



# Health Impact Assessment Guidance: A Manual

Standalone Health Impact Assessment  
and health in environmental assessment



MAKING LIFE BETTER



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The purpose of the Institute is to inform public policy to support healthier populations in Ireland and Northern Ireland.

The Institute does this through research and evidence review; policy analysis and evaluation; partnership working; specialist training and public communications.

The Institute focuses on promoting health and wellbeing, improving health equity and reducing health inequalities throughout the life course.

The Institute has researchers and policy specialists from a range of disciplines based in offices in Dublin and Belfast and is jointly funded by the Departments of Health in Ireland and Northern Ireland.

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This guidance is endorsed by the International Association for Impact Assessment. For further information on IAIA and resources for all forms of impact assessment please visit

<https://www.iaia.org/index.php>

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This guidance is endorsed by the European Public Health Association. For further information on the work by EUPHA relating to health impact assessment please visit the EUPHA HIA section at

<https://eupha.org/health-impact-assessment>



# Manual Contents

<b>Introduction</b>	<b>7</b>
At a glance - the guidance documents	9
Guidance for Health Impact Assessment on the island of Ireland	10
Terminology	12
<b>Framing the assessment of health</b>	<b>13</b>
Definition	14
Aims	14
Rationale	15
Background	15
Governance	15
Guiding principles for HIA	15
HIA and other assessments	17
<b>Health and inequalities in health</b>	<b>19</b>
Definition of health	20
Determinants of health	20
Health inequalities	22
Health equity	24
Policy context for addressing inequalities and inequity	25
<b>Doing the assessment</b>	<b>27</b>
Support	28
Ensuring a broad understanding of health and its determinants	29
Timing	30
Type	30
<b>The process</b>	<b>33</b>
Overview	34
Screening	36
Scoping	40
Analysis	43
Reporting	48
Implementation	51
Monitoring	53
Evaluation	55
<b>Conclusion</b>	<b>56</b>
<b>References</b>	<b>57</b>
<b>Technical Guidance</b>	<b>63</b>

# List of Figures

## Figures

Figure M01: Health Impact Assessment in its different forms	10
Figure M02: Guiding principles for HIA	16
Figure M03: The main determinants of health	21
Figure M04: Life expectancy gap between most and least deprived areas for men and women in Northern Ireland and Ireland	23
Figure M05: Percentage of people with health-related limitations in activity Northern Ireland and Ireland	23
Figure M06: Equality and equity	24
Figure M07: Health Impact Assessment: the process	34
Figure M08: Opportunities for stakeholder engagement as part of the assessment of human health in SEA/EIA and in HIA	36
Figure M09: Screening guide	39
Figure M10: Scoping guide	42
Figure M11: When is an effect likely and significant?	46
Figure M12: Assessment guide questions	47
Figure M13: <i>Healthy Ireland</i> and <i>Making Life Better</i> oversight and delivery mechanisms	52

A photograph of a woman and a young child in a garden. The woman, with her hair in a bun, is smiling and looking down at a pumpkin held by the child. The child is looking intently at the pumpkin. The background is a lush garden with green foliage and a wooden trellis. A large blue circular graphic is overlaid on the bottom left of the image.

# Introduction

## Introduction

This guidance defines Health Impact Assessment (HIA) and sets out the stages involved.

It updates guidance issued by the Institute of Public Health in Ireland in 2009.

It draws on best practice in impact assessment from across the island of Ireland, the UK and internationally.

There are new tools for each stage of the assessment process.

It is a user-friendly and practical framework to guide policymakers, commissioners and practitioners in undertaking standalone HIAs and health in environmental assessments.

At the time of writing this guidance, in 2021, the close dependence between environment and health is abundantly clear: government, businesses and civil society are grappling with the myriad of health, social and economic effects of COVID-19. This global pandemic is understood to have originated from an infection which crossed from wild animals to humans. Physical and mental health have been affected and stark differences, or inequalities, in health have been laid bare.

Society faces ongoing challenges from climate change; environmental pollution; poverty; emerging infectious diseases; increasing chronic diseases; reduced mental health; and widening health inequalities.

As we start to tackle these challenges, we clearly see the role that public health plays across society.

A 'Health in All Policies' (HiAP) approach provides the best possible opportunity to create the conditions for health and health equity. The *whole-of-government* approaches and cross-sectoral work embedded in HiAP is needed to recover from this current pandemic, to avoid future outbreaks and to tackle other societal challenges.

Many public health outcomes are influenced by environmental factors. For example:

The built environment influences levels of physical activity and active travel which in turn influence the occurrence of non-communicable diseases.

Access to green and blue spaces can support both physical and mental health, by providing opportunities for play, recreation, activity and social connection.

Strategies for animal and plant health, farming and food systems are critical to human health and wellbeing.

*Healthy Ireland* ([M1](#)) and *Making Life Better* ([M2](#)) provide policy frameworks for public health in Ireland and in Northern Ireland, respectively. These, and subsequent updates ([M3](#), [M4](#)), place a high priority on improving health and on tackling the wider determinants of health.

Each is clear about the importance of HiAP, of HIA and of equity and social justice.



## At a glance – the guidance documents



This guidance is for organisations that are developing legislation, policies, plans or programmes. It is also for planning authorities and developers who are considering whether to grant, or who are seeking, permission for an individual project.

It can be used at different levels of government and decision-making, such as:

- Ministerial committees
- Official groups
- Project boards
- Local partnerships
- Authorising bodies
- Councils and government departments

It is also for practitioners delivering impact assessments, including standalone HIAs, as well as health within environmental assessments.

The guidance is presented in four parts. Each part is aimed at a different readership.

This is the **Manual**.

It is for commissioners, that is, those commissioning, requesting, inviting tenders for, selecting or otherwise procuring, delivery of a health assessment.

Throughout the *Manual* there are boxes which highlight guidance, which point to policy documents and which show examples of practice in impact assessment.

The examples from impact assessments are for illustration and do not imply that the Institute is making a statement about the quality of each example.



These book icons tell readers about further information in the *Technical Guidance*. ([See page 63](#))

## Guidance for Health Impact Assessment on the island of Ireland

HIA is a systematic approach that can be applied in different contexts and sectors.

In 2009 the Institute published HIA guidance (M5). This identified the stages of HIA and steered the user through the process. It focused on voluntary HIAs and it assisted users to develop consensus through the assessment.

This document updates that 2009 guidance. It seeks to steer the user through the process and it takes account of changes in health in environmental assessment.

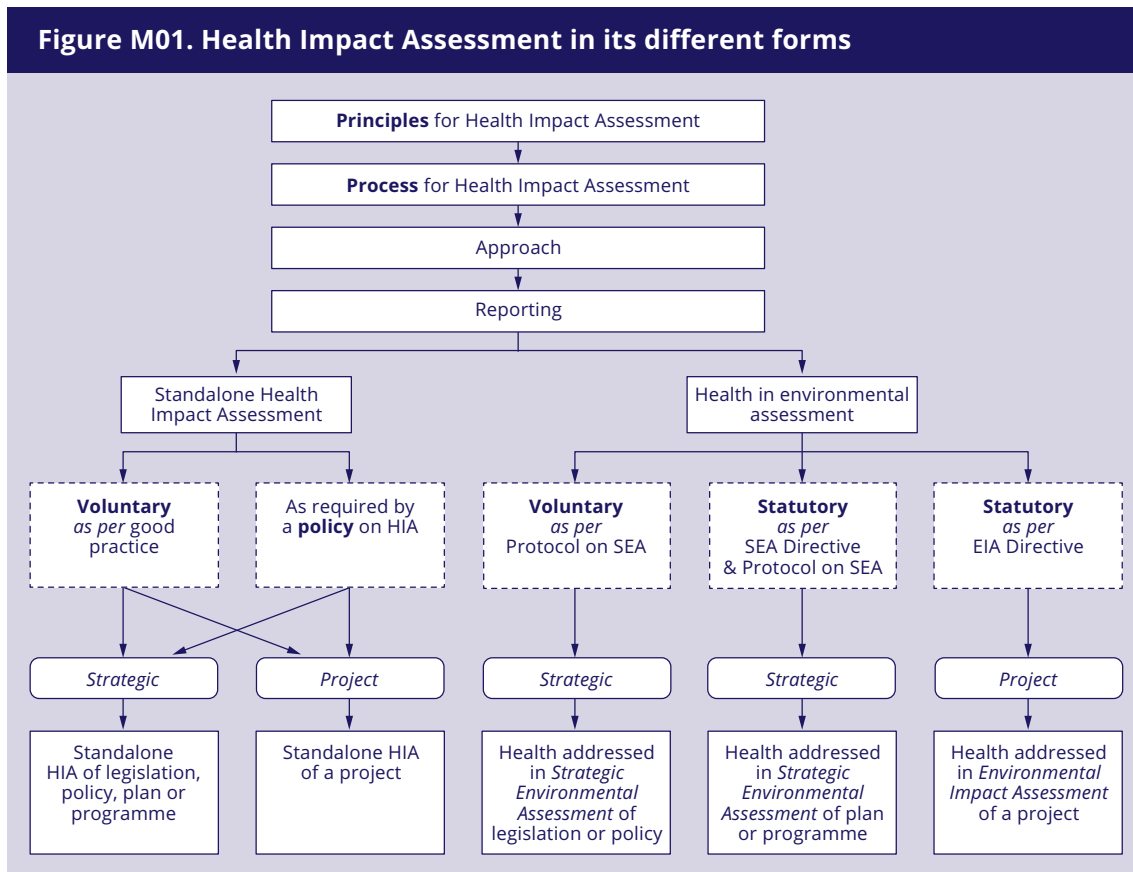
This 2021 guidance is for HIA in each of its different forms.

Figure M01 shows the different paths a HIA can take as well as the unifying features across all forms.

HIA can be voluntary but it can also be required by policy. Environmental assessment, which in most cases is a statutory process, is required to consider human health. Environmental assessment is an umbrella term for a Strategic Environmental Assessment (SEA) and an Environmental Impact Assessment (EIA).

This guidance refers to **standalone HIA** and **health in environmental assessment**.

These forms of assessment are applied at a strategic level to legislation, policies, plans and programmes, and at project level to individual projects. This guidance steers the user through the strategic and the project levels.



The term Health Impact Assessment encompasses the principles, process and approach that is common to standalone HIA and health in environmental assessment.

The **principles** for HIA are set out in [Figure M02 \(see page 16\)](#).

The HIA **process** consists of screening, scoping, analysis, reporting, implementation, monitoring and evaluation. Each stage is covered below – see pages [33](#) to [54](#).

The **approach** informs this whole guidance. It is introduced in this *Manual* and then further detail can be found in the *Technical Guidance*.

The Institute is keen to ensure consistency across all forms of HIA and so the approach presented across this guidance provides consistency in the conceptual models that are used and in the definitions of key terms such as health, inequalities, likelihood and significance.

The approach requires all forms of HIA to:

- Look at populations, as opposed to individuals
- Make relevant links to changes in health outcomes
- Consider effects on inequalities
- Keep the focus on those effects that are both likely and significant

A consistent approach across standalone HIA and health in environmental assessment is distinct from the methodologies that may be used in different types and levels of assessment. The *Technical Guidance* provides a conceptual model of evidence sources and decision criteria to enable a consistent and transparent approach to analysis.

The **reporting** requirements can differ for standalone HIA and health in environmental assessment. The precise methods and outputs of an assessment will depend on whether it is at strategic or project level, and also upon its driver, for example whether it is voluntary or required by statutory reporting requirements.

The Institute is an all-island organisation and so this guidance considers the implications of the UK exit from the European Union and it refers to policies for Ireland and for Northern Ireland.

HIA is a core part of public health practice and delivery of HiAP and this guidance provides fit-for-purpose advice to commissioners, stakeholders and practitioners.

## Terminology

This guidance refers to assessments being conducted on a 'proposal'.

This encompasses legislation, policy, plan, programme or project.

Further information on HIA may be found at

[www.publichealth.ie/hia](http://www.publichealth.ie/hia)



The glossary in Part 1 of the *Technical Guidance* defines terms that are used throughout the *Manual*. ([See page 74](#))





**Framing the assessment  
of health**

## Framing the assessment of health

This section introduces HIA, including definitions, rationale, background and aims. Principles underpinning all HIA are discussed, namely: a comprehensive approach to health; sustainability; participation; equity and equality; and ethical use of evidence.

The section concludes by setting out the relationship between HIA and other forms of impact assessment.

### Definition

HIA is a structured process. It looks at a proposal while it is being planned. HIA explores what the effects will be on people's health. HIA also shows how to improve the proposal.

The International Association for Impact Assessment defines HIA as a process which systematically judges the potential, and sometimes unintended, effects of a project, programme, plan, policy or strategy on the health of a population and the distribution of those effects within the population. HIA identifies appropriate actions to mitigate health risks and to promote health opportunities, and guides the establishment of a framework for monitoring and evaluating changes in health as part of sustainable development ([M6](#)).

### Aims

HIA seeks to inform and enhance the decision-making process in favour of health and health equity.

It aims to ensure potential positive health impacts and prevent potential negative health impacts of a proposal.

HIA can contribute to improved health by:

- Raising awareness among decision-makers of the relationship between health and the physical, social and economic environments
- Demonstrating how a proposal may affect the health of a population
- Providing recommendations or measures on how a proposal could be modified to increase opportunities for health gain and reduce chances of health loss

HIA contributes to better decision-making by:

- Following a clear, transparent process
- Ensuring conclusions and recommendations are evidence based
- Helping those affected by the proposal to participate

## Rationale

Proposals, including legislation, policies, plans, programmes and projects, from many areas affect health and should take into account their impact on health and health inequalities. HIA achieves this by considering, and presenting, the potential health effects of a proposal in a systematic and transparent way.

## Background

HIA has been developing internationally since the early 1990s. The International Association for Impact Assessment (IAIA) provides a list of key citations describing milestone publications in the field of HIA and relatively recent practical guidance documents for HIA ([M7](#)).

The World Health Organization (WHO) names impact assessment as a method for supporting HiAP ([M8](#)).

The founding Treaty on the Functioning of the European Union (EU) ([M9](#)), requires that a 'high level of human health protection shall be ensured in the definition and implementation of all Union policies and activities'.

The European Commission's internal guidance ([M10](#)) in relation to this mandate requires a broad definition of health and the consideration of inequalities.

In 2006, the Council of the European Union urged the Commission, Member States and the European Parliament to ensure the visibility and value of health in EU legislation through, among others, HIA ([M11](#)).

## Governance

It is good practice for relevant health authorities, particularly public health teams, to be involved from an early stage in the HIA. It may be appropriate, and is good practice, to convene a HIA steering group for standalone HIAs.

Typically, a steering group will not be convened for health in environmental assessments that is, within EIA and SEA, as governance and consultation processes are set out in the governing statutes.

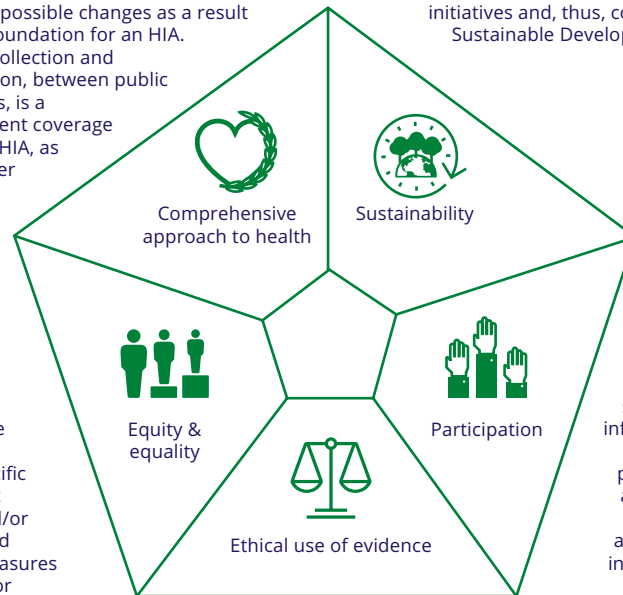
## Guiding principles for HIA

The guiding principles for HIA, as given by the IAIA ([M6](#)), are shown below. The principles apply to all stages of the HIA process (described in [Figure M07](#)). This guidance highlights where each principle is most relevant to show how they are applied.

## Figure M02. Guiding principles for HIA

HIA takes a broad, inclusive approach to health, emphasising that physical, social, and mental health and wellbeing are determined by health risks and health opportunities related to activities in all sectors of society. Proportionate consideration of such wider determinants of health, their inter-relationships, and possible changes as a result of development is the foundation for an HIA. Multi-disciplinary data collection and intersectoral collaboration, between public health and other sectors, is a prerequisite for a coherent coverage of health in standalone HIA, as well as for health in other forms of impact assessment.

Pre-existing inequalities and the potential for unequal distribution of health risks and opportunities across the population should be considered, paying specific attention to groups that could be vulnerable and/or marginalised. HIA should identify appropriate measures to reduce and to monitor inequities and inequalities in affected population groups.



Healthy, resilient communities are key for sustainable development and successful development initiatives. Therefore, HIA should judge future short- and long-term impacts of a proposal with a view to contribute to better, informed decision-making of new development initiatives and, thus, contributing to meeting the Sustainable Development Goals (SDGs) of the 2030 Agenda.

People have a right to be informed about proposed development initiatives and should be given a chance to influence the decision-making process. In adhering to this principle, HIA should involve and engage stakeholders so that people potentially affected by the development initiative have an opportunity to express their hopes and concerns regarding health and can influence the formulation of public health actions.

An HIA should use transparent and rigorous processes to synthesise and interpret the evidence. The evidence should be the best available from different disciplines and methodologies. The evidence should be evaluated, and measures developed impartially. HIA builds on evidence and sound judgement in accordance with up-to-date policies, guidance, data and scientific consensus to predict future impacts and to inform measures for managing health risks and health opportunities.

Adapted from Winkler et al ([M6](#))



## HIA and other assessments

There are parallels between HIA and other impact assessments, including:

- Environmental assessment (at strategic and project levels)
- Poverty (PIA)
- Human rights (HRIA)
- Equality (EqIA)
- Regulatory Impact Analysis (RIA)
- Social (SIA)



For further detail on each of these other instruments for assessment, see Part 1 of the *Technical Guidance*. ([See page 73](#))

Health can be integrated into other assessments and in so doing, the assessor can draw on the approaches and tools discussed in this guidance, particularly scoping.

However, these other assessments do not typically report against population health outcomes.

North-South and UK-Ireland impacts form part of the North-South and East-West dimensions of Regulatory Impact Assessment. Further guidance on border impact assessment and a useful Impact Assessment Toolkit for Cross-Border Cooperation was published in 2011 ([M12](#)).

This can be useful to HIA practitioners looking at proposals affecting the border region. The definition of Cross-Border Impact Assessment was developed from the definition of HIA ([M12a](#)). This helps to align it with HIA. The toolkit includes a strategic level example on fuel poverty in a cross-border context. This includes considering health and wellbeing objectives, impacts, indicators and monitoring. Cross-Border Impact Assessment could inform, or be informed by, a HIA.

Compliance with statutory procedures is very important in environmental assessment. The Institute is clear that SEA or EIA does not have to adopt all the HIA methods and tools discussed in this guidance.

The methods used, and the scope of issues examined, will vary. The guiding principles, process and approach remain the same (see [Figure M01](#) and [Figure M02](#)).

HIA tools and working practices can be used to enable Health in All Policies. For example, tools for *screening*, *scoping* or for formulating *recommendations* can also be used to examine an emerging issue or to scrutinise a new remit within an organisation. HIA tools can be used to develop an understanding of potential effects and to plan action. This need not result in a formal HIA report.

Impact assessment continually adapts to address current challenges. For example, in 2021, the IAIA issued an advice note on connecting people's wellbeing and biodiversity in impact assessment ([M12b](#)). See below for two examples of HIA in relation to COVID-19.

HIAs can be carried out on policies that are drafted at high speed. The assessment process can be useful for policymakers as they respond to unfolding novel circumstances, such as the COVID-19 pandemic, and also as plans for recovery are made. Such HIAs can be challenging to undertake, particularly when circumstances prevent them from being done while the policy is developed.



In 2020, the Wales Health Impact Assessment Support Unit issued a HIA of the 'Staying at Home and Social Distancing Policy' in Wales in response to the COVID-19 pandemic ([M13](#)). This maps evidence and flags up expected consequences of the policy across population groups and determinants of health. It looks at short- and long-term, positive and negative effects.



Liz Green, who led the HIA team, notes that the assessment helped Public Health Wales (PHW) to move its thinking beyond the immediate health protection focus of COVID-19. The HIA is enabling PHW to be proactive towards the wider harms and inequalities that have been exacerbated and caused by the pandemic and is helping with the recovery ([M14](#)).

In England, in 2020, the Yorkshire and Humber Public Health Network issued advice to its members about doing a Health Inequalities Impact Assessment in the context of COVID-19 (See source [M15](#)). [NB the term Health Inequalities Impact Assessments (HIIA) is interchangeable with HIA.] The Yorkshire and Humber Public Health Network note some challenges:

- HIA is usually used to assess 'one' policy and in COVID-19 there are multiple policies and other factors
- These multiple proposals and decisions occur simultaneously as well as concurrently, making it hard to separate impacts
- All are occurring at pace and at scale
- The concept of vulnerability is altered by COVID-19 with some people becoming newly vulnerable and others moving in and out of vulnerability
- There is little experience or evidence available to inform what the full range of impacts may be or how they may affect populations differently
- Resources, time and capacity issues may make it
- difficult to perform an HIA during the COVID-19 pandemic
- Data and intelligence may not be available

It is interesting to see that some of these challenges are also noted in the use of environmental assessment in disaster management ([M16](#)). Working within these limitations, HIA is able to add valuable insight to decision-making, and these examples show how HIAs can be done under difficult circumstances.



# Health and inequalities in health

## Health and inequalities in health

This section introduces the concept of health and its social, economic, environmental and institutional determinants. Health within the context of the Sustainable Development Goals is explored.

The concepts of health inequalities and health equity in HIA are discussed, including links to the public health and health equity policy context.

As understanding of the links between people, political systems, economies and the planet continues to grow, so too does the importance of defining health in a way that recognises the fundamental connections between health, society and the environment.



Go to Part 1 of the *Technical Guidance* for more information about defining health, including *One Health, planetary health; health as a human right* and health as part of the *UN's Sustainable Development Goals*. ([See page 79](#))

## Definition of health

The definition of health in this guide is from **the constitution of the World Health Organization** (WHO).

This defines health as '*a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity*' ([M17](#)).

This definition is in two parts. In keeping with the first part, HIA includes consideration of the potential impacts of a proposal on physical, mental and social wellbeing as well as ways to promote and improve health. In keeping with the second part, HIA also includes consideration of potential effects on health services and ways to protect health.

The longevity of the WHO definition of health ([M17](#)) gives it primacy as a definition ([M18](#)).

## Determinants of health

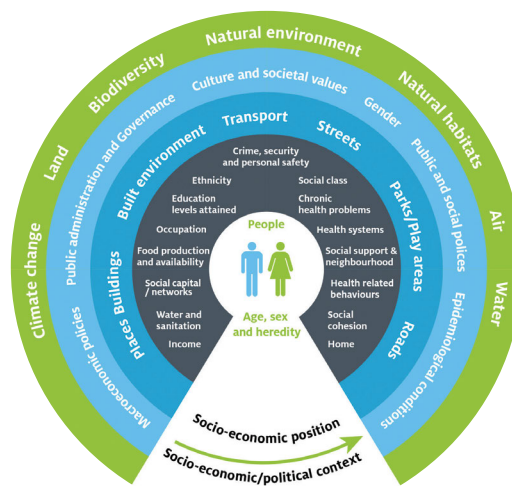
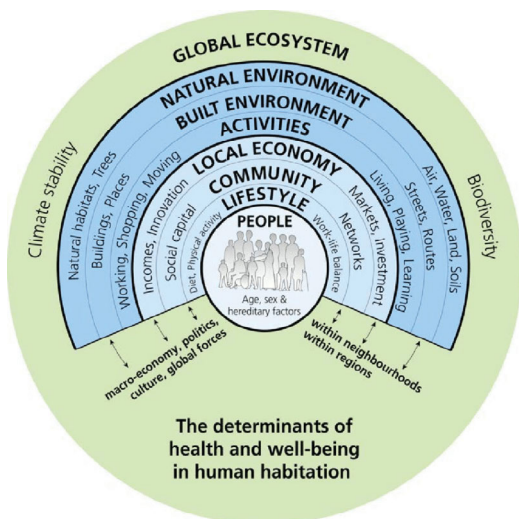
[Figure M03](#) below illustrates the main determinants of health as shown in *Making Life Better and Healthy Ireland*.

