Czech Republic (from the National Health Institute), reviewed by the rest of the SEA team.

14. Examples of health determinants that may be affected by a plan or programme include:⁶

- Factors affecting healthy lifestyle such as facilitation of walking and cycling, availability of healthy products, availability of public spaces for exercise, provision of public transport and discouraging private car use
- Factors related to social or community influences or networks, such as community cohesion, community severance or fragmentation, social support or isolation, accessibility of community services (including medical services, social support, shopping), accessibility of local transport and communication networks, land use and urban design, safety and levels of crime

⁵ Martin Smutny, SEA team leader, personal communication, January 2007. Further information available from martin.smutny@integranet.cz.

⁶ Based on International Association for Impact Assessment. *Health Impact Assessment: International Best Practice Principles*. Special Publications Series No. 5 September 2006. Available at <http://www.iaia.org/modx/assets/files/SP5.pdf>.

- Factors related to living and working conditions, such as the availability and quality of housing, access to safe drinking water and adequate sanitation, indoor air quality and exposure to hazards (i.e. risk of accidents, including work-place and transport hazards)
 - General socio-economic factors (e.g. education, employment and income), cultural factors (e.g. effects on traditional lifestyle values, religious values, or sites of cultural and spiritual significance), and environmental factors (air, water and soil pollution, noise, disease vector breeding places, etc.)
15. Some of the above-mentioned factors are inter-linked or cannot easily be clustered into one category of determinant and might indeed appear in more than category. However, this framework of health determinants is not meant as a complete checklist or rigid template for categorizing or clustering health factors. It is presented as a framework for possible use in the initial identification of various health factors that may be affected by a particular plan or programme.
16. The focus of SEA under the Protocol is on the physical environment. However, as practice with applying the Protocol develops it is anticipated that more complex interactions between the physical, social and behavioural environments might be assessed in some countries.
17. Though environmental factors are important in determining health, **socio-economic** ones are probably more so, with income and education being strongly correlated with health (see [Box A7.2](#)). However, it may be difficult to assess the influence of many types of plans and programmes (for example, land-use plans) on these health determinants.

Box A7.2: Measures of socio-economic status that are important determinants of health

Socio-economic status can be measured through a number of variables (Galobardes et al. 2006) including:⁷

- Income (individual or aggregated). Income influences health through a direct effect on material resources. Income is the best single indicator of material living standards. However, the collection of income data can be limited due to the sensitive nature of such information.
- Education levels (individual assets). Education is a strong determinant of future employment and income and it may affect a person's cognitive functioning. Information on education levels is easy to measure. However, these measures do not generally assess the quality of education.
- Occupation-based measures. Occupation is strongly related to income. Further, occupational class reflects social standing and may be related to health outcomes. Occupations may also reflect specific toxic environmental or work-task hazard exposures. Information on occupational measures is easily available in many routine data sources.

18. The Protocol requires assessment of only those environmental, including health, issues that are deemed likely and significant. Environmental and health authorities may therefore find it useful to gradually reduce any long list of possible health factors that may be affected by a particular plan or programme to only those on which the plan or programme

⁷ Galobardes, Bruna, Mary Shaw, Debbie A Lawlor, John W Lynch and George Davey Smith. Indicators of socioeconomic position (part 1). *Journal of Epidemiology and Community Health* 2006;60:7-12; doi:10.1136/jech.2004.023531. Available at <http://jech.bmj.com/cgi/content/full/60/1/7>.

may have likely significant effects. Some guidance on such a process is contained in annex III to the Protocol.