Both figures show how individual and community health is determined by behavioural choices, by social, environmental and economic conditions and by access to quality healthcare services.

Policies and actions formulated outside the healthcare sector have a significant impact on people's health and wellbeing. For example, a housing sector scheme on damp-proofing will contribute to improving respiratory health; and spatial planning and transport sector policies that increase active travel will in turn influence cardiovascular and mental health.



**Figure M03. The main determinants of health**



In *Making Life Better* (M2). Originally from Barton and Grant (M19) developed from the model by Dahlgren & Whitehead (M20) and accessible in Dahlgren & Whitehead (M21)

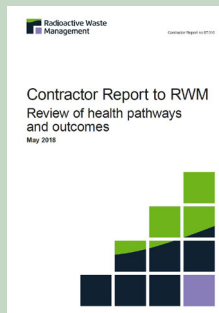
From *Healthy Ireland* (M1)

The box below provides some resources that have useful evidence reviews on specific determinants of health.



Public Health England (M22) provides an umbrella review which critically appraises and summarises existing review-level evidence of associations between the built and natural environment and health outcomes. The review is centred on five aspects of the built and natural environment:

- Neighbourhood design
- Housing
- Healthier food
- Natural and sustainable environment
- Transport



Radioactive Waste Management Limited (RWM) is a wholly owned subsidiary of the UK's Nuclear Decommissioning Authority. In 2018, RWM published an evidence resource to support the identification and assessment of potential health pathways and outcomes associated with the geological disposal of higher-activity radioactive wastes ([M23](#)). This provides evidence for the following health pathways:

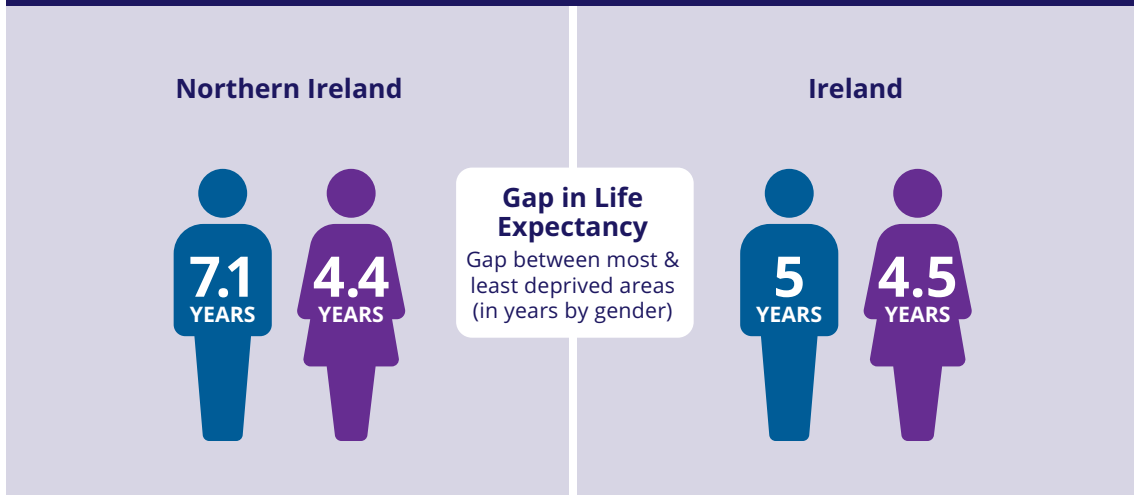
- Recreation, amenity and physical activity
- Transport and health
- Access to services and facilities
- Community cohesion
- Radiological safety
- Environmental effects and health
- Socioeconomic effects and health
- Community cohesion, with a focus on 'social cohesion'
- Radiological safety, with a focus on 'public understanding of risk'

## Health inequalities

The term *health inequalities* is used to refer to the avoidable gap in health outcomes between those at the top and bottom ends of the social class or socioeconomic classification scale. [Figure M04](#) shows the gaps in life expectancy between the most and the least deprived areas for men and women in Northern Ireland and Ireland. [Figure M05](#) shows the percentage of people with health-related limitations in activity, by age, in Northern Ireland and in Ireland.

People in higher socioeconomic groups are more likely to live longer and enjoy more years of good health than those in lower socioeconomic groups. There are also notable differences in the health experiences of men and women. Health inequalities and social inequalities are closely linked.

**Figure M04. Life expectancy gap between most and least deprived areas for men and women in Northern Ireland and Ireland**

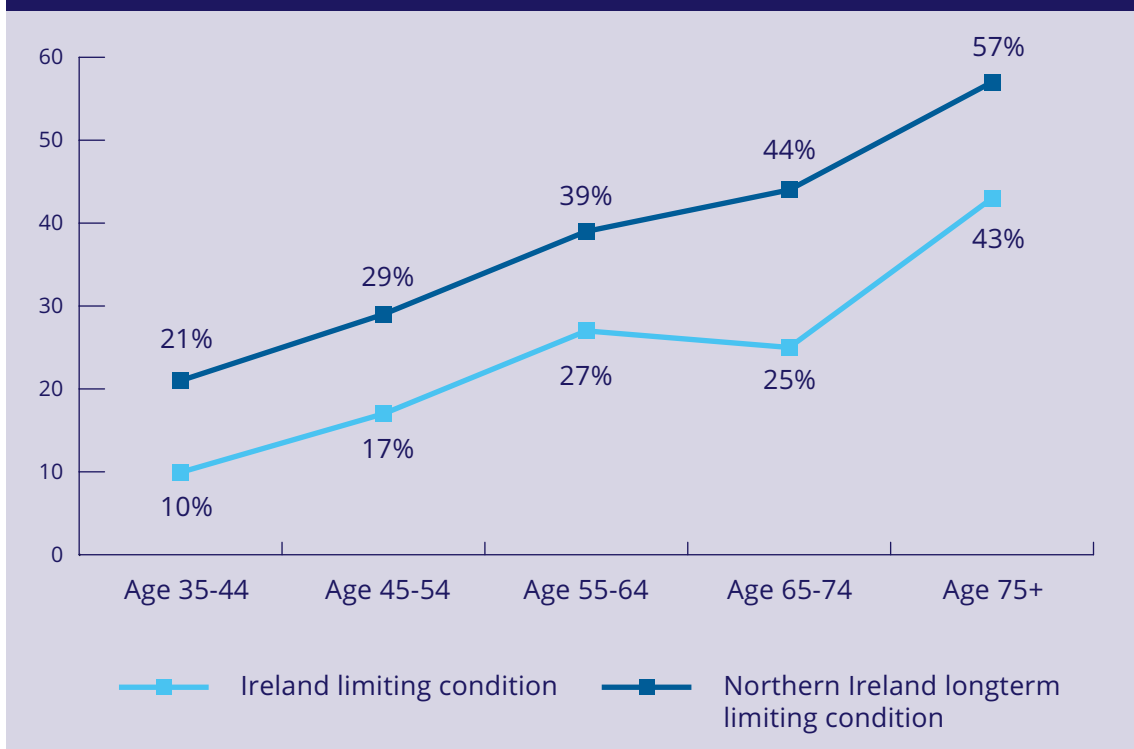


Source: DOH NI, 2020b

Source: CSO 2019b

From Institute of Public Health ([M24](#))

**Figure M05. Percentage of people with health-related limitations in activity Northern Ireland and Ireland**



From Institute of Public Health ([M24](#))

## Health equity

[Figure M06](#) shows the difference between *equality* and *equity*. Equity is about whether a difference is fair.

This makes the moral and ethical dimension of health inequalities explicit.

Health equity is both a principle and a goal. It motivates efforts to eliminate differences in health by improving the health of the economically/socially deprived.

This is central to HiAP, and is important for both *Making Life Better* ([M2](#)) and *Healthy Ireland* ([M1](#)).

[Figure M06](#) also shows how there are multiple ways by which inequity is experienced and created ([M25](#)). It is known as intersectionality when these overlap. These include but are not limited to, aspects such as gender, disability, sexuality, age, religion and ethnicity.

Equity and cumulative effects in the *Technical Guidance* considers how to address intersectionality in impact assessment.

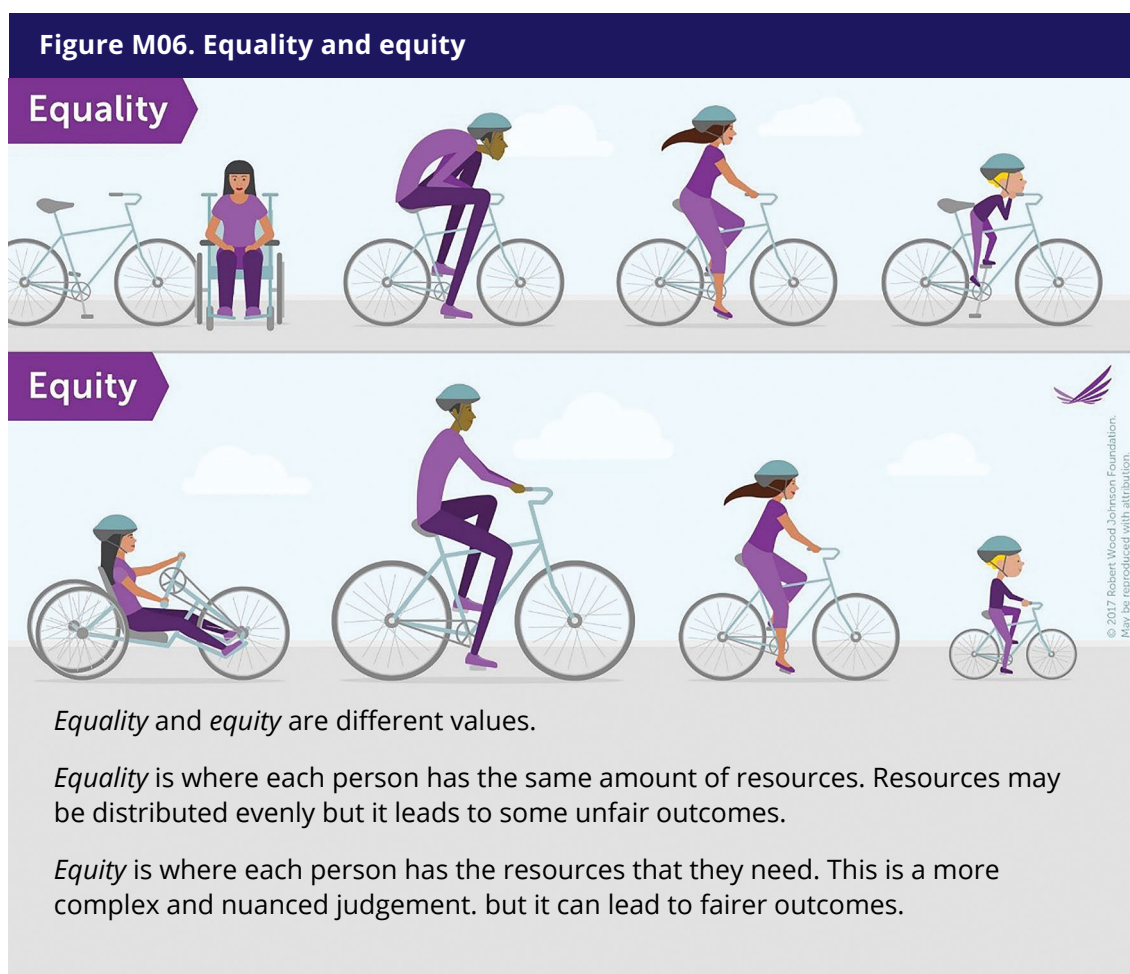


Illustration from © 2017 Robert Wood Johnson Foundation ([M26](#))

The two terms are not always used correctly. *Equality* is often considered instead of *equity*. Too often the focus is on measuring differences – that is, *equality* – and there is less consideration of what *fair* or *just* actually means. A proper consideration of *equity* requires debate and dialogue.

Dialogue also brings challenges – for example:

- What values inform the discussion?
- How are the questions framed?
- Who takes part in the debate?
- Which language is the debate held in?
- Who holds the decision-makers to account?

The 'UK Healthy Cities Network' and the 'Healthy Cities and Counties of Ireland Network' have engaged with such dialogues and promote HIA across the island of Ireland and at a European level.

## Policy context for addressing inequalities and inequity

*Healthy Ireland* (M1) and *Making Life Better* (M2) provide a policy context for HIA action, including to address inequalities and inequity. They provide the rationale and focus for pursuing a whole-of-government approach to tackling health inequalities, improving health equity and improving public health and wellbeing by addressing the social determinants of health.



**Healthy Ireland (M1):** Equity is one of the six ethical principles for the strategy.

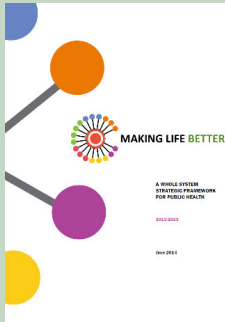
A life course approach is taken to improving health and wellbeing, with equity considerations beginning in pregnancy.

The principle of equity aims to minimise avoidable disparities in health, as well as the social determinants of health, between groups of people who have varying levels of social advantage. Equity provides all persons with a fair opportunity to attain their full health potential, to the greatest extent possible.



Ireland has published a Roadmap for Social Inclusion (M27). This whole-of-government strategy aims to reduce the number of people in consistent poverty and increase social inclusion for those who are most disadvantaged.





*Making Life Better* (M2): The charter that frames this strategic document has ‘Social justice, equity and inclusion’ as one of the six shared values to underpin action. It refers to Health 2020 and it defines HIA as being a practical tool that supports HiAP. It also places human rights at the centre of policymaking and sets great store by devolving responsibility and activity to community levels of working.

Implementation relies on the inter-connectedness of many government policies and programmes. There are opportunities to strengthen the linkages by considering health and health equity in policymaking, and governance and monitoring which develops a sense of coherence flowing through to implementation at delivery level (Exec summary, para 18).

A key purpose of this framework is to set out a strategic direction and actions that will actively pursue health equity and social inclusion. Tackling the major inequalities in health and wellbeing and their causes will help promote equality of opportunity and good relations (para 4.8).

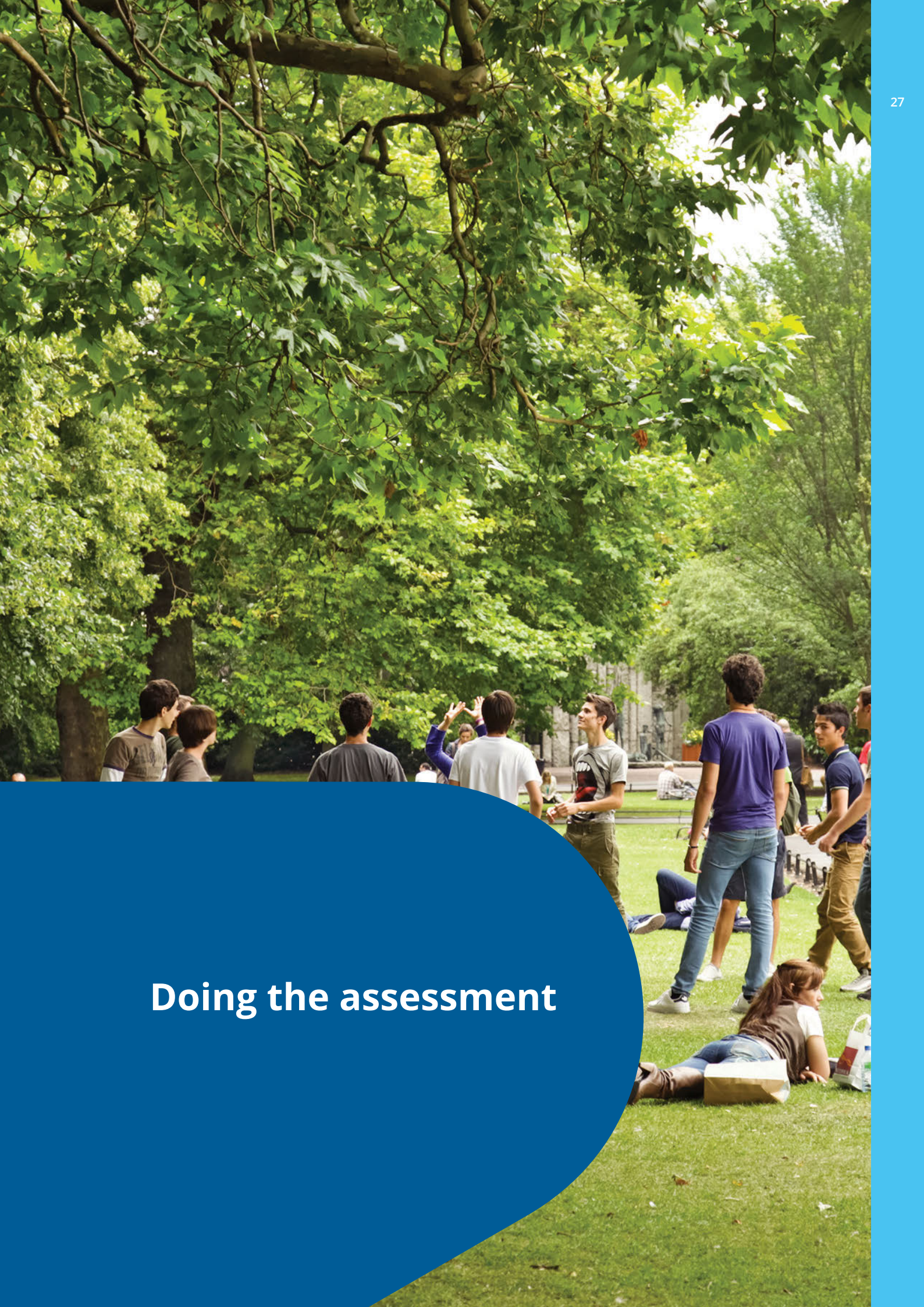
The ‘whole system’ governance and implementation arrangements will aim to ensure that health and health equity are considered coherently across ministerial and departmental policymaking through a Health in All Policies approach (para 10.3).



Northern Ireland is currently developing a suite of Social Inclusion Strategies under the Department for Communities (M28). There are four Expert Advisory Panels tasked with preparing the following Social Inclusion Strategies:

- Anti-Poverty Strategy
- Disability Strategy
- Sexual Orientation Strategy
- Gender Strategy





## Doing the assessment



## Doing the assessment

This section looks at some issues to consider before doing HIA, such as: level of support for the HIA; the breadth of health as a topic; timing in relation to the proposal; and type of assessment.

HIA supports *Healthy Ireland* and *Making Life Better* HiAP delivery through intersectoral working and analysis of the health impacts and opportunities of a particular proposal.

HIAs are conducted at the strategic level, for example, the HIA of a policy, plan, programme or piece of legislation. They are conducted at the project level, for example, a specific development.

- Strategic HIA tends to involve simpler, but arguably more powerful, tools for use by those with more generalist health knowledge to influence broad structural changes in a positive way.
- Project HIA tends to involve detailed consideration of local data and more involved analysis by health specialists.

In this section we focus on *what* to do during a HIA.



The *Technical Guidance* Parts 1 to 6 contain tools for HIAs at strategic and at project level. ([See page 63](#))

## Support

HIA can facilitate the implementation of a wide range of environmental, social, economic and institutional objectives across sectors.

HIA can help all sectors to deliver their objectives while also improving population health.

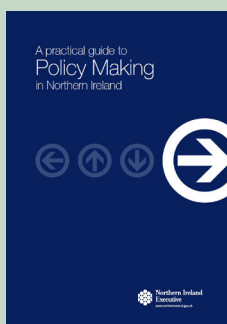
Knowledge of, and support for, HIA is limited. However, support for HIA is critical to the value it adds.



See also *The Case for HIA* which is a summary document for policymakers.



In 2017, the Committee on the Future of Healthcare ([M29](#)) in Ireland suggested that further work be carried out to ensure that government policies work to address the social determinants of health. This included the use of HIA and preventative care and health promotion, and better integration of and coordination between every aspect of the health service and all other relevant sectors, including finance, social protection, education, transportation, housing, agriculture, urban planning and more.



Northern Ireland policymaking recognises that conducting a HIA on policies and programmes is a critical means of addressing the social determinants of health and reducing health inequalities ([M30](#)).

## Ensuring a broad understanding of health and its determinants

Health in HIA covers physical, mental and social wellbeing. This demands a focus on social, economic, environmental and institutional determinants of health (see [Figure M03](#)).

This is essential in helping to decide where, when and what type of HIA might be appropriate and whether specialist assistance is required.

Most opportunities to improve population health are outside of the direct control of the health sector.

Intersectoral work between public health and other public, private and voluntary sector organisations is fundamental to delivering national and international health policy, including *Healthy Ireland* and *Making Life Better*.

HIA can facilitate HiAP to deliver population and community health benefits.

Ireland's Department of Health has recognised the need for HIA training for those in a public health ([M31](#)) and environmental and planning ([M32](#)) roles.

## Timing

The stage a proposal is at will affect the influence the HIA may have; for example, the designers of a new development may be making strategic decisions about a design or they may be putting final touches to a planning application. There are different opportunities at the strategic and project levels.

Impact assessment is prospective, that is, it is conducted while the proposal is being developed, so as to influence the decisions being made.

The monitoring and evaluation stage of a HIA may be undertaken while the proposal is being implemented, that is, concurrently.

Monitoring-based adaptive management (further action linked to monitoring) can overcome the problems sometimes faced in HIA in accessing detailed information about the proposal, for example, uncertainty in whether an effect would occur, or whether mitigation would be effective. An adaptive management approach is one that *'allows adjustments to changing events, decisions, and circumstances and that can modify implementation and mitigative strategies as new knowledge is gained'* (M33).

The term 'retrospective HIA' is sometimes used to describe the process once a proposal has been implemented. This is closer to outcome evaluation.

In deciding when to undertake a HIA, it is important to be clear about who is making key decisions and to identify key decision points in a given proposal. The timing of some HIAs will be governed by statutory or policy requirements, for example, addressing human health within SEA or EIA.

## Type

HIAs can have varying breadths of scope and depths of analysis. It is good practice to conduct a proportionate HIA, taking account of the:

- Time available
- Resources
- Proposal complexity
- Compliance requirements, for example, a statutory defined procedure and/or output

Terms such as *desktop*, *rapid* and *comprehensive* have been used to describe different types of HIA but there is little precision in how they are practically applied.

For example:

- Quick advice can be in depth and of great value and so the term *rapid* can undermine the credibility of the HIA and its conclusions. Timelines change: an assessment described as *rapid* may end up being conducted over many months.
- The term *desktop* is not a type of HIA, but it typically indicates that new evidence has not been collected. There are high-quality evidence sources which are readily available, including consultation reports on the proposal.



The *Technical Guidance* provides tools to support strategic- and project-level assessment of human health, whether as a standalone HIA or as a health in environmental assessment.

These tools allow for quick preliminary conclusions or for a deeper understanding with more nuanced, evidence-based and reasoned conclusions.

HIA's are sometimes described with terms such as *rapid* and *comprehensive*. These terms should be used with caution and with clear caveats that they do not indicate timelines, methodologies or outputs (see the box above).

This guidance states that each HIA should be proportionate to the time available, resources, proposal complexity and compliance requirements.

The process, described in the next section, should be followed, whatever type of HIA is undertaken.



The *Technical Guidance* Part 3 contains tools for HIAs that can be completed as checklists or as part of in-depth analysis.  
([See page 114](#))

The Institute of Public Health was requested by Ireland's Department of Health to undertake a HIA of a proposed tax on sugar-sweetened drinks (SSDs). The public health priority for this proposal was to support a reduction in obesity in Ireland. The HIA was completed in 2012 ([M34](#)).

This provides an example of a HIA conducted on a proposed tax.

A cross-sectoral steering group was formed with membership from other government departments, regulators, civil society and academia. The work was conducted by the Institute and presented to the steering group. It consisted of a review of the proposed tax on SSDs; a population profile; a literature review; and a stakeholder consultation.

In parallel to the HIA, the Department of Health also undertook a modelling exercise to estimate the effects of a 10% SSD tax on obesity and overweight and carried out a poll of public opinions and attitudes towards SSDs.

The HIA notes that the evidence examining the relationship between consumption of SSD and weight gain was suggestive of a positive relationship but is not conclusive – as the literature was contradictory and study quality tended to be low or medium. The HIA also concludes that 'price increases tend to decrease demand but the degree to which this happens is variable because consumer behaviour and industry response to tax is difficult to predict'.

The HIA acknowledged the decision on whether to implement the tax must be taken within the context of imperfect evidence. It also provided decision-makers with a clear consensus view from the cross-sectoral steering group on both the potential health benefits of the SSD tax and the uncertainties around such benefits.

The HIA noted the multifactorial nature of obesity. In this case, the remit of the HIA was a focus on the SSD tax alone and not on any measures that could complement it. In its conclusions, the HIA noted how consultees raised the importance of education and accompanying measures to promote physical activity; and of engagement with industry prior to moving forward with a tax. The example of salt reduction was cited as a precedent.

In 2016, in its 'Programme for a Partnership Government' ([M35](#)) the Department of the Taoiseach committed to implementing this tax as one of several public health interventions. As part of the preparations for bringing the tax in, the Oireachtas Library & Research Service re-examined the proposals and cited the HIA ([M36](#)). The tax was implemented in May 2018 ([M37](#)), informed by the HIA.



## The process

## The process

This section considers the HIA process and each stage, namely: screening; scoping; analysis; reporting; implementation; monitoring; and evaluation.

### Overview

[Figure M07](#) shows the stages in the HIA process. These apply whether the assessment is at the strategic or project level and whether it is a standalone HIA or a health in environmental assessment.

These stages can overlap with each other, for example, the scope should be kept under review as new information comes to light or the proposal develops through the analysis and draft reporting stages.

These HIA stages align to, but are distinct from, formal statutory reporting procedures in EIA and SEA.

**Figure M07. Health Impact Assessment: the process**

<b>Screening</b>	Decide whether to conduct an assessment; this may be a case-by-case decision or a statutory/policy requirement
<b>Scoping</b>	Choose the health determinants and issues to assess, specify methods and clarify governance arrangements
<b>Analysis</b>	Gather evidence and assess the proposal's effects, particularly likely significant effects
<b>Reporting</b>	Present conclusions and recommendations/measures, including in relation to inequalities and equity
<b>Implementation</b>	Follow through with the recommendations and/or the measures when implementing the proposal
<b>Monitoring</b>	Collect or examine further data/indicators and if appropriate take further action
<b>Evaluation</b>	Review the robustness and effectiveness of the assessment and its outcomes. Improve practice.



Different stakeholders are involved at different stages. For example, consultants delivering HIA may only be involved in the scoping, the analysis and the reporting. The HIA needs governance that runs from screening, through to implementation, monitoring and evaluation. ([See source M38 for a series of illustrations that show the various stages of EIA and who is involved.](#))

Standalone HIAs can use checklists to compress the scoping, analysis and reporting stages. This is appropriate if time or resources are tight.



The *Technical Guidance* provides tools and conceptual models to support HIA delivery, Part 2 for screening ([see page 105](#)), Part 3 for scoping ([see page 114](#)) and Parts 4 ([see page 136](#)), 5 ([see page 157](#)) and 6 ([see page 165](#)) for analysis and reporting.

Health in environmental assessment always has a strong focus on reporting, for example, the EIA or SEA report.

[Figure M08](#) shows the opportunities under the HIA process for stakeholder engagement. Early input from health stakeholders is strongly recommended, particularly at the scoping stage.

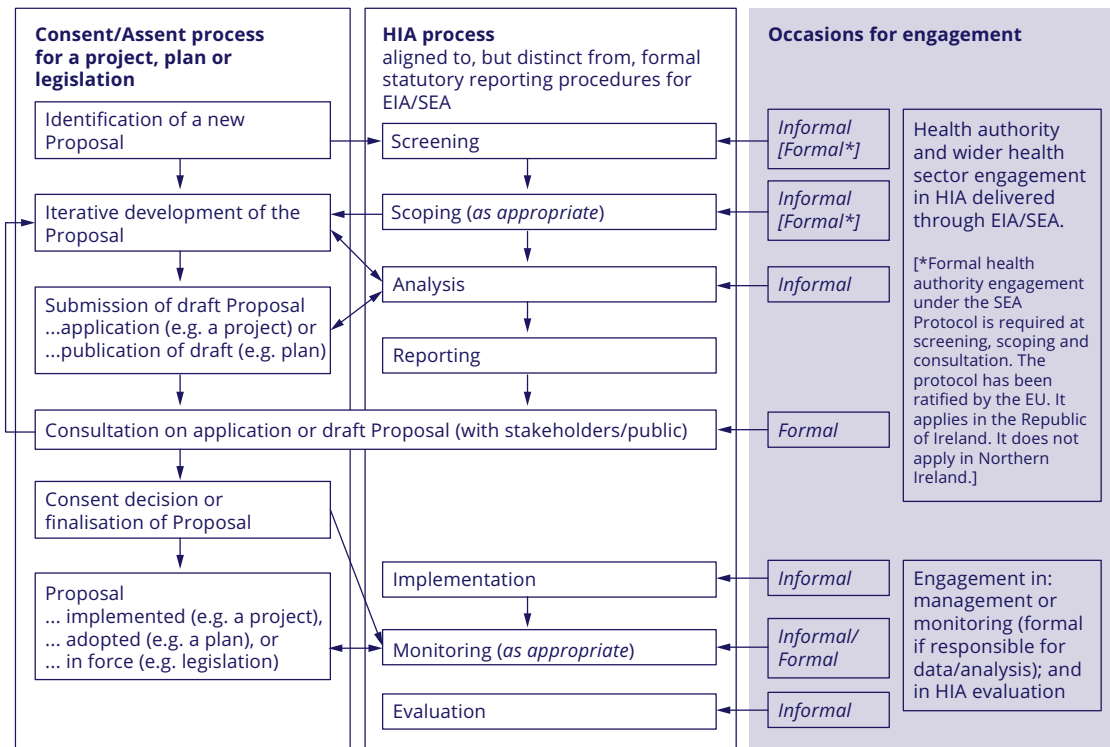
'Participation' is a guiding principle for HIA (see [Figure M02](#)). Consultation, and engagement, with the public can be conducted throughout but is typically conducted during scoping, analysis and reporting.

In EIAs and SEAs, these opportunities are both formal (required by statute), and informal (good practice).

In standalone HIAs, the opportunities for stakeholder involvement are informal (good practice).




**Figure M08. Opportunities for stakeholder engagement as part of the assessment of human health in SEA/EIA and in HIA**




Adapted from Cave et al ([M39](#))

### Screening

Screening determines whether an impact assessment is required. The output of screening is described as a screening decision. [Figure M09](#) shows how a screening decision can be automatic; in other words, proposals that always require an SEA or EIA as set out by EU Directives or that always require a HIA based on an adopted 'policy on HIA', or the screening decision can be based on reviewing the particular characteristics of a proposal against a list of criteria. This is known as making decisions on a 'case-by-case' basis.

 Part 2 of the *Technical Guidance* provides detail on developing a policy on HIA and a tool for case-by-case screening. ([See page 105](#))

 [Figure M09](#) of the *Manual* shows scenarios and guide questions that arise at screening. For further detail see Part 2 ([page 105](#)) of the accompanying *Technical Guidance*.

For **standalone HIA**, the screening decision will explicitly refer to health in one of these two ways. If there is a policy on HIA, the screening decision may be automatic. Alternatively, the screening decision can be based on a consideration of the proposal's potential to change 'risks to human health' in a way 'likely' to 'significantly' affect population health.

Screening decisions for **SEA** or **EIA** can refer to health but, in practice, they probably will not. Screening decisions can be based on the type of project. The potential for an effect on health will not be referred to when the screening decision is based on the proposal's type or scale.

However, if a case-by-case approach is used, one of the screening criteria should ask whether there is the potential for change in 'risks to human health' in a way 'likely' to 'significantly' affect population health.



Part 2 of the *Technical Guidance* cites good practice and examples in setting a policy for HIA. ([See page 105](#))

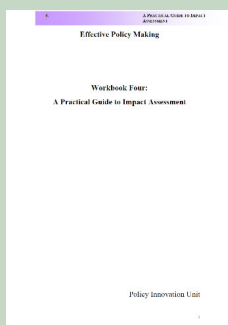


Part 2 of the *Technical Guidance* includes a case-by-case screening tool that can be used by standalone HIA and by SEA and EIA. ([See page 105](#))

The fact that the screening for an SEA or EIA is silent on health does not affect the ability of the SEA or EIA to consider health.

The SEA or EIA scoping stage will later elaborate on the extent to which health is an issue.

'Sustainability' is a guiding principle for HIA during screening (see [Figure M02](#)).



In 2008 the Policy Innovation Unit of the Northern Ireland Executive Office published a practical guide to impact assessment ([M40](#)).

In its section on screening for social impacts, there is a tool for screening determinants of health and population groups.



A 2015 report looking at the assessment of health impacts within national environmental regulation processes in Ireland identifies tools that can be used and also notes there could be greater clarity about screening for health ([M32](#)).

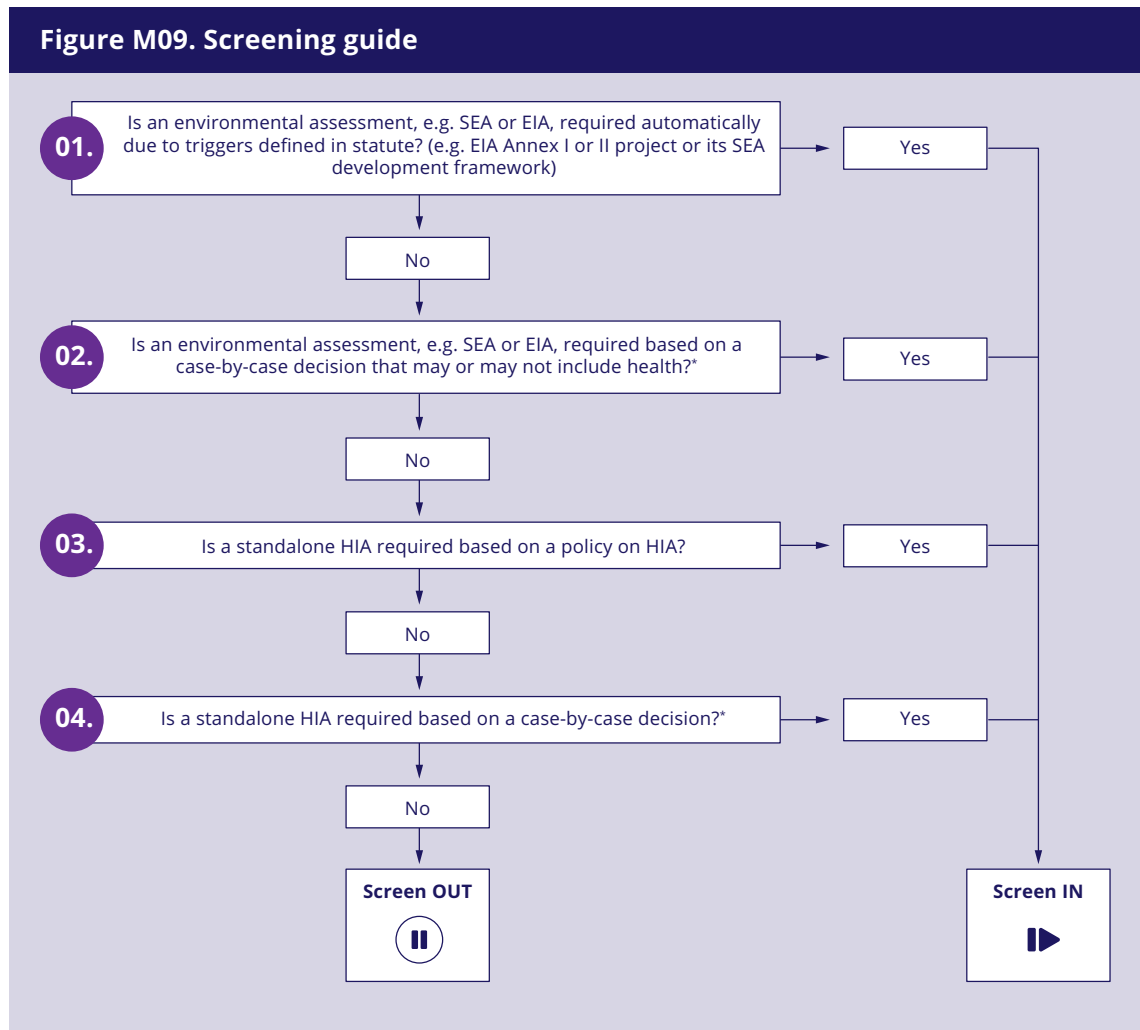


In 'Delivering sustainable healthy homes and communities in Northern Ireland', the Northern Ireland Housing Executive, the Town and Country Planning Association and Belfast Healthy Cities note that councils can consider the merits of requiring HIA ([M41](#)).

The report states that this should be according to local circumstances and the impact on their resources in assessing the information after submission.

The report also notes that, where possible, this requirement could be included as part of planning policies in the Local Development Plan.

Figure M09. Screening guide



\* When making a case-by-case decision, ask:  
*Broadly, based on available information, does the proposal have the potential to change 'risks to human health' in a way 'likely' to 'significantly' affect population health?*  
 Focus on factors that are clearly important or unacceptable.

## Scoping

The governance for the whole assessment process is established at this stage. The scoping stage also identifies the determinants of health and the populations to be assessed, as well as the methods by which they will be assessed. This is an important stage.

The approach at this stage can be high level as there may not be a huge amount of detail available. A given health effect is deemed 'likely' or 'not likely' and then, in turn, 'potentially significant' or 'not significant'.



Part 3 of the *Technical Guidance* shows how 'likely' health effects are those that, based on the scientific literature, have a plausible theoretical link between source-pathway-receptor, the occurrence of which, based on professional judgement, is probable in the relevant context. (See page 114)

[Figure M10](#) provides some questions to help with this. Health effects that are considered to be 'likely' and 'potentially significant' require further analysis and they are scoped in. Those issues that are 'not likely' or 'not significant' should be scoped out.

This ensures that the whole assessment is properly focused. It is known as keeping the assessment **proportionate**.

This guidance recommends that the rest of the assessment should focus on those effects that are both 'likely' and 'significant'.

At this point the HIA team will make a best estimate of whether an effect will be significant. This is explored in more detail in the *analysis* stage.



Apply the guide questions set out in [Figure M10](#) (see page 42) of this *Manual* to determinants of health listed in Part 3 of the *Technical Guidance* [Table 07](#) (strategic level) (see page 122) or [Table 08](#) (project level) (see page 123).

**Standalone HIA** may or may not present conclusions on the significance of each effect. By contrast, health in environmental assessments, **SEA** and **EIA**, must report on significant effects.



Part 1 of the *Technical Guidance*, [Table 03](#), provides a terms of reference for the HIA to frame governance issues and establish methods to be used in the HIA. (See page 73)

As noted above, the governance for the assessment is established in this stage. This may include a steering group. It may include defining responsibility for the implementation, monitoring and evaluation of the HIA results. These final steps can be outside of the remit of those delivering the assessment, that is, where specialists are commissioned for scoping, analysis and reporting.





Part 3 of the *Technical Guidance* provides a conceptual model for scoping ([Figure T06](#)). ([See page 116](#))

A 'comprehensive approach to health' is a guiding principle for HIA during scoping (see [Figure M02](#)).

In July 2020, an EIA report of an urban redevelopment project of approximately 1.44 hectares within the Abbey Quarter of Kilkenny was submitted to An Bord Pleanála ([M42](#)). The EIA was commissioned by Kilkenny County Council and produced by consultants.

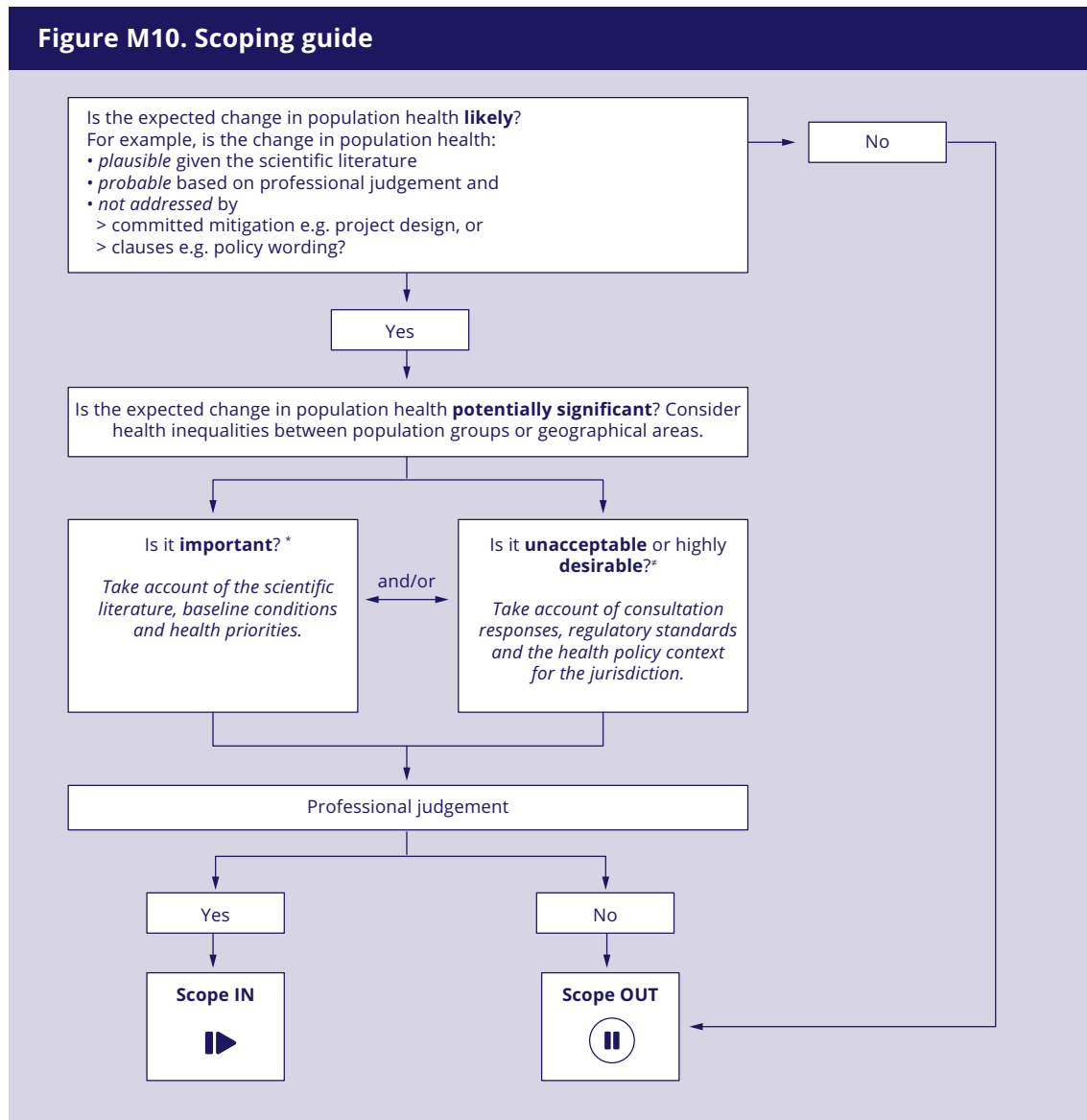
The project consists of two main components: an urban park and an urban street. The urban park will consist of a variety of grassed areas, trees, paved surfaces, water features and meeting points. The urban street will be a pedestrian- and cyclist-dominated space that will facilitate access to adjoining developments of the Abbey Quarter.

The Environmental Protection Agency, Health and Safety Authority and Health Service Executive (HSE) were consulted. The HSE commented that the project will support *Healthy Ireland* policies and requested that positive as well as negative health effects be considered. The health methodology responds to the specific consultation request by the HSE.

The EIA takes a relatively broad approach to the wider determinants of health, including consideration of health inequalities. The EIA includes a chapter titled 'Population and human health'. This considers 'economic activity and employment' and 'human health and wellbeing', including in relation to open space, physical activity and active travel opportunities.

Human health is also considered in other chapters: 'Land and soil', 'Water', 'Air quality and climate', 'Acoustics (noise and vibration)', and 'Material assets – traffic and transport'.

Figure M10. Scoping guide



\* For example, is the expected change central to, or influential for, the public health agenda of the relevant jurisdiction (positive and negative effects)?

\* For example, is the expected change contentious or a developing agenda (negative effects) or strongly desired and in need of securing (positive effects)?

## Analysis

This is when evidence of potential health effects is gathered and considered and when conclusions are drawn. This may include conclusions on the significance of health effects.



Part 3 of the *Technical Guidance* includes options for checklist analysis at the strategic and project levels. ([See page 114](#))

The methods used for data collection and analysis may vary according to the level, reporting format or type of HIA.

The *Technical Guidance* provides a conceptual model of evidence sources to enable a consistent and transparent 'approach' to analysis.



Part 4 of the *Technical Guidance* sets out a conceptual model of the evidence sources informing a range of criteria that support a professional judgement. This approach applies across all HIA. ([See page 136](#))

## Gathering information on potential health impacts

HIA is evidence based. The evidence must be relevant to the context of the proposal and the affected population.

Typically, a proportionate analysis of multiple criteria is needed. Qualitative and quantitative approaches can be used, including in combination. Quantitative health methods are for those occasions where:

- Robust exposure-response functions obtained from high-quality epidemiological studies are established
- Effect size and population size make this appropriate
- It is proportionate to undertake such analysis



Part 4 of the *Technical Guidance*, [Table 14](#), illustrates one option for consistent descriptive analysis of multiple criteria across health determinants, whether quantitative or qualitative inputs are used. ([See page 152](#))

All conclusions on significance, whether they are quantitative or qualitative, require explanation. In the *Technical Guidance* we look at how this can be done across the different determinants of health.

The steps involve characterising criteria relevant to sensitivity, magnitude and contextual considerations:

- The **sensitivity** of a population can be informed by some or all of the following: life stage; deprivation; health status; daily activities; inequalities; outlook; capacity to adapt; and/or resource-sharing with the project. Sensitivity is considered in relation to the general population and vulnerable groups.
- The **magnitude** of change can be informed by some or all of the following: exposure; scale; duration; frequency; severity; population extent; outcome reversal; and/or service quality implications.

Evidence sources include some or all of the following:

- **Scientific literature; baseline** conditions for the population; and/or **health priorities** in the area can evidence a narrative of whether changes in population health are important, that is, potentially significant.
- **Policy context** in the area; **consultation** for the proposal; and/or **regulatory standards** in the jurisdiction can evidence a narrative of whether changes in population health are unacceptable (or highly desirable), that is, potentially significant.