A7.3.2 Consulting environmental and health authorities

19. Consultation of environmental and health authorities is at the core of the consideration of health within SEA. In many countries, however, it is easier to identify relevant authorities with environmental responsibilities than to identify their health counterparts. Typically there are many organizations with differing responsibilities:
 - ❑ **National authorities** are often the lead agencies on health policy development and implementation issues.
 - ❑ **Regional and local authorities** may have a more specific role in operational matters relating to local populations.
 - ❑ **Municipal authorities** may have a role in protecting and promoting health. This can include both traditional health management such as sanitation and water supplies as well as issues such as health promotion activities and primary health care services.
20. Health authorities are rarely involved in the plan- or programme-making process. In the WHO *European Healthy Cities* programme, health and planning agencies were found to cooperate regularly in only 25% of the cases studied.⁸ Health authorities may also lack the capacity to contribute effectively and they may need – at least initially – proper support or guidance. If necessary, appropriate liaison arrangements and procedures for soliciting their inputs (such as service agreements) could be put in place (see also section A4.4, which deals with consultation of relevant authorities).
21. Indeed, the determination of the health factors that are likely to be significantly affected by a particular type of a plan or programme, and the drawing of conclusions about positive and adverse impacts of a plan or programme on health, may not be easy tasks at first. In this regard, it could be useful if environmental and health authorities and those developing plans and programmes share information and gradually reach a common understanding on:
 - ❑ Health determinants that are likely to be significantly affected by different types of plans and programmes
 - ❑ Causal linkages between changes in health determinants and corresponding health effects
 - ❑ Measures to prevent, reduce or mitigate any significant adverse effects on health
 - ❑ Arrangements for monitoring actual health effects during implementation of various plans and programmes

⁸ Hugh Barton, Claire Mitcham and Catherine Tsourou (eds.) 2003. *Healthy urban planning in practice: experience of European cities*. Report of the WHO City Action Group on Healthy Urban Planning. Available at <http://www.euro.who.int/document/E82657.pdf>.

A7.3.3 Assessing the expected impacts on health

22. The identification of the key health determinants that are likely to be significantly affected by a plan or programme can provide a basis for the assessment of the positive and negative effects of a plan or programme on health. Changes in these determinants may result in health effects that may be:
 - ❑ Direct or secondary
 - ❑ Short-, medium- or long-term
 - ❑ Cumulative or synergistic
 - ❑ Permanent or temporary
23. Table A7.1 provides a summary of physical environmental risk factors and possible related diseases and risks. Such a table, adapted to local conditions, may be useful to authorities in certain circumstances. It might also be adapted to different types of plan or programme.
24. In the light of the uncertainties and limitations discussed in section A7.3.1 above, it is not realistic to expect authorities carrying out SEA to make precise or detailed predictions about the potential effects, either beneficial or harmful, of their plans and programmes on health. Nor would it generally be practicable for them to carry out very detailed studies to predict these effects. It is essential that appropriate, simple and practical approaches be taken with more detailed studies being undertaken only in special cases, as adequately addressing health in SEA poses important methodological and procedural challenges.
25. In this regard, it is useful to note that the Protocol requires through its article 2, paragraph 7, provision only of information that may reasonably be required, taking into account:
 - (a) Current knowledge and methods of assessment;
 - (b) The contents and the level of detail of the plan or programme and its stage in the decision-making process;
 - (c) The interests of the public; and
 - (d) The information needs of the decision-making body.
26. In addition, annex IV, item 8, of the Protocol requires that the environmental report include information on difficulties encountered in providing the information to be included, such as technical deficiencies or lack of knowledge.

Qualitative assessment of health effects

27. In most instances, the assessment of health effects will be qualitative, not quantitative. However, qualitative assessment does not mean guessing: any judgement should be well reasoned and should whenever possible rely on existing research and knowledge. Annex A5.1 outlines some analytical tools that facilitate expert judgement; other tools may be derived from the medical profession. The London Health Observatory has produced *A Guide for Reviewing Published Evidence for use in Health Impact Assessment*, which details a number of steps for assessing quantitative and qualitative evidence that might be appropriate in SEA.⁹
28. It should at least be possible to assess the positive and negative effects of a plan or programme on relevant health determinants and to draw overall conclusions on whether the plan or programme creates favourable conditions for a healthy population, with health being defined to include well-being, not merely the absence of disease.
29. Table A7.2 below gives examples of questions related to health that SEA practitioners might raise in connection with their proposals, together with notes on links which have been established between these issues and the health of individuals and social groups. The questions are broadly ranged in a sequence, from specific and direct effects to those which are subjective and linked to well-being and the quality of life:

Quantitative assessment of health effects

30. Most approaches to the quantitative assessment of health effects are likely to rely on elements of Health Impact Assessment (HIA). HIA has to a great extent developed separately from SEA, is based on different disciplines, and is far less focused on prediction of the effects of strategic proposals. However, careful use of its approaches and methods can provide decision-makers with valuable information on the implications for health of their plans and programmes. Box A7.3 gives an overview of the scope and methods of HIA.
31. This Manual emphasizes the integration of health into SEA and the avoidance of a separate HIA for a plan or programme subject to SEA under the Protocol. Nonetheless, HIAs have been undertaken that illustrate health and planning authorities working together, and that would also fit straightforwardly into an SEA methodology. One example of such an approach is that of the Cambridgeshire Health Authority in the United Kingdom.¹⁰
32. To find out more about HIA, a good starting point is the WHO website at <http://www.euro.who.int/healthimpact>; more information may be found at <http://www.hiagateway.org.uk> and <https://webcollect.rivm.nl/hiadatabase/>. See also the *International Best Practice Principles for HIA* published by the International Association for Impact Assessment (<http://www.iaia.org/>).

⁹ Available at <http://www.lho.org.uk/download.aspx?urlid=10846&urlt=1>.

¹⁰ Cambridgeshire Health Authority. 2002. *Cambridgeshire & Peterborough Structure Plan Review: Health Impact Review*. Prepared by Land Use Consultants in association with Anne Gordon Associates. March 2002, available at <http://www.cambridgeshire.nhs.uk/publications/health-impact-assessment.pdf>.

Table A7.2: Health in SEA: possible effects of plans and programmes on health

Examples of questions that can help to identify possible effects of plans and programmes on health, with notes on the 'evidence base' of known connections between these issues and health. (Questions are indicative only and might be used or adapted as relevant.)

Questions on possible changes to health determinants	Related SEA topics	Government policies	Possible health effects and the evidence base (could be referenced to literature and/or web links) ¹¹
Does the plan or programme involve provision of health facilities, e.g. general practitioner surgeries, health centres or hospitals?	Population		Higher rates of general practitioner consultation are associated with greater social and economic deprivation, yet communities most at risk of ill health tend to experience the least satisfactory access to preventative services.
Does the plan or programme involve leisure facilities, e.g. sports centres?	Population		A lack of exercise is associated with increased cardiovascular risk.
Does the plan or programme affect access to health or leisure facilities?	Population		Lack of access to services (e.g. by foot or affordable transport) is experienced disproportionately by women, schoolchildren, the elderly and disabled people. Poor access to services is a significant factor in social exclusion, which is associated with health problems.
Will the plan or programme give rise to developments involving emissions to air or water?	Soil, water, air		Air pollution has both short- and long-term damaging effects on health, can worsen the condition of those with lung or heart disease, and may reduce average life expectancy.
Is the plan or programme concerned with contaminated land or waste management or disposal?	Soil, water, air		Contaminants such as heavy metals, oil, asbestos and landfill gases are injurious to health. Waste disposal can be a major generator of road transport, noise and dust, with potential adverse effects on safety and air quality.
Could the plan or programme lead to other types of impacts on people, e.g. from noisy or disruptive activities?	Population		Environmental noise causes annoyance and sleep disturbance to many people. There is evidence of a causal relationship between noise and hypertension and heart disease. ¹²

¹¹ Except where shown, evidence is based on Cave, B, Molyneux, P and Coutts, A (2004) *Healthy sustainable communities: What works?* Milton Keynes and South Midlands Health and Social Care Group. Available at <http://www.mksm.nhs.uk/FileAccess.aspx?id=148>.