Part 4 of the *Technical Guidance* gives more information on how to frame these contextual considerations. ([See page 136](#))

Articulating an explicit role for health policy and health priorities within the HIA analysis process also supports upstream development of how specific policies and priorities are set to be influential in HIA.

'Equity and equality' and 'ethical use of evidence' are key guiding principles for HIA during analysis, see [Figure M02](#).

## Data

Building a population profile helps in developing a better understanding of those affected by the proposal, identifying potentially vulnerable groups and establishing a baseline against which possible future health effects can be assessed.



Part 1 of the *Technical Guidance* gives sources for data. ([See page 73](#))

A population profile can be helpful at the scoping and analysis stages. The analysis stage should focus such baseline evidence towards the specific conclusions on a particular health determinant, for example, population health status or deprivation data informing sensitivity to changes in healthy lifestyles. It is good practice to only include baseline data relevant to, and linked to, the analysis.

## A focus on effects that are 'likely' and 'significant'

The phrase 'likely and significant' comes from environmental assessment. Standalone HIAs do not always explicitly rank, or score, significance. However, as an approach, all HIAs should have a focus on those health effects that are, in the professional judgement of the HIA team, likely and potentially significant.



Part 4 of the *Technical Guidance* provides additional detail on significance, including evidence and decision prompts for importance, desirability and acceptability. ([See page 136](#))

The example of the Public Health Agency HIA (below) shows how a strategic HIA may recommend some courses of action without formally scoring the significance of the identified effects on health. In this case the determination that certain issues were likely and potentially significant is implicit in the nature and focus of the recommendations made.

In 2011 the Public Health Agency (PHA) undertook a HIA to test and improve the effects of implementing the Cardiovascular Service Framework (CVSFW) on health inequities and inequalities in Northern Ireland ([M43](#)). The PHA highlighted some areas for consideration, for example:

### Communication and participation

- Facilitate Health and Social Care (HSC) staff in improving communication with and participation of service users and the wider public in service design and delivery.

### Health improvement

- Integrate health improvement activities across topics, settings and sectors by: coordinating brief intervention training for all HSC staff to support behaviour change and self-management for patients; supporting collaboration between HSC organisations, communities and local government in creating healthier environments; and creating synergy between communities, voluntary organisations and HSC providers, including pharmacies and primary care providers.
- Implement Obesity Prevention Strategic Framework on an interagency basis to take account of determinants of health.
- Develop Regional Emergency Life Support business case, strategy, policy and implementation plan.
- Advocate for salt reduction in foodstuffs.



HIAs often prioritise their findings. This guidance recommends that approaches from environmental assessment are used.

Figure M11 defines what the terms 'likely' and 'significant' mean for human health. This approach meets the needs of standalone HIA and health in environmental assessment.



Part 3 of the *Technical Guidance* provides additional detail on likelihood, including evidence and decision prompts, of whether effects are *plausible* and *probable*. ([See page 114](#))

### Figure M11. When is an effect likely and significant?

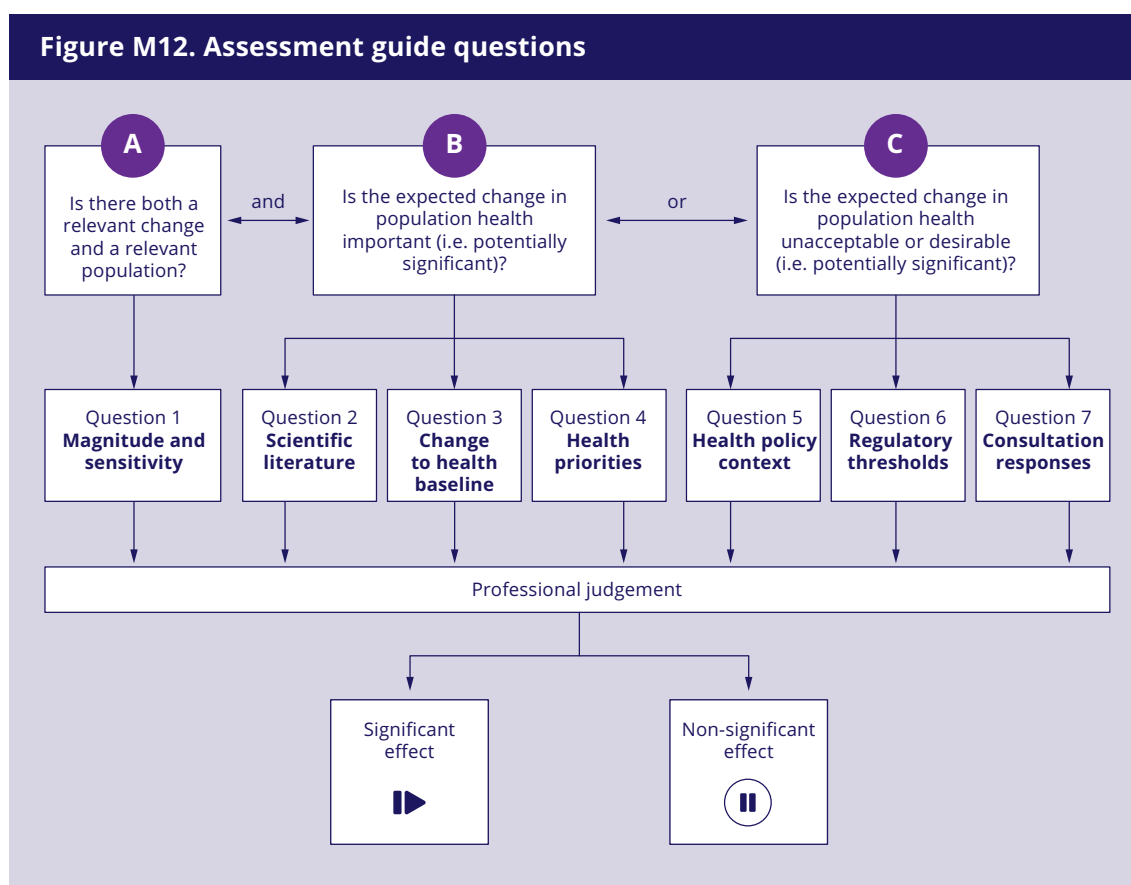
**'Likely'** health effects are those that, based on the scientific literature, have a *plausible* theoretical link between source-pathway-receptor, the occurrence of which in the relevant context is *probable* based on professional judgement.

**'Significant'** health effects are those that, based on professional judgement, are *important* (a positive or negative effect), highly *desirable* (a positive effect) or *unacceptable* (a negative effect) for population health with regards to changes triggered by the proposal in question.

[Figure M12](#) overleaf provides a series of questions to help with a decision on significance.



Part 4 of the *Technical Guidance* provides additional detail on conceptual models for sensitivity, magnitude and significance, including options for presenting a reasoned narrative based on this approach. ([See page 114](#))



- Q1.** Is the magnitude of change due to the proposal high or medium, and is the sensitivity of the affected population high or medium? Take account of vulnerable groups when considering the sensitivity of the affected population.
- Q2.** Is there a causal relationship, or a clear association, between changes that would result from the proposal and changes to health outcomes? Focus on relationships or associations with sufficient effect size to meaningfully influence population health.
- Q3.** Could the proposal result in an important change in the health baseline? This could be a substantial change or it could be a small change in a large or highly vulnerable population. Take account of mitigation that has been secured.
- Q4.** Have health priorities been set for the relevant study area that are of specific or general relevance to the determinant of health or population group affected by the proposal?
- Q5.** Could changes, due to the proposal, have a substantial or influential effect on the ability to deliver current health policy?
- Q6.** Could a change, due to the proposal, result in a regulatory threshold or standard being crossed or nearly crossed?
- Q7.** Have themes emerged, in consultation for the proposal, on relevant determinants of health or health outcomes? Is there consensus, or a mix of views, among stakeholders?

A positive response indicates a significant effect, and a negative response indicates a non-significant effect.

All relevant guide questions and their supporting evidence inform professional judgement.

For more detail see the *Technical Guidance* where the conceptual models are set out in full.

## Reporting

It is good practice to include a non-technical summary so that the purpose, scope and conclusions of the health assessment are clear to those with a generalist knowledge of health, such as intersectoral partners and the public.

Consistency in the HIA principles, process and approach will support good decision-making (see [Figure M01](#)). The report sets out the key activities that took place and the outcomes of the process.

Whether an EIA health chapter, SEA report section or a standalone HIA report, the report's aim is to document the judgements made on health, with reference to the evidence that informed those judgements. Reporting should be precise and concise.

At both strategic and project levels, health reporting should focus on the likely significant effects on population health outcomes of a proposal. This should include consideration of inequalities between population groups.

The assessment will report:

- A secured or recommended change to a proposal, such as: an alteration to the design of the proposal; to activities in, or strategies governing, the construction and operation phases of a project; or to the wording of a legal agreement and/or
- A conclusion on particular effects, for example, that an effect is likely and significant.

HIAs may consider and report on outcomes that are below the threshold for significance. For example, there is value in reporting community views even though they may not relate to issues that are significant in the terms of the assessment.

Reporting should be underpinned by HIA principles, including a comprehensive approach to health, equity and ethical use of evidence.

A proportionate description of methods, data, any quantitative algorithms used and other evidence should be included where this has informed the judgement.

The report will usually set out the residual health effects – these are the effects that are expected to occur after the measures for mitigation and enhancement have been implemented. When the conclusion in the assessment relies upon measures for mitigation and enhancement, the report should also set out how these measures are secured and, if necessary, how they will be monitored.

This point is also relevant for describing the decisions taken during scoping. The scope of the HIA is based upon the description of the proposal known at that point in time and this is likely to include measures for mitigation and enhancement. Both the scoping report and the final report should set out the measures that were relied upon to develop the scope of the HIA.

Examples of HIA reporting:

- HIA screening decision (see Part 2 of the *Technical Guidance*, [Table 05](#))
- HIA checklist (see Part 3 of the *Technical Guidance*, [Table 07](#) and [Table 08](#))
- Standalone HIA report
- Health chapter within an EIA report/Environmental Statement or
- An SEA report health section and/or columns within tabulated analysis

This guidance offers a range of breadths and depths of analysis and reporting at strategic and project levels to support a whole-of-system approach, for example, when any sector develops and implements campaigns or thematic initiatives that affect health.

'Participation' is a guiding principle for HIA during reporting and associated consultation (see [Figure M02](#)).

## Recommendations/mitigation or enhancement measures

HIA provides an evidence-based rationale within complex policy and planning decisions. A decision-maker needs a clear understanding of the HIA findings and any next steps.

A key outcome of the assessment process is reporting on whether the proposal can be improved from a public health perspective. Two terms are distinguished:

- **Recommendations** which a decision-maker or developer might accept, but to which there is no firm or binding commitment
- Mitigation or enhancement **measures** to which a decision-maker or developer is committed, for example, in the final wording of the proposal or its supporting legal documents

Environmental assessments typically include mitigation measures. Standalone HIAs have, historically, made recommendations. Mitigation and/or enhancement **measures** are more enforceable than **recommendations**.

The mitigation hierarchy should be used. In the first instance seek to avoid adverse effects; if this is not feasible then reduce adverse effects. Compensation is a last resort.

The focus should be on avoiding likely significant adverse health effects. It is good practice if opportunities to enhance beneficial health effects can be taken when it is proportionate and feasible.

Discussion on recommendations/measures should be initiated early in the HIA process and concluded before the health assessment report is finalised. This may require negotiation with the relevant proposal proponents. Strong advocacy, facilitation and negotiation skills within the health assessment team, and any steering group, are an essential competency needed to secure recommendations.

The level of detail within a recommendation/measure will depend on the level of HIA and the complexity of the issues at hand. In some cases, it may be practical first to agree a strategic commitment and to work out details at a later stage. For example, see the summary below of a HIA of a new nuclear power plant in Wales. This secured funding for a Health and Well-being Group to oversee monitoring with the understanding that the full specification for this group would be finalised later.

Monitoring can also be useful where there is uncertainty about whether a potentially significant adverse health effect would occur, or uncertainty as to whether mitigation to avoid/reduce a likely significant health effect would be effective.

Examples of measures and recommendations are set out below. These show the different approaches to presenting findings and agreeing ways forward.



Part 6 of the *Technical Guidance* provides a tool for developing recommendations and measures. ([See page 165](#))

In 2006, a HIA was conducted on the Draft Air Quality Action Plan, for Belfast, Northern Ireland. In interviews conducted as part of an evaluation, a respondent from the local authority noted that while most suggestions from the HIA were incorporated, not all were fully implemented.

It was acknowledged that responsibility for implementing HIA suggestions was held by organisations other than the local authority and it was thus difficult to ensure they were taken on board, as there is no statutory obligation for the suggestions to be implemented. This shows the importance of a legislative basis for such approaches and endeavours.

Extract from O'Mullane ([M44](#)).

A HIA and an EIA were conducted, in parallel, for a new nuclear power plant in Wales ([M45](#)). These were submitted to the Planning Inspectorate in 2018.

The Government of Ireland was consulted for this project as part of transboundary requirements of the EIA Directive.

The proponent committed to a series of measures that would protect and promote health and wellbeing, including a *Health and Well-being Monitoring Group* and *Community Involvement Officers*. Funding was to be secured by a legal agreement between the proponent and the local planning authority.

This was a very large project, so these measures may not be applicable to smaller projects. However, the principle holds true that governance for health, and other effects, can carry over from the design and assessment stage and into construction, operation and potentially decommissioning too.



In 2019 an EIA of the Trinity Wharf Development ([M46](#)) was submitted. This proposed development will form a new urban quarter in Wexford Town, and it is described as providing opportunities for residential, community/cultural, business and employment opportunities, contributing to the growth and development of the area.

Mitigation measures were secured as part of the design of the proposed development. These included measures during the construction stage to manage the traffic associated with the construction, stakeholder management and communication and measures to control air quality and noise and vibration. During the operational stage, plans will be put in place for accessibility and Transportation Mobility Management. The EIA report also states that measures set out in the following EIA chapters will be important for population and human health: traffic; landscape and visual; noise and vibration; air quality and climate; and material assets.

## Implementation

To be effective, standalone HIA and health in environmental assessment findings must be followed through when implementing the proposal.

The HIA process can support delivery of *Healthy Ireland* and *Making Life Better* through intersectoral working and analysis of what HiAP means for a particular proposal. In turn, *Healthy Ireland* and *Making Life Better* can support delivery of HIAs by providing mechanisms for health assessment findings, including recommendations/mitigation measures, to be implemented.

Delivery mechanisms are both the structure of organisations within the system, including their policies and priorities, and the activities these organisations put in place, for example, campaigns or thematic initiatives.

[Figure M13](#) shows delivery mechanisms as identified in *Healthy Ireland* and *Making Life Better*. The described organisations and teams can promote HIAs and implement health assessment findings.

**Figure M13. Healthy Ireland and Making Life Better oversight and delivery mechanisms**

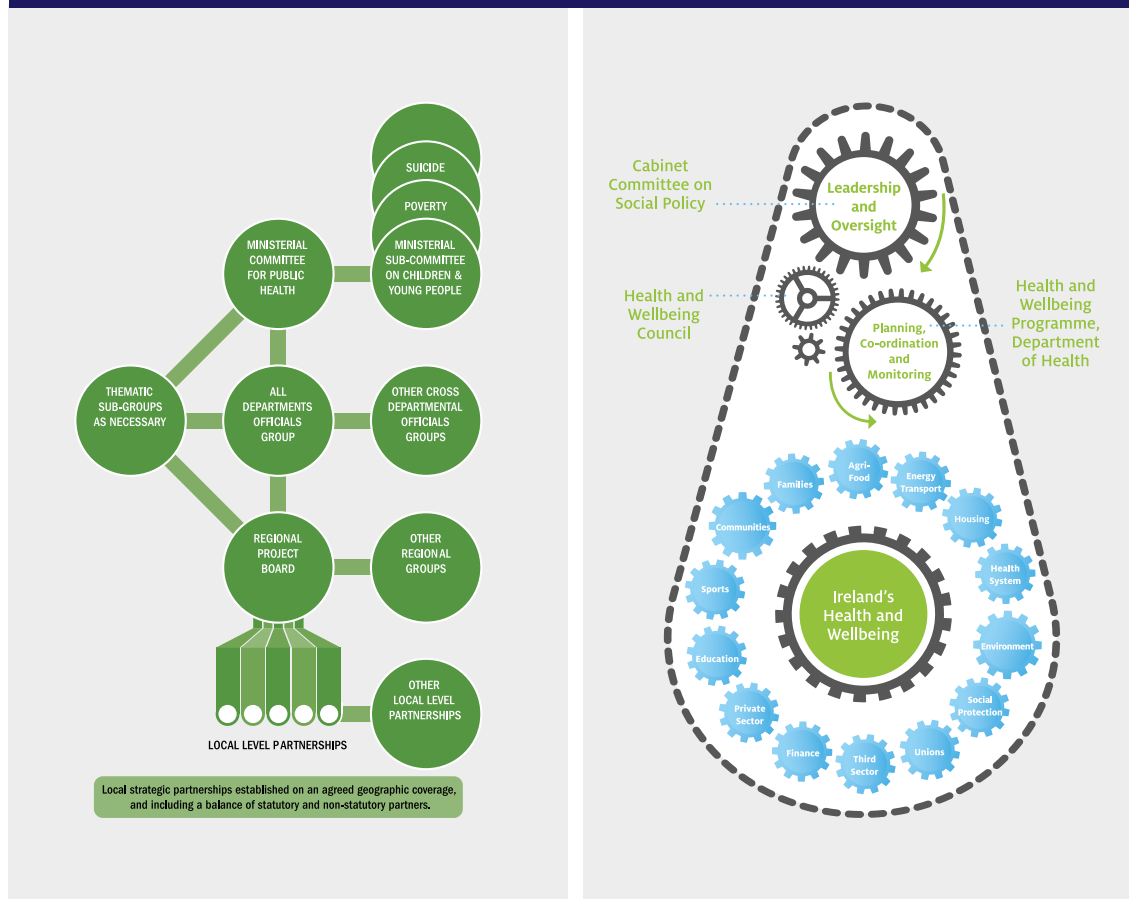


Fig 3 from *Making Life Better – Governance and Implementation*

From *Healthy Ireland – Working in Partnership* (p17)

Repositories of guidance and of completed reports are essential for providing worked examples and setting out good practice. It goes without saying that they need maintaining and updating. The examples below show repositories at different stages of development.

The **HIA Gateway** was an international resource that provided tools and information on HIA. It was put into a virtual archive on 6 January 2017 and, at the time of writing, it can be found in the Public Health England archive ([M47](#)).

The Wales Health Impact Assessment Support Unit (**WHIASU**) is an all-Wales service responsible to Public Health Wales and funded by Welsh Government. It is based in the World Health Organization (WHO) Collaborating Centre on 'Investment for Health and Well-being', Policy and International Health Directorate, Public Health Wales ([M48](#)). WHIASU provides advice, guidance and support through presentations, training sessions, facilitation of rapid appraisals and support for other ongoing HIAs. The website provides guidance, resources and completed impact assessments as well as news and information about professional development.

The Scottish Health and Inequalities Impact Assessment Network (**SHIAN**) is part of the Scottish Public Health Network. SHIAN is open to anyone working or planning to work on HIA and Health Inequalities Impact Assessments in Scotland and it has been running since 2001 ([M49](#)). The network promotes a Health in All Policies approach in Scotland, and it increases the use and quality of HIAs and improves consideration of health issues in other assessments. This contributes to improvements in policies and plans that will enhance population health and reduce health inequalities. SHIAN provides training, advice and support on HIA and HiAP for NHS boards, local authorities and partner organisations in Scotland. It has guidance on HIA in rural contexts and health and transport as well as evidence reviews, including on transport and COVID-19.

The environment and health **Impacts Hub** ([M50](#)) is a collaboration between the World Health Organization Regional Office for Europe and the Environmental Assessment and Management Research Centre at the University of Liverpool (a WHO Collaborating Centre on health in impact assessments). At the time of writing, the site is being developed and it will draw on expertise from the impact assessment community as part of its evolution.

## Monitoring

Monitoring involves data collection and analysis after the assessment report has been issued. The assessment identifies potential effects. Monitoring will track the actual effects and can be conducted during different phases of the legislation, the policy, plan or programme. At project level, monitoring will be conducted on the construction and operation phases. It may also be required during decommissioning. It can also be used to follow up on significant issues that were identified during the health assessment, but for which levels of certainty were low.



Part 6 of the *Technical Guidance* provides a tool for developing recommendations and measures, including monitoring. ([See page 165](#))

Monitoring is resource intensive so it should be used in a proportionate and time-limited manner. The purpose of, and the governance and methods for, monitoring should be appropriately developed. Resources for the monitoring should also be secured (see discussion on Reporting).

Where possible, monitoring should make use of routinely collected indicators rather than setting up bespoke systems. This would include routine public health data and other data from population censuses. Careful consideration should be given to the spatial and temporal relevance of the indicators. Censuses may provide small area data, but they may not be suitable to identify short-term or medium-term trends. Similarly, other indicators may be refreshed more frequently but may lack the geographical resolution to pick up on changes from individual projects.

If it is considered appropriate to collect personal data, particularly non-anonymised clinical health data, then it will be necessary to establish the governance around data collection, storage, analysis, anonymisation, deletion and/or reporting. It may be appropriate for a health authority, rather than the proposal proponent or a third party, to undertake such monitoring. In this case, the health authority can seek to secure resources to conduct this monitoring.

When monitoring is undertaken, responsibilities and resources should be clear, as should linked action to changes detected by the monitoring. This is termed *adaptive management*. Continuity between indicators informing the analysis baseline/population profile and monitoring is advantageous.

Ireland indicators sets:

- [Healthy Ireland Outcomes Framework](#)
- [The Central Statistics Office in Ireland](#)
- [Ireland deprivation mapping, Pobal Maps](#)



Part 1 of the *Technical Guidance* provides further information on data sources. ([See page 73](#))

Northern Ireland indicator sets:

- [Public health statistics](#)
- [Health inequalities statistics](#)
- [Social determinants of health statistics](#)
- [Making Life Better indicators at small area level](#)
- [The Northern Ireland Statistics and Research Agency \(NISRA\), including deprivation mapping](#)
- [Northern Ireland Neighbourhood Information Service \(NINIS\)](#)

## Evaluation

Evaluation can be of process, impact or outcome. Each is looked at briefly in turn.

### Process

Examine how the HIA process was undertaken, who was involved and how useful the process was. This can help determine whether the HIA added value to the process.

### Impact

Examine whether recommendations from the HIA were accepted as measures by the decision-makers and if not, why not.

### Outcome

Examine the health outcomes of a proposal after a HIA has been conducted. For example, whether the anticipated positive effects on health, wellbeing and equity were realised and whether negative ones were avoided.

There are review tools that can be completed within a few hours and which give an idea of the quality of a completed report. This is most relevant to process evaluation.

*Quality Assurance Review Framework for Health Impact Assessment (HIA)* ([M51](#)). This framework supports and guides people and organisations to review the quality of a HIA. It can be applied to HIAs conducted on policies, projects, plans, services, developments and programmes.

*A review package for Health Impact Assessment reports of development projects* ([M52](#)). This review package focuses on the project level. It enables a commissioner or reviewer of a HIA report to reach an opinion as to the quality of the completed report in a simple, quick and systematic manner. It focuses on project-level HIAs. An English district council, South Cambridgeshire, has incorporated this into a council policy for HIA (see South Cambridgeshire District Council, *Health Impact Assessment. Supplementary Planning Document* ([M53](#))).



## Conclusion

This *Manual* introduces HIA.

It provides a systematic approach to considering health across a wide range of policy areas.

The *Manual* introduces principles for HIA and the process of HIA. It covers standalone HIAs and health in environmental assessment at strategic levels and for individual projects.

This will assist with the commissioning of HIAs.

This *Manual* is accompanied by *Technical Guidance*, which provides advice on setting a policy on HIA to enable consistent and efficient HIA screening, as well as further detail on the relationship between HIA and other forms of assessment, other than environmental assessment, where health may also feature.

The *Technical Guidance* also provides further information for those tasked with undertaking, or with reviewing, assessments. This includes conceptual models and definitions, and it includes tools that can be adapted to the methods of a given assessment.

## References

- M1. Department of Health. Healthy Ireland Framework. A framework for improved health and wellbeing 2013-2025. Government of Ireland. 2013. <https://assets.gov.ie/7555/62842eef4b13413494b13340ff9077d.pdf>
- M2. Department of Health. Making Life Better. A whole system strategic framework for public health. 2013-2023. Northern Ireland Executive. 2014. [https://www.health-ni.gov.uk/sites/default/files/publications/dhssps/making-life-better-strategic-framework-2013-2023\\_0.pdf](https://www.health-ni.gov.uk/sites/default/files/publications/dhssps/making-life-better-strategic-framework-2013-2023_0.pdf)
- M3. Department of Health. Making Life Better. 1st progress report (2014-2015). Northern Ireland Executive. 2014. <https://www.health-ni.gov.uk/sites/default/files/publications/dhssps/making-life-better-1st-progress-report-2014-15.pdf>
- M4. Department of Health. Healthy Ireland outcomes framework. Government of Ireland. 2019. <https://www.gov.ie/en/publication/030396-healthy-ireland-outcomes-framework/>
- M5. Metcalfe O, Higgins C, Lavin T. Health Impact Assessment guidance. Institute of Public Health in Ireland. 2009. <https://publichealth.ie/health-impact-assessment-guidance-2009/>
- M6. Winkler MS, et al. Health Impact Assessment International Best Practice Principles. Fargo, USA: International Association for Impact Assessment. 2021. [https://www.iaia.org/uploads/pdf/SP5%20HIA\\_21\\_5.pdf](https://www.iaia.org/uploads/pdf/SP5%20HIA_21_5.pdf)
- M7. IAIA. Key citations. 2020. <https://www.iaia.org/key-citations.php>
- M8. World Health Organization. Adelaide Statement on Health in All Policies: moving towards a shared governance for health and well-being. Adelaide, South Australia: World Health Organization and Government of South Australia. 2010. [https://www.who.int/social\\_determinants/hiap\\_statement\\_who\\_sa\\_final.pdf](https://www.who.int/social_determinants/hiap_statement_who_sa_final.pdf)

- M9. Consolidated version of the Treaty on the Functioning of the European Union - PART THREE: UNION POLICIES AND INTERNAL ACTIONS - TITLE XIV: PUBLIC HEALTH - Article 168 (ex Article 152 TEC). *Official Journal*, 2008; **115**: 122-4. [http://data.europa.eu/eli/treaty/tfeu\\_2008/art\\_168/oj](http://data.europa.eu/eli/treaty/tfeu_2008/art_168/oj)
- M10. European Commission. Ensuring a high level of health protection, A practical guide. Luxembourg: Health & Consumer Protection Directorate-General. 2001. [https://ec.europa.eu/health/ph\\_overview/Documents/key07\\_en.pdf](https://ec.europa.eu/health/ph_overview/Documents/key07_en.pdf)
- M11. Council of the European Union. Council Conclusions on Health in All Policies (HiAP). Brussels. 2006. [https://ec.europa.eu/health/ph\\_projects/2005/action1/docs/2005\\_1\\_18\\_frep\\_a8\\_en.pdf](https://ec.europa.eu/health/ph_projects/2005/action1/docs/2005_1_18_frep_a8_en.pdf)
- M12. The Centre for Cross Border Studies, Euro Institut. Impact Assessment Toolkit for Cross-Border Cooperation. Armagh, Northern Ireland and Kehl, Germany. 2011. <https://transfrontier.eu/tools/impact-assessment-toolkit/>
- M12a. Health impact assessment: main concepts and suggested approach. Gothenburg consensus paper. Brussels, European Centre for Health Policy, WHO Regional Office for Europe, 1999. [http://www.healthedpartners.org/ceu/hia/hia01/01\\_02\\_gothenburg\\_paper\\_on\\_hia\\_1999.pdf](http://www.healthedpartners.org/ceu/hia/hia01/01_02_gothenburg_paper_on_hia_1999.pdf)
- M12b. Brownlie S, et al. Connecting People's Wellbeing and Biodiversity in Impact Assessment. Fargo, ND, International Association for Impact Assessment. 2021. [https://www.iaia.org/uploads/pdf/Fastips\\_23%20Connecting%20people%E2%80%99s%20wellbeing.pdf](https://www.iaia.org/uploads/pdf/Fastips_23%20Connecting%20people%E2%80%99s%20wellbeing.pdf)
- M13. Green L, et al. A Health Impact Assessment of the 'Staying at Home and Social Distancing Policy' in Wales in response to the COVID-19 pandemic. Cardiff, Wales: Public Health Wales NHS Trust,. 2020. <https://phw.nhs.wales/news/staying-at-home-policy-has-reduced-spread-of-coronavirus-but-has-also-had-other-positive-and-negative-impacts-on-the-well-being-of-welsh-society/a-health-impact-assessment-of-the-staying-at-home-and-social-distancing-policy-in-wales-in-response-to-th/>
- M14. Green L. Reflections on the HIA of the 'Staying at Home and Social Distancing Policy' in Wales in response to the COVID-19 pandemic. 2021. Personal communication to Cave B.
- M15. Yorkshire and Humber Public Health Network. How to think about doing a Health Inequalities Impact Assessments in the context of C19. 2020. Accessed 2021. <https://www.yhphnetwork.co.uk/links-and-resources/health-wellbeing-support-as-part-of-the-covid-19-response/health-inequalities-yh-covid-19-response/hia-c19/>
- M16. Tajima RYO, Gore TOM, Fischer TB. Policy integration of environmental assessment and disaster management. *Journal of Environmental Assessment Policy and Management* 2014; **16**(03): 1450028. <http://dx.doi.org/10.1142/S1464333214500288>
- M17. Constitution of the World Health Organization. 1946. [http://www.who.int/governance/eb/who\\_constitution\\_en.pdf](http://www.who.int/governance/eb/who_constitution_en.pdf)
- M18. Cave B, Pyper R, Fischer-Bonde B, Humboldt-Dachroeden S, Martin-Olmedo P. Lessons from an International Initiative to Set and Share Good Practice on Human Health in Environmental Impact Assessment. *International Journal of Environmental Research and Public Health* 2021; **18**(4). <http://dx.doi.org/10.3390/ijerph18041392>

- M19. Barton H, Grant M. A health map for the local human habitat. *The Journal of the Royal Society for the Promotion of Health* 2006; **126**(6): 252-3. [https://www.researchgate.net/publication/6647677\\_A\\_health\\_map\\_for\\_the\\_local\\_human\\_habitat](https://www.researchgate.net/publication/6647677_A_health_map_for_the_local_human_habitat)
- M20. Dahlgren G, Whitehead M. "The main determinants of health" model. 1991. [https://www.nwci.ie/download/pdf/determinants\\_health\\_diagram.pdf](https://www.nwci.ie/download/pdf/determinants_health_diagram.pdf)
- M21. Dahlgren G, Whitehead M. European strategies for tackling social inequities in health: Levelling up. WHO Collaborating Centre for Policy Research on Social Determinants of Health, University of Liverpool. WHO Regional Office for Europe. 2007. <https://www.euro.who.int/document/e89384.pdf>
- M22. Public Health England. Spatial Planning for Health An evidence resource for planning and designing healthier places. 2017. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/729727/spatial\\_planning\\_for\\_health.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/729727/spatial_planning_for_health.pdf)
- M23. Ben Cave Associates Ltd. Review of health pathways and outcomes. Prepared under contract to Jacobs for Radioactive Waste Management. 2018. <https://rwm.nda.gov.uk/publication/review-of-health-pathways-and-outcomes/>
- M24. Sheehan A, O'Sullivan R. Ageing and Public Health – an overview of key statistics in Ireland and Northern Ireland. Dublin, Belfast: Institute of Public Health. 2020. <https://publichealth.ie/wp-content/uploads/2020/04/20200416-AGEING-PUBLIC-HEALTH-SUMMARY.pdf>
- M25. Bauer GR. Incorporating intersectionality theory into population health research methodology: Challenges and the potential to advance health equity. *Social Science & Medicine* 2014; **110**: 10-7. <http://dx.doi.org/10.1016/j.socscimed.2014.03.022>
- M26. Robert Wood Johnson Foundation. Health equity bike graphic. Washington, DC: National Academy of Medicine; 2017. <https://nam.edu/programs/culture-of-health/culture-of-health-program-meetings/culture-of-health-program-november-meeting-2-summary/health-equity-bike-graphic/>
- M27. Government of Ireland. Roadmap for Social Inclusion 2020 - 2025. Ambition, Goals, Commitments. Department of Employment Affairs and Social Protection. Social Inclusion Division. 2020. <https://www.gov.ie/pdf/?file=https://assets.gov.ie/46557/bf7011904ede4562b925f98b15c4f1b5.pdf#page=1>
- M28. Department for Communities. Social Inclusion Strategies. 2021. <https://www.communities-ni.gov.uk/articles/social-inclusion-strategies>
- M29. Committee on the Future of Healthcare. Sláintecare Report. Dublin: Houses of the Oireachtas. 2017. <https://assets.gov.ie/22609/e68786c13e1b4d7daca89b495c506bb8.pdf>
- M30. Northern Ireland Executive Office. A practical guide to Policy Making in Northern Ireland. 2016. <https://www.executiveoffice-ni.gov.uk/publications/practical-guide-policy-making-northern-ireland>
- M31. Department of Health. Strategic Review of Medical Training and Career Structure Final Report. Government of Ireland. 2014. <https://www.gov.ie/en/collection/9ef920-strategic-review-of-medical-training-and-career-structure-maccraith-/>

- M32. Golder Associates Ltd. Report: Investigation into the Assessment of Health Impacts within National Environmental Regulation Processes. Dublin, Ireland: Report commissioned by the Environmental Protection Agency. 2015. <https://www.epa.ie/publications/research/environment--health/investigation-into-the-assessment-of-health-impacts-within-national-environmental-regulation-processes.php>
- M33. Noble BF. Strengthening EIA through adaptive management: a systems perspective. *Environmental Impact Assessment Review* 2000; **20**(1): 97-111. [http://dx.doi.org/10.1016/S0195-9255\(99\)00038-4](http://dx.doi.org/10.1016/S0195-9255(99)00038-4)
- M34. Institute of Public Health in Ireland. Proposed Sugar Sweetened Drinks Tax: Health Impact Assessment (HIA). Dublin, Belfast. 2012. <https://www.publichealth.ie/sites/default/files/documents/files/HIA%20Proposed%20Sugar%20Sweetened%20Drinks%20Tax%20Report.pdf>
- M35. Government of Ireland. A Programme for Government. A Programme for a Partnership Government. 2016. <https://www.gov.ie/en/publication/874885-programme-for-government-programme-for-a-partnership-government/>
- M36. Oireachtas Library & Research Service. A tax on sugar sweetened drinks: an overview. Houses of the Oireachtas. 2016. [https://data.oireachtas.ie/ie/oireachtas/libraryResearch/2016/2016-10-05\\_l-rs-note-tax-on-sugar-sweetened-drinks\\_en.pdf](https://data.oireachtas.ie/ie/oireachtas/libraryResearch/2016/2016-10-05_l-rs-note-tax-on-sugar-sweetened-drinks_en.pdf)
- M37. Irish Tax and Customs. Sugar Sweetened Drinks Tax (SSDT). 2018. <https://www.revenue.ie/en/companies-and-charities/excise-and-licences/sugar-sweetened-drinks-tax/index.aspx#:~:text=Records-,Overview,water%20and%20juice%20based%20drinks.&text=The%20tax%20applies%20to%20water,or%20more%20per%20100%20millilitres>
- M38. Cave B, et al. Human health: ensuring a high level of protection. A reference paper on addressing Human Health in Environmental Impact Assessment as per EU Directive 2011/92/EU amended by 2014/52/EU. International Association for Impact Assessment and European Public Health Association. 2020. <https://www.iaia.org/uploads/pdf/Human%20Health%20Ensuring%20Protection%20Main%20and%20Appendices.pdf>
- M39. Cave B, Fothergill J, Pyper R, Gibson G. Health and Environmental Impact Assessment: a briefing for public health teams in England. London, England, Public Health England. 2017. <https://www.gov.uk/government/publications/health-and-environmental-impact-assessment-guide-for-local-teams>
- M40. Northern Ireland Executive Office. Effective Policy Making - Workbook Four - A Practical Guide to Impact Assessment. 2008. <https://www.executiveoffice-ni.gov.uk/publications/effective-policy-making-workbook-four-practical-guide-impact-assessment>
- M41. Chang M. Delivering sustainable healthy homes and communities in Northern Ireland. Town and Country Planning Association with Healthy Cities Belfast for the Northern Ireland Housing Executive. 2016. <https://www.nihe.gov.uk/Documents/Research/Health-and-welfare/delivering-sustainable-healthy-homes.aspx?ext=>
- M42. Malone O'Regan Environmental. Environmental Impact Assessment Report (EIAR) Volume 2. Abbey Quarter – Urban Park and Street. Kilkenny County Council. County Hall, Kilkenny. 2020. [https://consult.kilkenny.ie/en/system/files/materials/2875/200729%20E1518%20EIAR%20Vol.%202%20Main%20Document%20FINAL\\_0.pdf](https://consult.kilkenny.ie/en/system/files/materials/2875/200729%20E1518%20EIAR%20Vol.%202%20Main%20Document%20FINAL_0.pdf)



- M43. Public Health Agency. Putting a health inequalities focus on the Northern Ireland cardiovascular service framework. Technical report. Health impact assessment. 2011. <https://www.publichealth.hscni.net/sites/default/files/Technical%20report%20final.pdf>
- M44. O'Mullane M. HIA in the physical environment. Policy development and community participation. Health Impact Assessment and policy development: Ireland and Northern Ireland: Manchester University Press; 2015. <http://dx.doi.org/10.7228/manchester/9780719091933.003.0004>
- M45. Horizon Nuclear Power. Wylfa Newydd Project. Health Impact Assessment (and series of supporting HIAs for associated development). 2018. [https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010007/EN010007-001739-8.19%20Health%20Impact%20Assessment%20Report%20\(R%20Rev%20201.0\).pdf](https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010007/EN010007-001739-8.19%20Health%20Impact%20Assessment%20Report%20(R%20Rev%20201.0).pdf)
- M46. Roughan & O'Donovan Consulting Engineers. Trinity Wharf Development. Environmental Impact Assessment Report. Chapter 6: Population and Human Health. 2019. <https://assets.gov.ie/119731/43ee677c-8526-4d40-8d2c-7278c803a3d6.pdf>
- M47. Public Health England. HIA Gateway. 2017. Accessed 2021. <https://webarchive.nationalarchives.gov.uk/20170106081244/http://www.apho.org.uk/default.aspx?RID=40141>
- M48. WHIASU. Homepage. 2021. <https://phwwhocc.co.uk/whiasu/?lang=cy> [CY] & <https://phwwhocc.co.uk/whiasu> [EN]
- M49. Scottish Health and Inequalities Impact Assessment Network (SHIAN). SHIAN Introduction. 2021. <https://www.scotphn.net/networks/scottish-health-and-inequalities-impact-assessment-network-shian/introduction/>
- M50. Environment & Health Impacts Hub, University of Liverpool. Welcome to Impacts Hub. A community space to share and learn good practice about impact assessment. 2017. <https://www.impactshub.com/>
- M51. WHIASU. Quality Assurance Review Framework for Health Impact Assessment (HIA). Cardiff, Wales: Wales Health Impact Assessment Support Unit, Public Health Wales. 2017. [https://whiasu.publichealthnetwork.cymru/files/8815/3545/2412/Complete\\_QA\\_Framework.pdf](https://whiasu.publichealthnetwork.cymru/files/8815/3545/2412/Complete_QA_Framework.pdf)
- M52. Fredsgaard MW, Cave B, Bond A. A review package for Health Impact Assessment reports of development projects. Leeds, UK: Ben Cave Associates Ltd. 2009. <http://webarchive.nationalarchives.gov.uk/20170106084526/http://www.apho.org.uk/resource/item.aspx?RID=72419>
- M53. South Cambridgeshire District Council. Local Development Framework: Health Impact Assessment. Supplementary Planning Document. 2011. <https://www.scambsgov.uk/planning/local-plan-and-neighbourhood-planning/health-impact-assessment-spd/>





# Health Impact Assessment Guidance: Technical Guidance

Standalone Health Impact Assessment  
and health in environmental assessment



MAKING LIFE BETTER



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# Technical Guidance Contents

<b>Introduction</b>	<b>67</b>
<b>Part 1: Definitions</b>	<b>73</b>
Glossary	74
Further definitions of health	79
Assessment instruments	84
Health and environmental assessment	95
Government strategies and policies	98
Governance	101
Data	104
<b>Part 2: Screening: tools and resources</b>	<b>105</b>
Introduction	106
Screening for health in environmental assessment	112
Standalone HIA screening	113
<b>Part 3: Scoping: tools and resources</b>	<b>114</b>
Introduction	115
Scoping tools	120
Assessment checklists	133
Setting health objectives	133
Selecting preferred options	134
<b>Part 4: Analysis: tools and resources</b>	<b>136</b>
Introduction	137
Presenting the findings	138
Considering sensitivity	140
Considering magnitude	145
Judging significance	147
<b>Part 5: Cumulative effects</b>	<b>157</b>
Introduction	158
Equity and cumulative effects	162
<b>Part 6: Making <i>recommendations</i> or <i>securing measures</i></b>	<b>165</b>
<b>References</b>	<b>167</b>



## List of tables

Table 01:	Northern Ireland Government strategies and policies	99
Table 02:	Ireland Government strategies and policies	100
Table 03:	HIA terms of reference	102
Table 04:	Wording for policies on HIA and some examples	107
Table 05:	Health assessment screening tool for case-by-case decisions	110
Table 06:	Terms for defining the <i>scope</i>	118
Table 07:	Strategic-level scoping tool for health determinants	122
Table 08:	Project-level scoping tool for health determinants	123
Table 09:	Scoping tool for population groups	129
Table 10:	Tool for the technical, temporal and spatial scopes of health	131
Table 11:	Terms for defining <i>sensitivity</i>	142
Table 12:	Terms for defining <i>magnitude</i>	146
Table 13:	Terms for defining <i>significance</i>	149
Table 14:	A (generic) narrative and reasoned conclusion example for a project-level health assessment	152
Table 15:	Intra-proposal effects and scores for population groups, by geography	161
Table 16:	Intra-proposal effects and scores for vulnerable groups	162
Table 17:	Community-centred actions for health equity and wellbeing	164
Table 18:	Making recommendations and/or securing measures	166

## List of figures

Figure T01:	Relationship between the Manual and the Technical Guidance	71
Figure T02:	Sustainable Development Goals, including examples of HiAP actions	81
Figure T03:	One Health includes ...	82
Figure T04:	Health Impact Assessment in its different forms	95
Figure T05:	Structure and elements of the scoping conceptual model presented in Figure T06	115
Figure T06:	Considerations while scoping health effects	116
Figure T07:	Scoping decisions and scoping tools	121
Figure T08:	Structure and elements of significance conceptual model shown in Figure T12	139
Figure T09:	Health sensitivity: conceptual model	141
Figure T10:	Terms: judging health sensitivity	144
Figure T11:	Health magnitude: conceptual model	145
Figure T12:	Health significance: conceptual model	148
Figure T13:	Vulnerability and diminishing population size	163

# Introductions

## Introduction

This guidance is for organisations that are developing legislation, policies, plans or programmes. It is also for planning authorities and developers who are considering whether to grant, or who are seeking, permission for an individual project.

**It can be used at different levels of government and decision-making, such as:**

- Ministerial committees
- Official groups
- Project boards
- Local partnerships
- Authorising bodies
- Councils and government departments

It is for practitioners delivering impact assessments, including standalone HIA, as well as health in environmental assessments.

The guidance is presented in four parts. Each part is aimed at a different readership.

This is the **Technical Guidance**. It has two primary audiences:

- Practitioners undertaking standalone HIAs and/or health in environmental assessments
- Technical health stakeholders to such assessments, for example, public health teams.

*Health in environmental assessment* includes health chapters or sections within Environmental Impact Assessment (EIA) and Strategic Environmental Assessment (SEA). *Standalone health assessment* means a separate Health Impact Assessment (HIA) report.

Tools and materials that support implementation and training, and which are practical and ready to use, are essential for real-world application.

This *Technical Guidance* supports effective implementation of, and capacity building for, standalone HIA and health in environmental assessment.

The guidance offers conceptual models which prompt the user and which enable consistent approaches and clear reporting.

## The guidance and its audience



This *Technical Guidance* has six parts:

- Part 1: Definitions
- Part 2: Screening tools and resources
- Part 3: Scoping tools and resources
- Part 4: Analysis tools and resources
- Part 5: Cumulative effects
- Part 6: Making *recommendations* and secured *measures*.

This *Technical Guidance*:

- Sets out the tools
- Provides the core HIA resources to give the reader an understanding of the technical concepts, legal nuances and knowledge base needed to use the tools to best effect.

If users are not familiar with impact assessment processes, then this will require some study.

This investment in time will pay dividends for individual and organisational consistency, capacity building and good practice in relation to health assessment.

Throughout the *Technical Guidance* there are boxes which highlight guidance, which point to policy documents and which show examples of practice in impact assessment.



The examples from impact assessments are for illustration and do not imply that the Institute is making a statement about the quality of each example.

This guidance looks at health in environmental assessments and standalone HIA reports. It considers each of these at the strategic level and the project level. The tools are colour coded accordingly.