¹² Institute for Environmental Health. *Report on the non-auditory effects of noise*. Report R10. Medical Research Council. Leicester, UK, pp 90, ISBN 1 899110 14 3, 1997

Questions on possible changes to health determinants	Related SEA topics	Government policies	Possible health effects and the evidence base (could be referenced to literature and/or web links) ¹¹
Could the plan or programme create a risk of flooding?	Water, soil		Health effects from flooding can include gastroenteritis, chest infections, asthma, stiffening of joints, and psychological problems of stress, amongst a number of perceived effects.
Will the plan or programme contribute to climate change?	Climatic factors, air		Climate instability and rising sea levels have major long-term health implications. Avoidance or mitigation of adverse effects can make a difference.
Does the plan or programme encourage the use of public transport or alternative means of transport other than private cars?	Air, climatic factors		<p>Reduced car use lowers direct exposure to exhaust pollutants.</p> <p>Reduction in traffic congestion and noise can be expected to improve quality of life and well-being.</p> <p>Any reduction in carbon emissions, however small, contributes to the achievement of climate change objectives.</p>
Does the plan or programme encourage walking and cycling?	Air, population		<p>Physical activity is one of the best ways of improving overall health and reducing obesity.</p> <p>Neighbourhoods with mixed land use, high population and employment density, street connectivity, pedestrian-oriented design and safety encourage more physical activity and have a lower obesity prevalence.</p> <p>These features are particularly helpful to older people to reduce social isolation.</p>
Does the plan or programme involve greater provision of access to the countryside and coast?	Population, landscape, biodiversity		<p>Greater opportunities for walking and cycling are beneficial to physical health.</p> <p>Greater contact with nature is beneficial to mental health</p>
Will plans or programmes for housing take into account energy efficiency, warmth, ventilation and flexibility?	Population, climatic factors		<p>Cold, damp homes are associated with cardiovascular and circulatory diseases.</p> <p>Fuel poverty affects mental health and contributes to health inequalities.</p> <p>Housing needs to be suitable for people with disabilities, families and the ageing population.</p>

Questions on possible changes to health determinants	Related SEA topics	Government policies	Possible health effects and the evidence base (could be referenced to literature and/or web links) ¹¹
Does the plan or programme promote easy and sustainable access to services such as workplaces, shops, schools, healthcare facilities and social activities?	Population		<p>Poor transport contributes to social exclusion as it restricts access to activities that enhance people's life chances, such as work, learning, health care, food shopping, and other key activities.</p> <p>Community severance by physical barriers (e.g. transport infrastructure) and psychological barriers (e.g. road safety fears) limits travel horizons and can affect access to services such as employment, education and health facilities.</p> <p>Lack of access to services (e.g. by foot or affordable transport) is experienced disproportionately by women, schoolchildren, the elderly and disabled people.</p> <p>Poor access to services is a significant factor in social exclusion, which is associated with health problems.</p>
Does the plan or programme encourage a sense of community safety, identity and social cohesion?	Population, cultural heritage, landscape, biodiversity		<p>Good design encourages greater community ownership of the environment and reduces negative effects such as vandalism and under-use of facilities. A sense of community identity and belonging is known to foster health and the sense of well-being.</p> <p>Fear of crime reduces social solidarity, and has an adverse psychological impact. Fear of leaving home exposes older people in particular to isolation and vulnerability. Good urban design can help to "design out crime" and enhance community safety.</p>
Will the plan or programme provide for locally accessible green spaces?	Population, biodiversity, fauna and flora, cultural heritage, landscape		<p>Safe green space encourages social contact and exercise, and is associated with lower crime rates.</p> <p>People who can see trees or green space from their homes report higher levels of health and well-being.</p>

Questions on possible changes to health determinants	Related SEA topics	Government policies	Possible health effects and the evidence base (could be referenced to literature and/or web links) ¹¹
Does the plan or programme have employment implications relevant to the social groups concerned?	Population		<p>Isolated developments can lead to the exclusion of vulnerable groups.</p> <p>Local job opportunities enable walking and cycling options.</p> <p>Unemployed people have a higher risk of poor physical and mental health and shorter life expectancy.</p> <p>Low-paid insecure employment carries greater risks of accidents, infections and heart disease and increase health-damaging behaviour such as smoking.</p>

Box A7.3: SEA and Health Impact Assessment: similarities and differences

Health Impact Assessment (HIA) is not defined in any international legal instrument, but the International Association for Impact Assessment defines it as:

“... a combination of procedures, methods and tools that systematically judges the potential, and sometimes unintended, effects of a policy, plan, programme or project on the health of a population and the distribution of those effects within the population. HIA identifies appropriate actions to manage those effects.”¹³

There are many similarities between SEA and HIA. Both are intended to inform and influence decision-making. Both use procedures involving screening, scoping and reporting, and both attach great importance to consultation.

But there are also a number of important differences:

- ❑ HIA is often applied outside the normal SEA context of “ex-ante” prediction of the effects of strategic proposals such as plans and programmes, for example to identify the effects on health of specific services, activities or behaviour.
- ❑ In many contexts, HIA can draw on established knowledge from research in fields such as social sciences, epidemiology and toxicology; this may be more detailed and quantitative than is appropriate for SEA, though HIA can take a strategic and qualitative approach where appropriate.
- ❑ In addition, it is worth noting that the health sector sometimes uses terms such as “plan” or “programme” in different senses from those generally understood in SEA (e.g. a plan for reducing health inequalities or a programme of immunization).

Some of the methods used in HIA, and knowledge based on it, can readily be applied in SEA to help identify the potential effects of plans and programmes on human health and health inequalities, and to suggest how adverse effects could be offset and beneficial ones enhanced. As with other environmental effects, however, the predictive character of SEA and the uncertain and indirect nature of many of the health effects of plans and programmes can make it impracticable or even undesirable to attempt precise or detailed predictions.

¹³ International Association for Impact Assessment. *Health Impact Assessment: International Best Practice Principles*. Special Publication Series No. 5. September 2005. Available at <http://www.iaia.org/modx/assets/files/SP5.pdf>.

A7.3.4 Scoping and preparation of the environmental report

33. Subsection A4.2.3 of the Manual describes steps in scoping and the preparation of the environmental report. This subsection provides some practical tips for addressing health issues within those steps, by presenting additional guidance on the contents of the report (further to Table A4.2). The suggestions in Table A7.3 below should not be treated as providing a complete and rigid framework. Those persons addressing health issues in the environmental report might adopt approaches based on the specific nature and context of the given plan or programme and on the comments obtained from health authorities during scoping.

Table A7.3: Possible approaches to addressing health in the Environmental Report

Items in Environmental Report (Protocol, <u>annex IV</u>)	Tips for possible approaches to addressing health
1. The contents and the main objectives of the plan or programme and its link with other plans or programmes.	This issue is fully addressed in <u>Table A4.2</u> of the Manual.
2. The relevant aspects of the current state of the environment, including health, and the likely evolution thereof should the plan or programme not be implemented. 3. The characteristics of the environment, including health, in areas likely to be significantly affected. 4. The environmental, including health, problems which are relevant to the plan or programme.	<p>These three items may overlap but relate to different aspects of health conditions in areas covered by the plan or programme and on which it is likely to have significant effects.</p> <p>In paragraph 2, the relevant aspects might describe overall trends in the state of health in the area.</p> <p>In paragraph 3, relevant general trends in health might be described, with specific reference to areas with high values for well-being (public spaces, areas for exercise, etc.), areas with localized health problems or health inequalities, and densely populated areas.</p> <p>In paragraph 4, health problems might be mapped. When a more comprehensive approach to addressing health issues in the SEA is chosen, determinants of health might be identified and might include factors such as lifestyle, social or community influences, living and working conditions or general socio-economic, cultural or environmental factors.</p>