### Key for colour coding tools

**HEA** Health in Environmental Assessments

**HIA** Standalone HIA reports

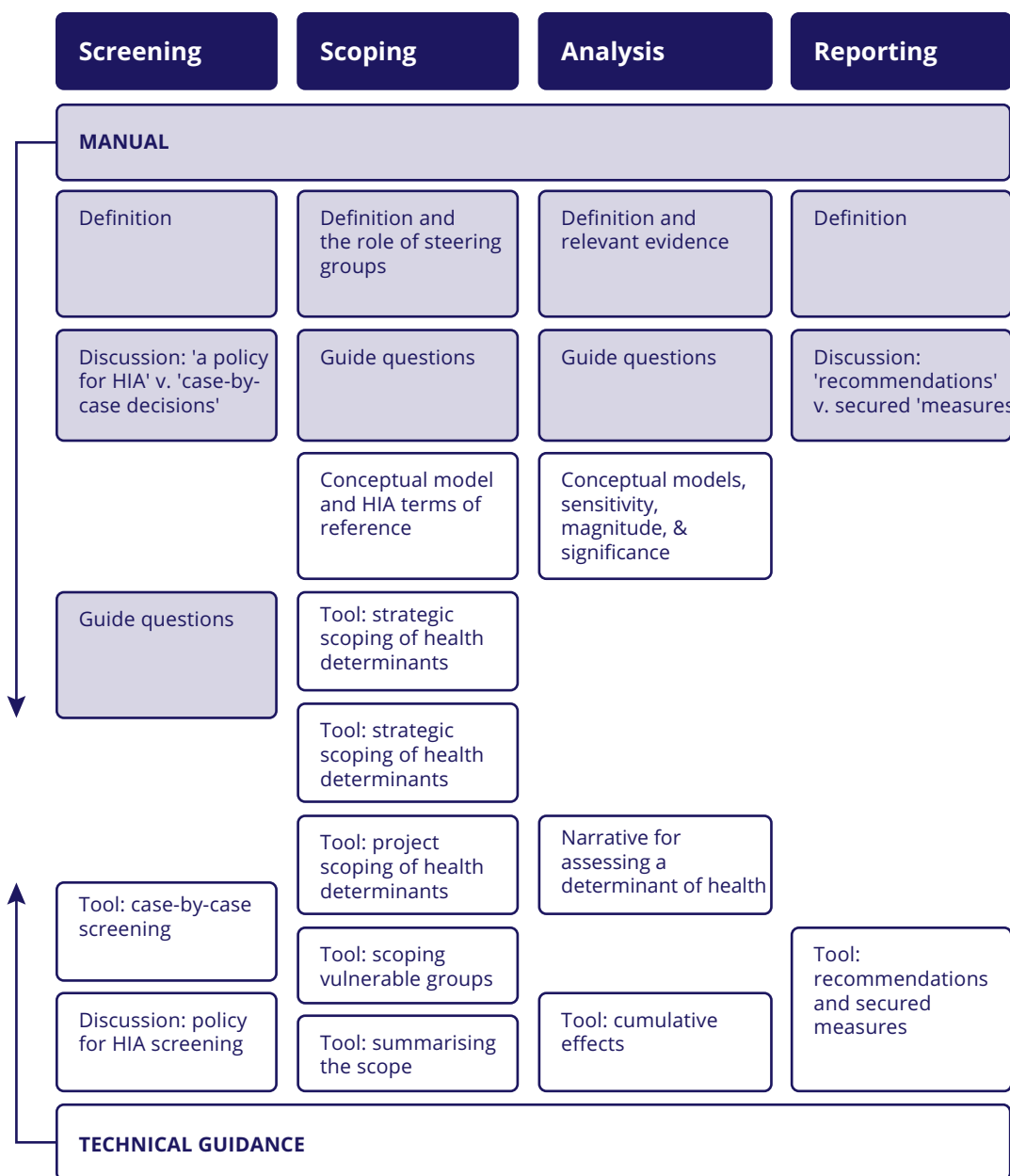
**SL** Strategic Level

**PL** Project Level

A greyed out box is used to indicate when a section is not relevant. eg: Project Level is not relevant in this example:

**HEA** **HIA** **SL** **PL**

**Figure T01. Relationship between the Manual and the Technical Guidance**







## PART 1

# Definitions

### **At a glance**

Glossary of key terms

Further definitions of health

Assessment instruments

Health and environmental assessment

Strategies and policies for Ireland and Northern Ireland

Governance for HIA

Data

## Glossary

The glossary is adapted from Cave et al (T1).

Term	Definition
<b>Determinants of health</b>	Biological, behavioural, socio-economic, cultural or environmental factors which contribute to the health status of individuals or populations (adapted from source T2).
<b>Developer</b>	The applicant for development consent on a private project or the public authority which initiates a project (T3).
<b>Development consent</b>	This is the decision of the competent authority or authorities which entitles the developer to proceed with the project (T3).
<b>Environment</b>	Environment includes health. The two are inextricably linked as one system. EU Directive 2014/52/EU Article 3 on EIA is explicit that human health is a factor within the definition of environment (T4). Similarly, EU Directive 2001/42/EC Annex 1 (T5) and the Protocol on SEA Article 2 (T6) are explicit that environment includes health.
<b>Epidemiology</b>	This is the study of the distribution and determinants of health-related states or events (including disease), and the application of this study to the control of diseases and other health problems (T7).
<b>Equity in health</b>	This refers to fair, just and unavoidable differences in exposure to health risk factors and status, among groups of people. As an example, significant differences in mortality or environmental risk exposure between low- and high-income groups would be considered unfair and avoidable, and therefore considered an equity challenge (From source T8).
<b>Health and human health</b>	This means a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity (T9). The definition of 'health' has not changed since 1948, and it is clear that mental and social wellbeing are also to be considered in addition to effects on physical health (T9). Health and wellbeing are influenced by a range of factors, termed the 'wider determinants of health'. The terms 'health' and 'health and wellbeing' are used interchangeably in this guidance.

Term	Definition
<b>Health authority</b>	This is defined in this paper as the local, regional or national health department that by reason of its specific health competencies and responsibilities is likely to be concerned by the health effects of the implementation of the proposal.
<b>Health in All Policies (HiAP)</b>	HiAP is an approach to public policies across sectors that systematically takes into account the health implications of decisions, seeks synergies and avoids harmful health impacts in order to improve population health and health equity. It improves accountability of policymakers for health impacts at all levels of policymaking. It includes an emphasis on the consequences of public policies on health systems, determinants of health and wellbeing (T10).
<b>Health indicator</b>	This is a characteristic of an individual, population or environment which is subject to measurement (directly or indirectly) and can be used to describe one or more aspects of the health of an individual or population (quality, quantity and time) (T2).
<b>Health inequality</b>	This refers to descriptive measures of difference in exposure to health risk factors, and to differences in health status between groups of people (T8).
<b>Health outcome</b>	This is a change in the health status of an individual, group or population which is attributable to a planned intervention or series of interventions, regardless of whether such an intervention was intended to change health status (T8).
<b>Health priority</b>	This is defined in this guidance as a health issue that has been identified, and given priority, by public health teams at local, regional, national or international levels.
<b>Health risk factor</b>	This is a social, economic or biological status, or behaviours or environments which are associated with or that cause increased susceptibility to a specific disease, ill health or injury (T2).
<b>Health sector</b>	This consists of organised public and private health services, health departments and ministries, health-related non-governmental organisations and community groups, and professional associations (adapted from source T2).

Term	Definition
<b>Health status</b>	This is a description and/or measurement of the health of an individual or population at a particular point in time against identifiable standards, usually by reference to health indicators (T2).
<b>Impact assessment</b>	This is the process of identifying the future consequences of a current or proposed action. The 'impact' is the difference between what would happen with the action and what would happen without it (T11).
<b>Likely health effect</b>	This effect is one that, with reference to the scientific literature, shows a plausible theoretical link between source-pathway-receptor; and the occurrence of which is judged as probable, in a specific context.
<b>Mitigation</b>	Mitigation describes measures that are envisaged to avoid, prevent or reduce any identified significant adverse effects on the environment (T3).
<b>One Health</b>	This is the collaborative effort of multiple disciplines – working locally, nationally and globally – to attain optimal health for people, animals and our environment (T12).
<b>Pathway</b>	This is the route by which changes to determinants of health lead to changes in health outcomes (T13).
<b>Planetary Health</b>	This refers to a trans-disciplinary field that calls for new efforts to simultaneously safeguard human health and the natural systems that underpin it. It encourages integrated approaches to address the health and the broader social, environmental and economic impacts of increasing pressures on our planet, and can be a useful frame for supporting implementation of the Sustainable Development Goals, ensuring that no one is left behind (T14).
<b>Population</b>	This is defined in this guidance as any group of people with shared characteristics. This could be the entire population of an area, or a population defined by relevant characteristics that make them more vulnerable to a proposal change, such as age or socio-economic status.
<b>Population health</b>	This means the health outcomes of a group of individuals, including the distribution of such outcomes within the group (T15).

Term	Definition
<b>Project</b>	<p>This is the execution of construction works or of other installations or schemes, and/or other interventions in the natural surroundings and landscape including those involving the extraction of mineral resources (T3). The assessment of a project is typically divided into the consideration of effects during construction, operation and decommissioning.</p>
<b>Proposal</b>	<p>This encompasses not only legislation but also a policy, plan, programme or project. Strategic-level proposals relate to new or amended legislation, policy, plans or programmes. Project-level proposals are individual development projects.</p>
<b>Public health</b>	<p>This is a theoretical and practical discipline in its own right and is the science and art that focuses on:</p> <ul style="list-style-type: none"> <li>• Population health</li> <li>• Human systems and interventions intended to improve population health and</li> <li>• Interactions between these two systems</li> </ul> <p>(adapted from source T16)</p>
<b>Risk assessment</b>	<p>This is a product of how likely an outcome is and how severe its consequence may be. Risk assessment can inform standalone HIAs and health in environmental assessment methods.</p> <p>Human health risk assessments can be accomplished using one to several of the following approaches:</p> <ul style="list-style-type: none"> <li>• Addressing actual or perceived risks using a descriptive or qualitative approach</li> <li>• Calculation or determination of a relative risk index based on information on several selected factors</li> <li>• Relative comparisons of the perceived risks of the alternatives being evaluated and/or</li> <li>• A quantitative, probabilistic approach focused on actual risks of the alternatives being evaluated</li> </ul> <p>(From T17)</p>



Term	Definition
<b>Significance</b>	<p>This relies on informed, expert judgement about what is important, desirable or acceptable with regards to changes triggered by the proposal in question (<a href="#">T18</a>, <a href="#">T19</a>).</p> <p>The use of 'significance' in this guidance is distinct from 'statistical significance'. Statistical significance is routinely used in scientific analysis to refer to whether the effects are real rather than chance occurrences, and is not necessarily a test of importance, desirability or acceptability (<a href="#">T20</a>).</p>
<b>Significant health effect</b>	<p>This is an effect that is judged to be important (a positive or negative effect), highly desirable (a positive effect) or unacceptable (a negative effect) for population health with regards to changes triggered by the proposal in question.</p>
<b>Stakeholders</b>	<p>These are people involved in, or affected by, a proposal drawn from public, private and/or voluntary sectors and the communities or groups affected (<a href="#">T21</a>).</p>
<b>Vulnerable groups</b>	<p>These groups are not vulnerable <i>per se</i> but are vulnerable in a given context and can include groups such as ethnic minorities, non-Irish nationals, people with disabilities, people who are homeless, people living in poverty, those struggling with addiction and substance abuse, and isolated older people (adapted from source <a href="#">T22</a>).</p>

## Further definitions of health

The *Manual* states that as understanding of the links between people, political systems, economies and the planet continues to grow, so too does the importance of defining health in a way that recognises the fundamental connections between health, society and the environment.

The definition of health in this guide is from **the constitution of the World Health Organization** (WHO).

This defines health as *'a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity'* (T9).

This section considers ways in which this overarching definition has developed. It looks at:

- Governance for health
- Health as a human right
- Health as a cross-cutting aspect of the Sustainable Development Goals
- One Health
- Planetary health

### Governance for health

Health is created largely outside the health sector (T23). de Leeuw shows how engagement in health governance, policy, and intervention development and implementation by sectors other than health is therefore important.

de Leeuw cites Leppo (T24) and McIntyre (T25) to show four ways in which health can contribute to informing a decision.

**The health argument:** Health has an intrinsic value and is a priority for people. For this reason, governments can and should support public sector engagement in this area.

1. **The health-to-other-sector argument:** Improved health and equity can support realisation of mandates and goals of other public sectors through the pursuit of this action.
2. **The health-to-societal-goal argument:** Improved health and equity contribute to wider societal gain, including wellbeing, economic and social development, and financial and environmental sustainability. This also generates support/confidence in public decision-making.
3. **The economic argument:** This emphasises the contribution of improved health and equity to wider economic goals.

de Leeuw notes that all of the above depend on partnership and cross-sectoral working and that it may not always be productive to start with health. She notes also that 'Healthy Cities' thrive when environmental sustainability is their starting point (T26).

### Health is a human right:

- *'The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition'* (T9).
- *'Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family'* (T27, Article T25).
- *'[It is] the right of everyone to the enjoyment of the highest attainable standard of physical and mental health'* (T28, Article 12).
- *'[It is] as an inclusive right extending not only to timely and appropriate health care but also to the underlying determinants of health... A further important aspect is the participation of the population in all health-related decision-making at the community, national and international levels'* (T29, paragraph T11).

### Sustainable Development Goals

The Sustainable Development Goals (T30) are the 17 goals of the 2030 Agenda for Sustainable Development, adopted by all UN Member States in 2015. The Sustainable Development Goals recognise that ending poverty and other deprivations must go hand in hand with strategies that improve health and education, reduce inequality, spur economic growth, tackle climate change and preserve ecosystems.

Each of the Sustainable Development Goals (T30) is important for health and they are all social, economic or environmental determinants of health (see Figure T02). Goals 3 and 10 are of direct relevance and are listed below:

- Goal 3: Ensure healthy lives and promote wellbeing for all at all ages
- Goal 10: Reduce inequality within and among countries

The goals are not legally binding, but countries are expected to establish a national framework for achieving them (T31). The UK Government is delivering the goals by fully embedding them in the planned activity of each government department using the departmental planning process to coordinate implementation (T32). The Government of Ireland has published the 'Sustainable Development Goals National Implementation Plan 2018-2020', providing a whole-of-government approach (T33).

The Sustainable Development Goals are an existing HiAP framework for departmental leadership and inter-departmental co-operation, as well as the involvement of local government and other stakeholders, to achieve 'good health and wellbeing' (goal 3) and 'reduced inequalities' (goal 10) across the island of Ireland. HIA is an approach recommended by the WHO to achieve the Sustainable Development Goals (T34). HIA, particularly strategic-level HIA, and health in SEA are approaches suited to supporting delivery of the Sustainable Development Goals across departments. Project-level HIA and health in EIA can also reference, and support the achievement of, the Sustainable Development Goals (T35).

The WHO (T36) states that public health can provide an overarching and unifying platform to achieve the Sustainable Development Goals. Menne et al (T37) mapped the links between health and wellbeing and the Sustainable Development Goal targets. Where impact assessments seek to respond to the Sustainable Development Goals, such links can inform HIA and health in environmental assessment screening and scoping.

The Sustainable Development Goals are explicitly referred to in the Sustainability principle for HIA (see the *Manual*, [Figure M02](#)).

**Figure T02: Sustainable Development Goals, including examples of HiAP actions**



From WHO Regional Office for Europe (T36)

## One Health

One Health is defined as the collaborative effort of multiple disciplines – working locally, nationally and globally – to attain optimal health for people, animals and our environment (T12).

The *Pan-European Commission on Health and Sustainable Development* is tasked with rethinking policy priorities in the light of pandemics. In March 2021, it issued its first statement and called for the full implementation of the concept of **One Health** in all settings where health policies are developed (T38). This includes a call for metrics that can serve as benchmarks for the assessment of projects, policies and resource allocation (p. 9).

### Figure T03. One Health settings ...

Agri- and bio-terrorism

Animal agriculture and animal sciences

Antimicrobial resistance

Basic and translational research

Biomedical research

Clinical medicine

Combating existing and emerging diseases and zoonoses

Comparative medicine

Conservation medicine

Consumer support

Diagnosis, surveillance, control, response and recovery directed at natural or intentional threats that are chemical, toxicological or radiological in nature

Entomology

Ethics

Food safety and security

Global food and water systems

Global trade and commerce

Health communications

Health of the environment and environmental preservation

Implications of climate change

Infectious disease ecology

Integrated systems for detection

Land use and production systems and practice

Mental health

Microbiology education

Occupational health

Public awareness and public communications

Public health and public policy

Regulatory enforcement

Scientific discovery and knowledge creation

Support of biodiversity

Training

Veterinary and environment health professionals and organisations

Wildlife promotion and protection

From One Health Task Force (T12)

In 2008, the American Veterinary Medical Association (AVMA) (T39) stated that ‘... the convergence of people, animals, and our environment has created a new dynamic in which the health of each group is inextricably interconnected. The challenges associated with this dynamic are demanding, profound, and unprecedented. While the demand for animal-based protein is expected to increase by 50% by 2020 (T40), animal populations are under heightened pressure to survive, and further loss of biodiversity is highly probable.’

‘On top of that, of the 1,461 diseases now recognized in humans, approximately 60% are caused by multi-host pathogens characterized by their movement across species lines (T41). And, over the past three decades, approximately 75% of new emerging human infectious diseases have been zoonotic (T42). Our increasing interdependence with animals and their products may well be the single most critical risk factor to our health and well-being with regard to infectious diseases.’

Figure T03 above shows how the AVMA defines the scope of One Health and how it requires collaboration among multiple professions: veterinary medicine, human medicine, environmental, wildlife and public health.

One Health is also a tool to inform policymakers, to manage infectious disease outbreaks, to implement strategies and to enhance institutionalisation (T43).

Work has been done to link impact assessment with One Health – see for example, *Health Impact Assessment: A Good Practice Sourcebook* (T44, pp106-109) and Annex 2 of the IOGP/PIECA HIA guidance, which considers emerging infectious diseases (T45).

Humboldt-Dachroeden et al (T46) note that the COVID-19 pandemic has made it clear that attention to broader sets of socio-economic issues is essential in public health responses. They note a need for interdisciplinary research that bridges diverse perspectives, for example social, political and anthropological.

There are economic opportunities associated with developing alternative forms of energy and clear health gains (co-benefits) through decarbonising electricity production. There are economic advantages in reducing fossil fuel combustion and improving air quality; for example, a reduction in chronic diseases and in their associated healthcare costs.

These are known as co-benefits.

A 2021 research paper found that an average person who ‘shifted travel modes’ from car to bike decreased life cycle CO<sub>2</sub> emissions by 3.2 kg CO<sub>2</sub>/day. Promoting active travel should be a cornerstone of strategies to meet net zero carbon targets, particularly in urban areas, while also improving public health and quality of urban life.

Although uncertainties remain, climate change mitigation in transport should benefit public health substantially. Policies to increase the acceptability, appeal and safety of active urban travel, and to discourage travel in private motor vehicles, would provide larger health benefits than policies that focus solely on lower-emission motor vehicles.

Adapted from Brand et al (T47), Haines et al (T48), Patz et al (T49), Woodcock et al (T50), Wilkinson et al (T51) and Markandya et al (T52).



## Planetary health

**Planetary health** calls for action that simultaneously protects human health and the natural systems underpinning human health (T14).

It emphasises interconnections between human health and environmental changes, and it looks at challenges and solutions for present and future generations.

Planetary health offers an opportunity to advance the 2030 Agenda for Sustainable Development (T53), including the identification of co-benefits across targets, encouraging effective cross-sector action and partnerships, and ensuring policy coherence (T54).

## Assessment instruments

The following summaries of assessment instruments provide a general context to HIA. The summaries are not exhaustive and do not constitute legal advice. There are complexities that are not reported, including the interactions between assessments and procedural points for cross-border assessments.

These instruments show how determinants of health and vulnerable groups are a feature of many assessments. There may be an integrated discussion of health outcomes, as in SEA and EIA; or the assessment of health may be framed in terms of other outcomes, for example, poverty, human rights or equality. Assessments that look at outcomes other than health may inform, or be informed by, a standalone HIA if HIA screening indicates this would be appropriate.

## Environmental Assessment (EA)

<b>Purpose</b>	This is not an assessment in its own right but it is an important umbrella term that covers both Strategic Environmental Assessment (SEA) and Environmental Impact Assessment (EIA).
<b>Funded by</b>	See the tables below for information about Strategic Environmental Assessment (SEA) and Environmental Impact Assessment (EIA).
<b>Legislation</b>	
<b>Change due to UK exit from EU</b>	
<b>Requirements regarding human health</b>	
<b>Good practice</b>	Environmental Assessment should: <ul style="list-style-type: none"> <li>• Include proportionate consideration of human health with a population health outcome perspective</li> <li>• Take a broad interpretation of health, to provide decision-makers with information on how health is affected. See below.</li> </ul>

## Strategic Environmental Assessment (SEA)

<b>Purpose</b>	SEA is conducted on plans and programmes that set the framework for future development consent.
<b>Funded by</b>	SEAs are typically funded by national, regional and local government (public sector) as part of preparing plans and programmes.
<b>Legislation</b>	<p>SEA derives from Directive 2001/42/EC (the SEA Directive) (T5) and requires the consideration of effects on 'human health'.</p> <p>There is legislation for SEA in Ireland (T55) and in Northern Ireland (T56).</p> <p>SEA is also governed by the <i>Protocol on Strategic Environmental Assessment to the Convention on Environmental Impact Assessment in a Transboundary Context</i> (the Protocol on SEA) (T6).</p> <p>The Protocol on SEA emphasises the inclusion of health within SEA, including consultation with health authorities.</p> <p>It also provides a non-mandatory framework for the SEA of policies and legislation.</p>
<b>Change due to UK exit from EU</b>	<p>The Northern Ireland legislation (T56) transposing the SEA Directive remains in force. Divergence from the SEA Directive may occur over time depending on future regulatory alignment between the EU and the UK.</p> <p>Ireland is a Member State of the EU and the EIA Directive continues to apply.</p> <p>Ireland has not approved the Protocol on SEA independently but it has been approved by the EU on behalf of the EU Member States.</p> <p>The UK has not approved the Protocol on SEA.</p> <p>The Protocol on SEA therefore applies in Ireland, but not in Northern Ireland.</p>
<b>Requirements regarding human health</b>	<p>The SEA Directive (T5) states that '<i>policy on the environment is to contribute to, inter alia, the preservation, protection and improvement of the quality of the environment, [and] the protection of human health...</i>'.</p> <p>The SEA Directive (T5) requires identification, description and evaluation of '<i>the likely significant effects [including secondary effects] on the environment, including on issues such as... human health</i>'.</p> <p>The SEA Directive (T5) requirement relates to health being considered in its own right as a factor affected by the plan or programme and in terms of the interrelationship between health, population and listed environmental factors.</p> <p>The emphasis on health under the Protocol on SEA includes the objective that '<i>environmental, including health, considerations are thoroughly taken into account in the development of plans and programmes</i>' (T6).</p> <p>Guidance for Northern Ireland includes a strong consideration of health during SEA (T57).</p>

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<b>Good practice</b>	<p>Good practice in SEA should integrate assessment of human health taking a population health perspective and tracing effects through to relevant health outcomes.</p> <p>Good practice is to take a broad interpretation of health, which provides decision-makers with information on how health is affected by environmental change and the secondary effects on health in relation to social and economic consequences of environmental change.</p> <p>The United Nations Economic Committee for Europe (UNECE) has developed draft guidance to address human health within SEA (<a href="#">T58</a>).</p>
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## Environmental Impact Assessment (EIA)

<b>Purpose</b>	EIAs are conducted on individual projects as part of an application for development consent.
<b>Funded by</b>	EIAs are funded by the project proponent.
<b>Legislation</b>	EIA originates from Directive 85/337/EEC (T59), which was amended and updated three times, before being replaced by the current EIA Directive 2011/92/EU, as amended by 2014/52/EU (T4).
<b>Change due to UK exit from EU</b>	<p>Post-Brexit, the Northern Ireland legislation transposing the EIA Directive (T60) remains in force, but divergence from the EIA Directive may occur over time depending on future regulatory alignment between the EU and the UK.</p> <p>Ireland is a Member State of the EU and the EIA Directive continues to apply.</p>
<b>Requirements regarding human health</b>	<p>Among the changes that came into force from 2017 was the requirement for a consideration of effects on '<i>population and human health</i>'.</p> <p>The objective of the EU EIA Directive (T4) is to '<i>ensure a high level of protection of the environment and of human health</i>'.</p> <p>The EIA Directive (T4) requires assessment of '<i>the direct and indirect significant effects of a project on... human health</i>'.</p> <p>The EIA Directive (T4) requirement relates to health being considered in its own right as a factor affected by the project and in terms of the interaction between health, population and listed environmental factors.</p> <p>The 2017 EIA Regulations for Northern Ireland (T60), and Ireland (T61), make it clear that EIA must include consideration of human health. EIA requires the assessment of all the direct and indirect significant effects of a project on human health, including interactions with the project's effects on environmental and population factors (EIA Directive Article 3).</p>
<b>Good practice</b>	<p>An EIA should:</p> <ul style="list-style-type: none"> <li>• Include proportionate consideration of human health, taking a population health perspective and tracing effects through to relevant health outcomes.</li> <li>• Take a broad interpretation of health, to provide decision-makers with information on how health is affected <u>directly</u> by environmental change and <u>indirectly</u> by the social and economic consequences of environmental change.</li> </ul> <p>The International Association for Impact Assessment (IAIA) and the European Public Health Association (EUPHA) have published a reference paper advising health authorities on human health within EIA (T1).</p>