Items in Environmental Report (Protocol, <u>annex IV</u>)	Tips for possible approaches to addressing health
<p>5. The environmental, including health, objectives established at international, national and other levels which are relevant to the plan or programme, and the ways in which these objectives and other environmental, including health, considerations have been taken into account during its preparation.</p>	<p>Health objectives might include international or regional (e.g. from WHO or WHO/Euro), national and more local objectives that are relevant to the plan or programme's likely significant effects or to issues that it raises.</p>
<p>6. The likely significant environmental, including health, effects*/ as defined in article 2, paragraph 7.</p> <p>*/ These effects should include secondary, cumulative, synergistic, short-, medium- and long-term, permanent and temporary, positive and negative effects.</p>	<p>Health should be considered in the context of the other components listed in <u>article 2</u>, paragraph 7, such as exposure to traffic noise or air pollutants. A description of the relationship between these components might be important, as it might reveal other and more significant effects than by a study of the components individually.</p> <p>More comprehensive approaches to addressing health might assess the positive and negative effects of a plan or programme on relevant health determinants, and might draw conclusions on whether the plan or programme would create favourable conditions for a healthy population, with health being defined to include well-being, not merely the absence of disease.</p>
<p>7. Measures to prevent, reduce or mitigate any significant adverse effects on the environment, including health, which may result from the implementation of the plan or programme.</p>	<p>Environmental mitigation measures proposed in the environmental report might themselves have adverse health effects and vice versa. Any such effects should be considered.</p>
<p>8. An outline of the reasons for selecting the alternatives dealt with and a description of how the assessment was undertaken including difficulties encountered in providing the information to be included such as technical deficiencies or lack of knowledge.</p>	<p>This issue is fully addressed in <u>Table A4.2</u> of the Manual.</p>

Items in Environmental Report (Protocol, <u>annex IV</u>)	Tips for possible approaches to addressing health
<p>9. Measures envisaged for monitoring environmental, including health, effects of the implementation of the plan or programme.</p>	<p>Monitoring issues specific to health may include:</p> <ul style="list-style-type: none"> ❑ <i>Monitoring short- and longer-term effects.</i> Changes to the physical environment may have short-term consequences, for instance changes in transport and land use may see an immediate impact on accident rates. Other ecosystem changes such as air quality and climate change may have much longer-term impact timeframes. ❑ <i>Monitoring impacts on health inequalities</i> (differences in health status). If the scoping and environmental reporting stage has addressed health inequalities, it may be important to include these indicators in the monitoring stage. This will be of benefit to environment and health practitioners as well as supporting the provision of information to the public concerned. <p>The feasibility of any monitoring of health effects will be influenced by the availability of data, which may be obtained through:</p> <ul style="list-style-type: none"> ❑ <i>Use of existing national, regional or local data.</i> Environmental and health authorities will most likely have an existing environmental and health monitoring programme. ❑ <i>Use of health indicators.</i> It may sometimes be useful to continue the use of the health indicators chosen during the scoping and environmental reporting stages to monitor the health impacts of the plan or programme. This allows for consistency of analysis throughout the SEA. However, adjustments to existing monitoring systems in order to incorporate new health indicators may be quite demanding. Therefore, the feasibility of the establishment of any new monitoring system should be carefully reviewed prior to its approval.
<p>10. The likely significant transboundary environmental, including health, effects.</p>	<p>This issue is fully addressed in <u>Table A4.2</u> of the Manual.</p>
<p>11. A non-technical summary of the information provided.</p>	<p>This issue is fully addressed in <u>Table A4.2</u> of the Manual.</p>

The Protocol on Strategic Environmental Assessment (SEA) was adopted in Kiev (UKraine) on 21 May 2003. By the end of March 2007, there were six Parties to the Protocol.

The Protocol, once in force, will require its Parties to evaluate the environmental consequences of their official draft plans and programmes. SEA is undertaken much earlier in the decision-making process than project-level environmental impact assessment (EIA), and it is therefore seen as a key tool for sustainable development. The Protocol also provides for extensive public participation in government decision-making in numerous development sectors.

The Meeting of the Parties to the Convention on EIA in a Transboundary Context, which the Protocol supplements, decided to produce a capacity-development manual to support implementation of the Protocol. The Meeting of the Parties foresaw capacity development in SEA through preparation and dissemination of the manual.