## Poverty Impact Assessment (PIA)

<b>Purpose</b>	<p>PIA is used, in Ireland, to assess policies and programmes for the likely impact that they will have, or that they have had, on poverty and on inequalities which are likely to lead to poverty, with a view to poverty reduction (T62).</p> <p>In Northern Ireland there is no requirement for a PIA. Section 75 statutory duties fulfil a similar function for inequalities more generally (see Equality Impact Assessment).</p>
<b>Funded by</b>	<p>In Ireland, PIAs are typically funded by government departments, local authorities and state agencies (public sector) as part of designing, implementing and reviewing policies and programmes.</p>
<b>Legislation</b>	<p>A PIA is not a requirement in legislation but rather developed from the 1998 Anti-Poverty Strategy. The Cabinet Handbook (T63) states that Memoranda for Government involving significant policy proposals should include a statement of the likely effects of the policy on persons experiencing or at risk of poverty or social exclusion. PIA may be covered as part of a Regulatory Impact Analysis (see RIA) (T64).</p>
<b>Change due to UK exit from EU</b>	<p>N/A</p>
<b>Requirements regarding human health</b>	<p>PIA guidance states that poverty is deprivation due to a lack of resources, both material and non-material, for example, income, housing, health, education, knowledge and culture (T65).</p> <p>A PIA shares a process similar to that of a HIA, and determinants of health overlap with factors that create and perpetuate poverty.</p>
<b>Good practice</b>	<p>Good practice in PIA should include an integrated assessment of human health from a poverty outcome perspective.</p>

## Human Rights Impact Assessment (HRIA)

<b>Purpose</b>	<p>In Ireland, a statutory HRIA is used to place human rights at the heart of how a public body fulfils its purpose and delivers its strategic plan (T66). Voluntary HRIA can also bring human rights concerns into the heart of key decision-making within other enterprises/ organisations (T67).</p> <p>In Northern Ireland, HRIA was developed to assist civil servants in evaluating the impact of a policy or proposal on the rights contained in the Human Rights Act (T68).</p>
<b>Funded by</b>	<p>HRIAs are funded by public bodies fulfilling their statutory duties (Ireland and Northern Ireland). Other organisations, including the private and voluntary sectors, may also undertake HRIAs on a voluntary basis.</p>
<b>Legislation</b>	<p>In Ireland, Section 42 of the Irish Human Rights and Equality Commission Act 2014 (T69) requires public bodies to have regard to, and assess, the need to protect the human rights of its members, staff and the persons to whom it provides services. Links are made with the duties of public body in relation to equalities (see Equality Impact Assessment).</p> <p>HRIA in Northern Ireland relates to the duty on public bodies arising from the European Convention on Human Rights (and its Protocols) and the Human Rights Act 1998. These rights include ‘the right to life’, ‘respect for private and family life’ and the ‘prohibition of discrimination’. The Northern Ireland Executive Office provides a proforma for undertaking HRIA (T70). Links are also made with Section 75 statutory duties (see Equality Impact Assessment) (T71).</p>
<b>Change due to UK exit from EU</b>	<p>There would be no change in Ireland. The European Convention on Human Rights Act, 2003, Section 3 (T72) creates a statutory obligation on every government department, local authority and public institution such as the HSE to ‘perform its functions in a manner compatible with the State’s obligations under the European Convention on Human Rights’ (T73).</p> <p>The UK exit from the EU will have no direct impact on the UK’s obligations under the European Convention on Human Rights (T74).</p>



<p><b>Requirements regarding human health</b></p>	<p>The Irish Human Rights and Equality Commission provides guidance for public bodies in relation to statutory HRIA (T75). The tool provides five steps for undertaking the assessment. The guidance states that in assessing and prioritising relevant equity and human rights issues, areas of action that demand urgent attention include situations where the 'wellbeing' of specific groups is at particular risk. Links are made to health data sets as sources of evidence. Groups mentioned in the guidance, for example people at risk of poverty and social exclusion, would also be relevant to HIA. In addition to statutory HRIA, the Commission provides general guidance on '7 Steps Towards Human Rights and Equality in the Workplace' (T67), which includes steps for undertaking an equality and human rights impact assessment of a policy or plan at the design stage.</p> <p>Health as a human right (T27, T28) is not part of the European Convention on Human Rights (T73) or the Human Rights Act 1998 (T76), and does not feature within the Northern Ireland proforma for HRIA.</p> <p>In Ireland, the Commission guidance states that '<i>human rights are interdependent and indivisible, meaning that rights are linked and not protecting one right may impact on another. For example, failure to protect the right to health may affect the right to life</i>' (T77).</p> <p>This explicit inclusion of health as a human right within Ireland HRIA aligns with international commitments. Human rights can align with or relate to the determinants of health that can be considered within HIA.</p> <p>A standalone HIA may inform a statutory HRIA, but a HIA is:</p> <ul style="list-style-type: none"> <li>• Not limited to the activities of public authorities</li> <li>• Concerned with outcomes beyond human rights compliance</li> <li>• Will typically neither frame assessment in terms of human rights nor exhaustively cover all rights</li> </ul>
<p><b>Good practice</b></p>	<p>Good practice in HRIAs should include an integrated assessment of human health from a human rights outcome perspective.</p>

## Equality Impact Assessment (EqIA)

<b>Purpose</b>	<p>In Northern Ireland, EqIA relates to ‘the Section 75 statutory duty on public authorities to have due regard to the need to promote equality of opportunity between: persons of different religious belief, political opinion, racial group, age, marital status or sexual orientation; men and women generally; persons with a disability and persons without; and persons with dependants and persons without (T78).</p> <p>In Ireland, an EqIA is ‘a thorough and systematic analysis of a policy whether that policy is written or unwritten, formal or informal, and irrespective of the scope of the policy or the size of the public authority’. The EqIA process is set out in guidance to public authorities (T79).</p>
<b>Funded by</b>	EqIAs are funded by public authorities (Ireland) and public bodies (Northern Ireland).
<b>Legislation</b>	<p>Section 75 of the Northern Ireland Act (T80) places a duty on public bodies to promote equality of opportunity. Furthermore, Schedule 9, paragraph 4.2(b) requires public authorities to carry out consultations in relation to ‘the likely impact of policies adopted or proposed to be adopted by the authority on the promotion of equality of opportunity’.</p> <p>The Northern Ireland guidance on rural proofing requires policies to be implemented so that services will be delivered to rural areas in an equitable manner (T81).</p> <p>In Ireland, the Public Sector Equality and Human Rights Duty to promote equality of opportunity originates from Section 42 of the Irish Human Rights and Equality Act 2014 (T69). Furthermore, the Equal Status Acts 2000-2018 (T82) prohibit discrimination in the provision of goods and services, accommodation and education (T79, T83), and the Employment Equality Acts 1998-2015 prohibit discrimination at work (T84).</p>
<b>Change due to UK exit from EU</b>	<p>Post-Brexit, the UK equality legislation remains in force, but divergence from the EU may occur over time depending on future regulatory alignment and trade agreements between the EU and the UK. Under the Northern Ireland Protocol to the Withdrawal Agreement (T85) reached with the EU, certain discrimination law provisions in Northern Ireland will continue to comply with EU equality laws (T86).</p> <p>There would be no change in Ireland.</p>
<b>Requirements regarding human health</b>	The nine equality categories of EqIA may overlap with the vulnerable groups considered when carrying out a HIA, but a HIA will not necessarily consider all nine equality categories and may consider other vulnerable groups, for example in relation to income, social disadvantage or social isolation.
<b>Good practice</b>	<p>Good practice in EqIA should include an integrated assessment of human health from an equality outcome perspective.</p> <p>It is good practice for all HIAs to consider equality and equity, but a HIA can also consider other outcomes and is not limited to the activities of public authorities.</p>

## Regulatory Impact Analysis (RIA)

<b>Purpose</b>	<p>RIA is used, in Ireland, for a structured exploration of different options to address particular policy issues (T87). It is used where one or more of these options is a new regulation or a regulatory change and facilitates the active consideration of alternatives to regulation or lighter forms of regulation.</p> <p>In Northern Ireland, RIA is a key tool in delivering better regulation, supporting the Government's aim of only regulating when necessary and, when it is required, to do so in a way that is proportionate to the risk being addressed and to deregulate and simplify wherever possible (T88).</p>
<b>Funded by</b>	<p>RIA is funded by the relevant regulatory bodies in Ireland, the majority of whom are public sector, although there are a small number of independent regulators. Beyond regulatory bodies, RIA is also relevant to officials working in most other policy areas (T87).</p> <p>In Northern Ireland, RIA is funded as part of policy development, including in departments, executive agencies, regulatory organisations and local authorities (T89).</p>
<b>Legislation</b>	<p>In Ireland, RIA is not a requirement in legislation, but the requirement is set out within the Cabinet Handbook (T63), including that Memoranda for Government are informed by RIA.</p> <p>Similarly, Northern Ireland has no requirement in legislation, but the <i>Northern Ireland Better Regulation Strategy</i> requires all departments, arm's-length bodies and other public bodies to consider an RIA as part of their policy development process (T89).</p>
<b>Change due to UK exit from EU</b>	N/A
<b>Requirements regarding human health</b>	<p>The Ireland's Revised RIA Guidelines (T87) quote <i>Quality and Fairness – A Health System For You</i> (T90), which states that a HIA is to be carried out on all new relevant Government policies and an RIA should therefore, where appropriate, examine the potential impact on health, with particular reference to health inequalities (T87).</p> <p>The UK Government's guidance states that the protection of human health can be a legitimate policy objective that can be considered as part of evaluating the UK's Technical Barriers to Trade obligations (T89). The RIA template requires an evidence base, which includes reference to wider impacts in the context of other impact assessments in Policy Toolkit Workbook 4, which recommends HIA (T91).</p>
<b>Good practice</b>	<p>Good practice in carrying out an RIA, in both its Ireland and Northern Ireland forms, should include a proportionate assessment of human health from a regulatory options appraisal perspective.</p>

## Social Impact Assessment (SIA)

<b>Purpose</b>	<p>SIA in Ireland is an evidence-based methodology which estimates the likely distributive effects of policies on household incomes, families, poverty and access to employment (T92).</p> <p>SIA is not a formal process in Northern Ireland.</p>
<b>Funded by</b>	<p>SIA is funded as part of analysing budgetary policy decisions by a number of the Government of Ireland's departments, including Finance, Public Expenditure and Reform and Social Protection (T93). For example, SIA is applied to the welfare and income tax measures of the annual Budget.</p>
<b>Legislation</b>	<p>There is no requirement for SIA in legislation. The SIA framework used in Ireland developed from the 2016 Programme of Government commitment to develop a process of budget and policy proofing as a means of advancing equality, reducing poverty and strengthening economic and social rights (T93).</p>
<b>Change due to UK exit from EU</b>	N/A
<b>Requirements regarding human health</b>	<p>The Government of Ireland has committed to incorporate PIAs as part of an integrated social impact assessment, with health impacts as a core feature of this new tool (T94, page 13). The outcomes and populations considered by SIA are a subset of determinants of health and vulnerable groups considered within HIA. SIA therefore overlaps with HIA but does not explicitly relate findings to health outcomes. An SIA could be undertaken as part of, or used to inform, a HIA.</p> <p>In Northern Ireland, there is no requirement for an SIA, but academic literature notes that health issues have a central place in SIA (T95). An SIA usually discusses the broader determinants of health but does not necessarily recognise the links to, or relevance of, health.</p> <p>Typically, there is no input of health expertise into SIAs, but this could be beneficial given the similarities between SIA and HIA.</p>
<b>Good practice</b>	<p>Good practice in carrying out SIAs should include an integrated assessment of human health from a social outcome perspective.</p>

### **Place-based policymaking: Island Communities Impact Assessment for the Scottish islands**

Across Europe, island regions face a particular set of challenges when compared with their mainland counterparts (T96). Distance, geography, connectivity and demography are factors that can work against islands. The loss of younger people due to limited work opportunities is a major challenge for island communities. However, they also enjoy some advantages over mainland communities: islands tend to be self-reliant and to have strong community involvement. Their isolated character also means that island communities tend to be resourceful and innovative.

The Government of Ireland's Rural Development Policy (T97) seeks to ensure that offshore islands continue to support sustainable and vibrant communities and it notes that access affects every aspect of island life, including health. The Rural Development Policy commits to a new, 10-year, cross-departmental Policy for Island Development and associated Action Plans which will cover areas such health (T97).

Rathlin Island is the only inhabited offshore island in Northern Ireland, and the Northern Ireland Executive both understands that this island community faces challenges different to those on the mainland and recognises the need for a coordinated approach to its development (T98).

The Islands (Scotland) Act 2018 (T99) (the Act) is one of the few place-based pieces of legislation in the world that focus specifically on islands. The Act sets out the requirements for a National Islands Plan (source T99, para 3). Among other objectives, this plan must improve outcomes for island communities. This, in turn, includes improving and promoting sustainable economic development, environmental wellbeing, health and wellbeing and community empowerment (T99). The measures it contains, like the Island Communities Impact Assessment, are designed to meaningfully improve outcomes for island communities (T100).

The Act requires a Relevant Authority to have regard to island communities in carrying out its functions. These include local authorities, transport authorities, health boards and other bodies.

The Act sets out when an Island Communities Impact Assessment must be carried out. The guidance (T100) stresses the importance of consultation and robust community engagement so that islanders are given a platform to voice their opinions, concerns and suggestions.

The Island Communities Impact Assessment is a separate process to a HIA but, as we see above, improving and promoting health and wellbeing is a stated outcome for island communities. An Island Communities Impact Assessment, thus, provides a further example where a given assessment approach can inform, or be informed by, a HIA.

## Health and environmental assessment

Governments direct sustainable development through a tiered system. This starts at the most strategic level with policies and legislation, then plans and programmes and finally individual projects.

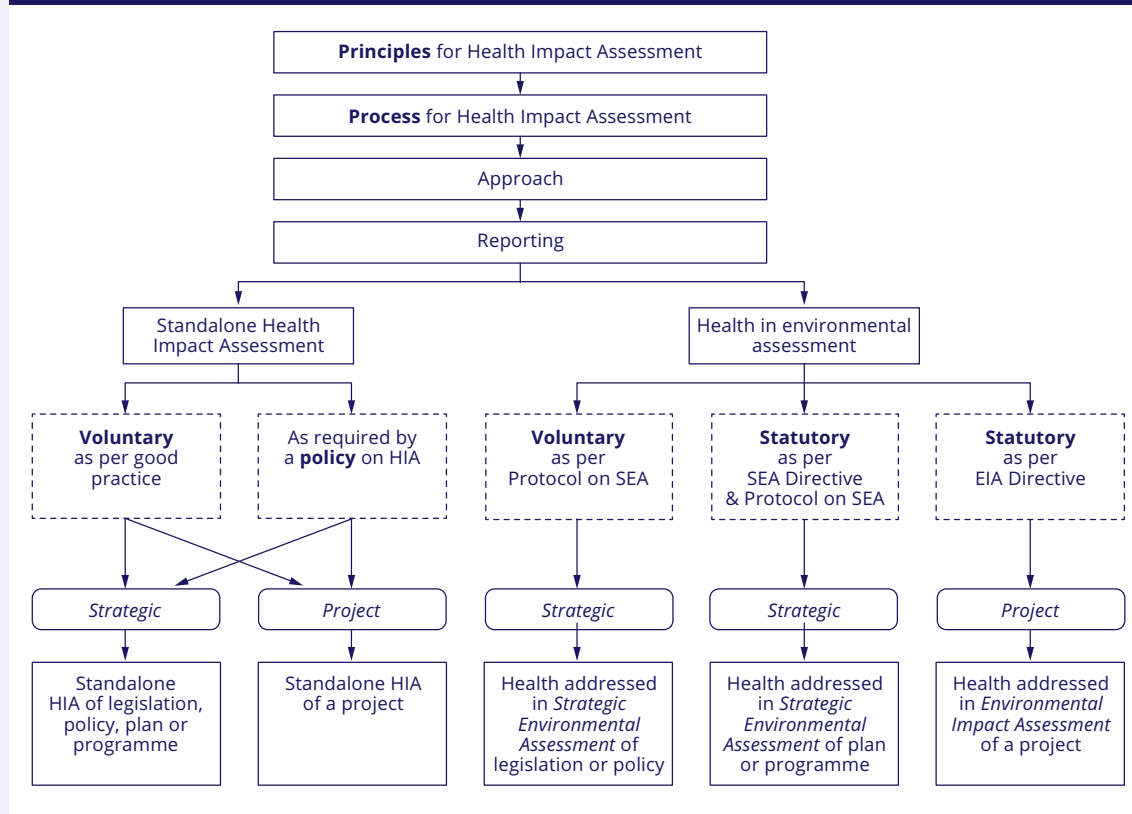
Figure T04 shows this tiering and the implications for the assessment of health.

The Protocol on SEA encourages SEA to be applied to legislation and policy development, but this is not mandatory.

The SEA Directive requires plans and programmes, and other documents that set the framework for consent.

The EIA Directive focuses on projects.

**Figure T04. Health Impact Assessment in its different forms**





## Integrating health into other policies and assessments

Impact assessment practice accommodates, and needs to navigate, legal and policy requirements for considering health.

An integrated assessment reduces bureaucracy. It delivers both HIA and HiAP effectively using existing statutory mechanisms. This is considered good practice.

The similarities between the assessment of human health in environmental assessment and a standalone HIA are greater than the differences.

[Figure T04](#) shows how both follow the same principles, process and approach. A consistent approach across standalone HIA and health in environmental assessment is distinct from the methodologies that may be used in different types and levels of assessment. This *Technical Guidance* provides a conceptual model of evidence sources and decision criteria to enable a consistent and transparent approach to analysis.

The procedures and outputs for environmental assessment (SEA and EIA) are defined by statute. For example, each topic in the assessment is required to focus on the *likely significant effects* of a proposal. These procedures and outputs therefore influence the conduct and the output of the assessment of human health.

In 2017, Ireland's Environmental Protection Agency (EPA) published draft guidelines on the information to be contained in EIA reports ([T101](#)). These justified a focus, in EIA, on environmentally related health issues by quoting from European Commission (EC) guidance on SEA ([T102](#)).

The EC ([T102](#)) notes that environmentally related health issues are obvious aspects to study but does not limit the scope of health to these aspects.

The Government of Ireland's 2018 Guidelines for Planning Authorities and An Bord Pleanála ([T103](#)) references the EPA's draft guidelines but draws a wider scope for health. It notes that the focus in an EIA should be on the health issues arising in the context of the other environmental factors listed in Article 3 of the EIA Directive, including population, biodiversity, land, soil, water, air, climate, material assets, cultural heritage and landscape.

The 2018 guidelines also cites the European Commission guidance ([T18](#)), which states that in addition to bio-physical determinants, environmentally related health issues may include changes to disease vectors, changes to living conditions and effects on vulnerable groups.

HIA is not a statutory requirement on the island of Ireland, so a HIA team can mirror the procedures and outputs of an environmental assessment or the team can be more flexible with its approach to the HIA.

The example from Wales, below, shows how HIA can be adapted to suit the context. Here, a steering group is used. It centres on a participatory workshop, and outputs are framed as voluntary recommendations to a wide range of stakeholders rather than measures to which the proponent is committed. The final HIA report is appended to an Environmental Statement.

The bullet points below set out key activities in a standalone HIA. This text is adapted from Box 2 in Green et al (T35). The stages in the HIA process have been applied to the activities that the authors describe.

This HIA looked at a project for a new cable connection between a substation and the high-voltage electricity transmission network in north Wales. The cable would be mostly overhead but would also have an underwater section.

### Screening

- A short session with local authority officers identified the potential impacts and groups affected. This highlighted the need for a broad, focused HIA.

### Scoping

- The scope, resources and type of HIA were defined.
- The steering group was established.

### Analysis

- Evidence was gathered – literature review, health intelligence (demographic and health profile) and quantitative information including that from other EIA topic areas, for example, noise assessments and social impact assessments.
- A steering group meeting was held and stakeholders identified to be invited to the workshop.
- A participatory workshop was held – all notes were transcribed, translated into Welsh and circulated post workshop by attendees, and agreed. A workshop evaluation was carried out.
- Analysis and triangulation of evidence was undertaken.
- A steering group meeting was held to discuss findings and amend (if necessary).

### Reporting

- A report was drafted and circulated to the steering group.
- A steering group meeting was held to discuss the report and amend if necessary. Transcripts/notes were referred back to. A final draft was reviewed by senior managers in Public Health Wales, the local authority and the power company. Changes were noted or actioned.
- Final versions of the report (Welsh and English) were prepared. These were used to support the final Development Consent Order application and to inform the wider stakeholders. These flag up potential opportunities and unintended consequences, as well as those groups affected in the local population.
- The report was amended, agreed, circulated and added to the Environmental Statement as an appendix.

Green et al (T35) do not describe the stages of Implementation, Monitoring and Evaluation.

This guidance supports consistency between environmental assessment and standalone forms of health assessment. It notes the flexibility of standalone HIA reports in exploring issues outside of the statutory remit of an SEA or EIA, such as health effects arising from smaller development projects below the thresholds for an EIA.

If an SEA or EIA scopes the wider determinants of health and considers inequalities, there should be no need for a standalone HIA report.

This HIA guidance reflects the Institute's view that it is good practice to adopt a wider determinants of health approach when addressing human health within an EIA and that this should be proportionate. This is consistent with the consensus of international impact assessment professional bodies and European public health (T1) discussion in the academic literature (T104).

### Duplication – the flip side of integration

Where an SEA or EIA takes a narrow bio-physical approach to health, then a supporting standalone HIA may be needed for a robust consideration of all the likely significant health effects of the proposal.

This can raise compliance risks. For example, a standalone HIA may identify likely significant effects in addition to any that are reported in the SEA or EIA report. This would not be consistent with the requirement that the SEA or the EIA report describes the likely significant effects of the plan, programme or project.

The SEA requirement for reporting likely significant health effects in the SEA environmental report is set out in EU Directive 2001/42/EC Annex I paragraph f. The equivalent requirement for EIA is set out in EU Directive 2014/52/EU Annex IV paragraph 4.

Presenting a standalone HIA alongside an SEA or EIA is therefore not usually good practice. There are exceptions: for example, a standalone HIA report can be prepared to provide confidence that there are no *likely significant* health effects for the EIA or SEA to formally report.

Duplication between environmental assessment and HIA increases costs and it is a burden on consultees and decision-makers.

The Institute recommends that health is considered within environmental assessment, for example in an SEA or EIA, and that health is considered in a standalone HIA where an environmental assessment is not undertaken.

### Government strategies and policies

Wales has successfully championed HIA in both legislation and policy and is reaping the benefits. The island of Ireland has a similar opportunity to harness HIA for its communities. Policy support and leadership for public health is vital to support HIA legislation (T105).

The Public Health (Wales) Act 2017 (T106) requires Welsh government ministers to set out regulations stating the circumstances in which public bodies in Wales must carry out HIAs. This will make HIA statutory for public bodies in specific circumstances such as national and local land use development plans (T107).

The Well-being of Future Generations (Wales) Act (2015) (T108) places a statutory duty on specified public bodies and public service boards to ensure that sustainable wellbeing becomes a core focus for all.

Leadership, networking and advocacy are key skills in promoting the benefits of HIA. A sustained programme of HIA capacity building and awareness-raising targeting senior public and private sector stakeholders is needed for HIA to be effective, for example to link HIA to sectoral, organisational or national policy and/or good practice.

Support also extends to ensuring appropriate resources are available to those with responsibilities arising from national and/or international commitments on use of standalone or integrated HIA.

See [Table 01](#) and [Table 02](#) for Government strategies and policies in Northern Ireland and Ireland respectively. These are outside the health sector but will have implications for public health and therefore for HIA.

Policies change, and are updated, so these tables are not exhaustive.

In fact, changes and updates to policies are opportunities for strategic HIAs to be explicitly used to improve population health and reduce health inequalities.

There is a need for explicit attention to public health within public and private sector organisations and departments. This can be achieved through support for HIA. Relying on implicit support, or support on a case-by-case basis once an HIA has been initiated, weakens the benefits for society and for the organisation conducting the assessment.

<b>Table 01. Northern Ireland Government strategies and policies</b>	
<b>Northern Ireland Government Department</b>	<b>Strategy/Policy/Action Plan</b>
Department of Justice	<a href="#">Improving health within criminal justice</a> <a href="#">Inter-departmental Homelessness Action Plans</a> <a href="#">Improving mental health within criminal justice: Action plan</a>
Department for Communities	<a href="#">Social Inclusion Strategies</a> <a href="#">Services and Standards Framework</a> <a href="#">Tenant Participation Strategy</a> <a href="#">Active ageing Strategy</a> <a href="#">Child Poverty Strategy</a>
Executive Office	<a href="#">Delivering Social Change – Signature Programmes</a> <a href="#">Urban Villages Initiative – Strategic Framework</a> <a href="#">Racial Equality Strategy</a>
Department for Infrastructure	<a href="#">Regional Development Strategy</a> <a href="#">Regional Strategic Transport Network Transport Plan 2015</a> <a href="#">Strategic Planning Policy Statements</a> <a href="#">Active Travel</a>
Department for Agriculture, the Environment and Rural Affairs	<a href="#">UK Air Quality Strategy</a> <a href="#">Sustainable Development</a>

<b>Table 02. Ireland Government strategies and policies</b>	
<b>Ireland Government Department</b>	<b>Strategy/Policy/Action Plan</b>
National Strategies	<a href="#">Project Ireland 2040</a>
	<a href="#">National Development Plan 2018-2027</a>
Department for Agriculture, Food and the Marine	<a href="#">Common Agricultural Policy Post 2020 – Sustainable Food, Farming and Rural Communities</a> <a href="#">Common Agricultural Policy Strategic Plan (under development)</a> <a href="#">Sustainable Food Systems and Ireland’s 2030 Agri-Food Strategy</a>
Children and Youth Affairs	<a href="#">Better Outcomes, Brighter Futures: The National Policy Framework for Children and Young People 2014-2020.</a>
Environment, Climate and Communities	<a href="#">National Climate Policy</a>
	<a href="#">Ireland’s National Energy and Climate Plan 2021-2030</a>
	<a href="#">National Mitigation Plan</a>
	<a href="#">Sustainable Development</a>
	National Clean Air Strategy (currently under development)
Employment Affairs and Social Protection	<a href="#">Pathways to work</a>
	<a href="#">Roadmap for Social Inclusion, 2020-2025: Ambition, Goals, Commitments</a>
Housing, Local Government and Heritage	<a href="#">National Planning Framework</a>
	National River Basin Management Plan I-III
	<a href="#">National Marine Planning Framework</a>
	Nitrates Action Programme
Justice and Equality	<a href="#">National Disability Inclusion Strategy</a>
	<a href="#">Traveller and Roma Inclusion Policy in Ireland</a>
Rural and Community Development	<a href="#">Town and Village Renewal Scheme</a> (part of the Project Ireland 2040)
	<a href="#">Realising Our Rural Potential – Action Plan for Rural Development Programme</a>
	<a href="#">Our Rural Future – Rural Development Policy 2020-2025</a>
Transport	<a href="#">Project Ireland 2040</a>
	<a href="#">National Development Plan 2018-2027</a>
	<a href="#">Local Link Rural Transport Programme Strategic Plan 2018 to 2022</a>
	<a href="#">National Cycle Policy Framework</a>
	<a href="#">Smarter Travel – A Sustainable Transport Future</a>

## Governance

One of the key activities of the scoping stage is to set out the governance arrangements for the HIA work. Stakeholder and community participation forms an important part of HIA. Steering groups can be used to represent the main stakeholders.

Representation may include:

- The proponent
- Public health teams
- Health and social care services
- Professionals from the relevant policy areas
- Representatives from affected communities
- Voluntary sector organisations
- Local, regional or national government departments/agencies
- Regulators

The HIA delivery team are not typically members of the steering group but will attend meetings. The steering group advises the HIA delivery team.

Some of the stakeholders listed above may opt to be observers to, rather than active participants of, the steering group.

Steering group input will contribute to informed and balanced results at the end of the process. Steering groups are one way in which HIA provides a platform for intersectoral working.

[Table 03](#) provides some terms of reference. These are primarily for standalone HIA, but can also be useful in clarifying resourcing and governance issues within health in environmental assessments. The main difference is that environmental assessments do not always have a steering group due to alternative consultation processes as set out in the governing statutes.

[Table 03](#) is adapted from a resource developed by Erica Ison. Note that this is an activity to conduct during the scoping stage.



HEA HIA SL PL

**Table 03. HIA terms of reference**

HIA remit, planning and governance	Record of decision
Title of the proposal on which the HIA is being conducted	
Type of proposal (legislation, policy, plan, programme or project)	
Strategic or project level and whether integrated or standalone HIA (determined at screening) (e.g. strategic-level standalone HIA report)	
Aims and objectives of the HIA	
Principles underpinning the HIA	
Boundaries of the HIA (e.g. geographical and/or population scope)	
Timescales (e.g. HIA outputs and temporal scope)	
<b>Non-negotiable aspects of the proposal</b>	
Steering group membership (if applicable) <ul style="list-style-type: none"> <li>Suggest maximum of 12 members</li> <li>Include decision-makers for the proposal in the group</li> </ul>	
Steering group role and any limits on remit (e.g. in signing off aspects of the HIA and the end point of the steering group)	
Main stakeholders: <ul style="list-style-type: none"> <li>Who is likely to be affected?</li> <li>Are key stakeholders represented on the steering group or as formal consultees?</li> </ul>	
Key informants for the HIA: <ul style="list-style-type: none"> <li>Who can provide useful information on how the proposal is likely to affect health?</li> <li>Have any conflicts of interest been declared? Have approaches to manage any conflict of interest been agreed? E.g. proponent-funded research.</li> </ul>	

**Table 03. HIA terms of reference (continued)**

HIA remit, planning and governance	Record of decision
<p>What methods will be used to determine:</p> <ul style="list-style-type: none"> <li>• Likelihood (source-pathway-receptor or DPSEEA model?)</li> <li>• Significance (if applicable)</li> <li>• Cumulative effects (if applicable)</li> <li>• Recommendations and/or measures</li> </ul>	
<p>Who will be responsible for gathering evidence in the following areas? (as applicable)</p> <ul style="list-style-type: none"> <li>• Literature review (e.g. using PubMed)</li> <li>• Health priorities review</li> <li>• Community profile/baseline data</li> <li>• Health policy context review</li> <li>• Stakeholder consultation/thematic review</li> <li>• Regulatory/standards compliance review</li> <li>• Relevant monitoring indicators</li> </ul>	
<p>Who will be responsible for appraising the evidence and forming conclusions and recommendations? Who will provide review?</p>	
<p>How will the results of the HIA be presented? (e.g. checklist and/or reasoned narrative/discussion)</p>	
<p>How will the results of the HIA be disseminated?</p>	
<p>Who will be responsible for monitoring and adaptive management recommended by the HIA?</p>	
<p>What evaluation will be undertaken of the HIA, when and by whom? (e.g. process evaluation as appendix to the HIA report)</p>	
<p>How will the HIA budget be spent? Consider:</p> <ul style="list-style-type: none"> <li>• Human resources (HIA delivery and review)</li> <li>• Venue hire, catering and travel costs for meetings and workshops</li> <li>• Costs associated with dissemination of the results</li> <li>• Evaluation costs</li> </ul>	
<p>Operating arrangements for the steering group (if applicable) including:</p> <ul style="list-style-type: none"> <li>• Chair</li> <li>• Date and location of meetings</li> <li>• Secretariat</li> </ul>	

## Data

Different agencies provide information for population profiling in Northern Ireland and Ireland, including:

- [The Northern Ireland Statistics and Research Agency \(NISRA\), including deprivation mapping](#)
- [Northern Ireland Neighbourhood Information Service \(NINIS\)](#)
- [The Central Statistics Office in Ireland](#)
- [Ireland deprivation mapping, Pobal Maps](#)
- Healthy Cities profiles (Cork, Waterford, Galway, Belfast, Derry)

Government departments, local authorities and community/voluntary groups may also be able to provide useful data. The local community and other stakeholders are valuable sources of information and evidence and can provide insight not available elsewhere on how the proposal might affect health.

Engagement with key informants and stakeholders can take place through a variety of means including interviews, focus groups and stakeholder workshops.

It may be difficult to find evidence to show the direct health impacts of public policy decisions, particularly at a local level. For this reason, evidence from other similar geographical areas can be used and extrapolated, qualitatively or quantitatively, to apply to local conditions.

All the evidence used to support analysis should be clearly referenced.

Economic valuation can be helpful where expressing the benefits of interventions in health and health equity terms alone is not persuasive, for example in policy settings where health is not a priority, or when trade-offs exist with other public policy objectives.

In some cases, the economic rationales for interventions and for the ways in which intersectoral policies are developed and implemented remain underdeveloped.

The WHO recommends using economic evaluation studies to show whether any specific action ([T109](#)):

- will reduce health inequality
- will improve overall health and well-being
- will save money and reduce public expenditure

Economic evaluation studies can relate to an action's:

- effectiveness for changing health outcomes
- cost-effectiveness or cost-benefit for health
- impact on public budgets

## PART 2

# Screening: tools and resources

### **At a glance**

How a policy can drive screening for health and how decisions can be taken on a case-by-case basis.

Screening for health as part of environmental assessment or in a standalone HIA.

'Sustainability' is a guiding principle for HIA during screening.

## Introduction

In this section we look at:

- Screening of health in environmental assessments v. a standalone HIA
- Screening using a case-by-case screening tool v. using a policy on HIA
- This sets out how to determine whether a health assessment should be undertaken, and it provides a process by which to do this. This section assumes the reader is familiar with the introduction to screening in the *Manual*.

### Screening: a collaborative approach

Screening in HIA has historically involved convening a meeting with a range of stakeholders in which a screening exercise is performed. The stakeholders may work through a tool or checklist to consider determinants of health and population groups.

The advantage of this approach is that it is collaborative, and it increases ownership of the screening decision. The disadvantage is that it is resource intensive to go through this process for all projects and thus it tends not to be performed for each project.

There has been a shift towards embedding requirements for screening for HIA into local, regional or national government policies. The intention is to improve the proportionality and efficiency of the HIA screening process.

### Screening via a policy on HIA

A policy on HIA would indicate when a standalone HIA is required. This promotes a consistent approach. The policy would define triggers, based on 'types' and 'thresholds of scale' for legislation, policies, plans, programmes or projects.

The guide question is in two parts: 'broadly, based on available information, does the proposal have the potential to change "risks to human health"?' And then, 'will this happen in a way that is judged "likely" to "significantly" affect population health?' A policy on HIA need refer only to situations where there is relative certainty that the answer(s) to the guide question will be yes.

This fulfils a similar role to the screening within SEA and EIA legislation.

A policy on HIA removes the burden of screening a large number of proposals. It also helps proponents by providing certainty from the outset.

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**Table 04. Wording for policies on HIA and some examples**

Triggers for strategic-level standalone HIA	
<p>... when new legislation, policy, plans or programmes are drafted or substantive amendments are made to existing strategic documents, such as:</p> <ul style="list-style-type: none"> <li>• National legislation if not voluntarily subjected to an SEA as encouraged by the Protocol on SEA</li> <li>• Local, regional or national policy if not voluntarily subjected to an SEA as encouraged by the Protocol on SEA</li> <li>• Local, regional or national plans or programmes where an SEA is not applicable, that is, an SEA screening exercise is not required to be undertaken</li> </ul>	
Triggers for project-level standalone HIA in planning policies	
'Types' of change	'Thresholds of scale'
<p>1. Development or activities not meeting requirements for an EIA and which <i>include, or reasonably should include</i> due to the nature of the development, changes in the inclusivity, quality, quantity or accessibility of:</p> <ul style="list-style-type: none"> <li>• Publicly available open space, particularly green space</li> <li>• Leisure or community facilities</li> <li>• Active travel infrastructure</li> <li>• Public transport infrastructure</li> </ul>	<p>of an area of [0.5 hectares] [1 hectare] or more, or of [500 sq m] or more floorspace; which is in, or in the adjacent, small area to communities with the worst or second worst rank of multiple deprivation. [Deprivation link optional]</p> <p>In Ireland the small area data relates to: small area (SA) level data. See <a href="#">Pobal deprivation maps</a>.</p> <p>In Northern Ireland the small area data relates to: Super Output Areas (SOA). See <a href="#">Northern Ireland Multiple Deprivation Measure mapping</a>.</p>
2. Housing development not meeting requirements for an EIA	of more than [20] [100] [150] [500] dwellings.
3. Non-housing urban development not meeting requirements for an EIA	of an area of [1 hectare] [5 hectares] or more, or of [1,000 sq m] or more floorspace.
4. Non-housing rural development not meeting requirements for an EIA	of an area of [1 hectare] [5 hectares] or more, or of [1,000 sq m] or more floorspace; which is in, or in the adjacent, small area to communities with the worst or second worst rank of multiple deprivation. (See definitions above). [Deprivation link optional]
5. Development in areas of complexity	for any area that will be subject to a masterplan.

**Table 04. Wording for policies on HIA and some examples (continued)**

## Triggers for strategic-level standalone HIA

## Notes:

The phrase 'includes, or reasonably should include' ensures that a policy on HIA does not disincentivise facilities, or activities, that would be beneficial to health, such as the inclusion of publicly accessible green space.

The thresholds in brackets need to be tailored to suit the context.

From Public Health England ([T110](#))

Examples of 'triggers' which could be used in a policy on HIA are provided in [Table 04](#) above. These would need to be adapted to a sector and policy context but they can be included in national planning frameworks, spatial and economic strategies, strategic development zones and local area plans.

A policy on HIA can be used in spatial planning and, as with SEA and EIA, also in agriculture, forestry, fisheries, energy, industry, transport, waste management, water management, telecommunications and tourism.

*Public Health England* ([T110](#)) shows how a planning authority can phrase a policy on HIA (see [Table 04](#) above). The examples in [Table 04](#) are a starting point and will need legal and planning review for any given jurisdiction. Many of these are targeted in areas where populations are deemed vulnerable and at developments that are large enough to address this vulnerability. This supports a proportionate approach and reflects that the policy on HIA should apply to areas where 'significant' effects are likely.

The Town and Country Planning Association and Belfast Healthy Cities support a policy on HIA approach ([T111](#)). However, at the time of writing, no examples of policies on HIA have been identified within local development plans in Ireland or in Northern Ireland. However, across the island of Ireland, updates to such plans are taking place and it is therefore timely to consider the inclusion of a policy on HIA.

The policy on HIA needs to select an appropriate '**threshold of scale**' that is likely to be influential within communities. This will vary depending on the context, for example, urban or rural.

The policy must aim to avoid triggering a HIA with every change to legislation, policies, plans, programmes or projects, and to ensure that it captures aspects that would be associated with potentially important or unacceptable changes in population health. In other words, it needs to capture aspects that could clearly have the potential for significant effects on human health.

Key activities are to:

- Identify the HIA triggers (see [Table 04](#)) that are relevant to the context, for example local, regional, national, sectoral, etc.
- Agree wording between public health and other sectors, for example planning
- Agree responsibility for completing the HIA screening stage based on the policy on HIAs, for example, a developer submission describing whether it meets the triggers or not





'Our health and wellbeing are inextricably linked to our surrounding environment. Many of the issues we face that damage our environment and our health and wellbeing are closely interconnected. Harnessing the co-benefits of solutions is essential for effective and efficient environmental and health protection. Solutions that can help to address one issue can deliver substantial co-benefits for others. For example, providing integrated health-promoting environments in urban planning can promote more active travel, reduce air pollution through the use of fewer private vehicles, act as quiet areas buffered from environmental noise and improve the physical and mental health of those walking or cycling.'

Ireland, Environmental Protection Agency, 2020 ([T112](#))

### Supporting the policy on HIA with a case-by-case screening tool

There will always be unusual or complex situations that do not fit neatly into the policy discussed above. A policy on HIA is typically accompanied by a case-by-case approach. [Table 05](#) below provides a screening tool to assist in this type of screening decision. It should be completed by a small, e.g. two or three person, working group of professionals who together are familiar with HIA, with the proposal and with the context of the proposal. Involvement of relevant public health teams and review for quality assurance is good practice.

When completed, the table provides a concise record of how the screening decision was reached. It also ensures consistency with other screening decisions, and compliance with guidance and other requirements.

[Table 05](#) requires the user to be familiar with principles such as 'determinants of health', 'likelihood' and 'significance'. These are explained in more detail in the following sections in this *Technical Guidance: scoping* in Part 3 and *analysis* in Part 4.

[Table 05](#) can be used for health in SEA or EIA and it can be used for standalone HIA screening.

Further consideration of health impacts is required when the answer to one or more of the answers in step 2 is 'yes'.

[Table 05](#) could be completed in a screening meeting or it could be a desk-based activity. The completed screening tool and its screening decision should be issued to the proposal proponent and other relevant stakeholders, including statutory environmental authorities as relevant.

Standalone HIAs can also be screened using [Table 05](#). This could include development or activities (not meeting requirements for SEA or EIA) with potential for significant cross-border differential effects between communities in Ireland and Northern Ireland. Such changes would benefit from a standalone HIA but cannot be easily defined in terms of type or thresholds of scale.

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**Table 05. Health assessment screening tool for case-by-case decisions**

**Screening tool for case-by-case decisions for health in environmental assessments or a standalone HIA**

**Step 1** Record of screening:

Title of plan, programme, project, policy or legislation	
Date	
Organisation(s)/ person(s) performing screening	

**Step 2** Broadly, based on available information, does the proposal have the potential to change 'risks to human health'? Will this happen in a way that is judged 'likely' to 'significantly' affect population health?

Consider the following determinants that can influence physical, mental and social wellbeing:	Judgement Yes/No	Brief justification see notes below
Health inequalities		
Healthy lifestyles		
Safe and cohesive communities		
Socio-economic conditions		
Environmental conditions		
Health and social care services		

**Table 05. Health assessment screening tool for case-by-case decisions (continued)****Screening tool for case-by-case decisions for health in environmental assessments or a standalone HIA****Notes**

Consider whether effects are

- Positive (+) or negative (-)
- Likely (L) or unlikely (U)
- Short term (ST), medium term (MT) or long term (LT)
- Permanent (P) or temporary (T)
- Significant (S) or non-significant (NS)

A likely effect is 'plausible and probable'.

A significant change is clearly 'important or unacceptable'.

'Yes' would be associated with likely and significant effects, particularly negative, medium- or long-term and permanent effects (also consider the opportunity cost of missed positive effects).

Population health vulnerability includes: age (young and old); income (job insecurity or low income); health status (existing poor health and carers); social disadvantage (social isolation or discrimination); and access and geographic (areas of deprivation or barriers to services).

<b>Step 3</b> Decision	Screened IN or OUT:	Health in environmental assessment (SEA or EIA) or standalone HIA
<p>If one or more answers in step 2 is 'yes', then an SEA or EIA is warranted on human health grounds.</p> <p>If neither an SEA nor an EIA is applicable, then a standalone HIA is warranted.</p>		e.g. Health in SEA
<b>Step 4</b> Notification		
Decision notified to (proposal proponent, stakeholders and/or the public):	(e.g. organisation(s)/person(s))	

## Screening for health in environmental assessment

The statutory processes for environmental assessment require health to be considered. Screening is, however, about whether the overall SEA or EIA process is conducted, rather than whether health is screened into an SEA or EIA. Typically, the format for the screening decision will be set out in SEA or EIA legislation and relate to pre-defined 'types' and/or 'thresholds of scale' of plan, programme or project.

There may also be case-by-case screening decisions that require health as a criterion to be taken into account to determine if an SEA or an EIA should take place. Across the island of Ireland, where case-by-case decisions are made, both SEA and EIA require consideration of the 'risk to human health' as one of the criteria informing the judgement. This is in the context of any subsequent assessment needing to consider:

- The short-, medium- and long-term effects, permanent and temporary effects, positive and negative effects, and secondary, cumulative and synergistic effects
- The direct and indirect significant effects of the proposal on the following factors in their own right and in terms of their interrelationships: population, human health, biodiversity, soil, water, air, climatic, material assets, cultural heritage and landscape

For health, case-by-case screening asks whether a proposal is likely to result in a significant 'risk to human health' at a population level.

There will be uncertainty at this stage, so a simple 'yes' or 'no' answer is required, along with a brief, reasoned justification.

This may be informed by careful application of the precautionary principle. Where there are threats of serious damage to health, a lack of full scientific certainty should not be used as a reason for postponing measures to minimise this damage.

The screening criteria for the 'risk to human health' are set out in the following regulations.

### **Ireland:**

For EIA, see Schedule 7(1)(h) of the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 ([T61](#)).

For SEA, see Schedule 1(2) of the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (as amended) ([T55](#)).

### **Northern Ireland:**

For EIA, see Schedule 3(1)(g) of the Planning (Environmental Impact Assessment) Regulations (Northern Ireland) 2017 ([T60](#)).

For SEA, see Schedule 1(2)(d) of the Environmental Assessment of Plans and Programmes Regulations (Northern Ireland) 2004 ([T56](#)).

## Standalone HIA screening

At the strategic and project level, the screening stage is about considering the need for a HIA, rather than the particular health issues within the HIA. The following approach is recommended in order to promote equity, certainty and transparency in standalone HIAs:

- Formal policy adoption of pre-defined triggers for a HIA, based on 'types' and 'thresholds of scale' of legislation, policies, plans, programmes or projects
- Case-by-case screening decisions that use health criteria for atypical circumstances

This is consistent with the approach for health in environmental assessment.

## PART 3

# Scoping: tools and resources

### **At a glance**

What will the proposal do and who will be affected?

How can this be shown across different determinants of health?

Use a source-pathway-receptor model. Consider whether any likely effects are potentially significant.

Scope by determinant of health and by population group. Look at the general population as well as vulnerable populations.

A 'comprehensive approach to health' is a guiding principle for HIA during scoping.

## Introduction

Which determinants of health should the health assessment focus on? How can the scope be kept consistent and robust?

This section starts with a conceptual model of the scoping process. The conceptual model shows the thought process that builds to a scoping decision. The conceptual model can be used as an *aide memoire*, crib sheet or workshop tool; it need not be formally reported as part of the methods.

It can be used to develop a common understanding between the proponent, or their consultants, and the health authority, or it could be used by the health authority to support consistent and proportionate scoping advice.

With use, the conceptual model becomes internalised by the practitioner.

The section then covers scoping tools applicable:

- At strategic or project level
- Whether for health in environmental assessment or a standalone HIA
- Adaptable to 'full' or 'checklist' depths of enquiry

Support is also provided on setting health objectives and selecting a preferred proposal option from the health perspective. A Terms of Reference for a HIA is provided.

This section assumes the reader is familiar with the introduction to scoping in the *Manual*.

Scoping is a defined stage with its own reporting outputs but it is good practice to keep the scope of the assessment under ongoing review. This captures new issues if they arise or come to light through stakeholder feedback.

Figure T05 shows how this guidance uses a source-pathway-receptor model and adds preliminary considerations of 'significance'.

A linear format is turned into a circular format. 'Layers' indicate a scale. 'Segments' present sub-considerations.

**Figure T05. Structure and elements of the scoping conceptual model presented in Figure T06.**

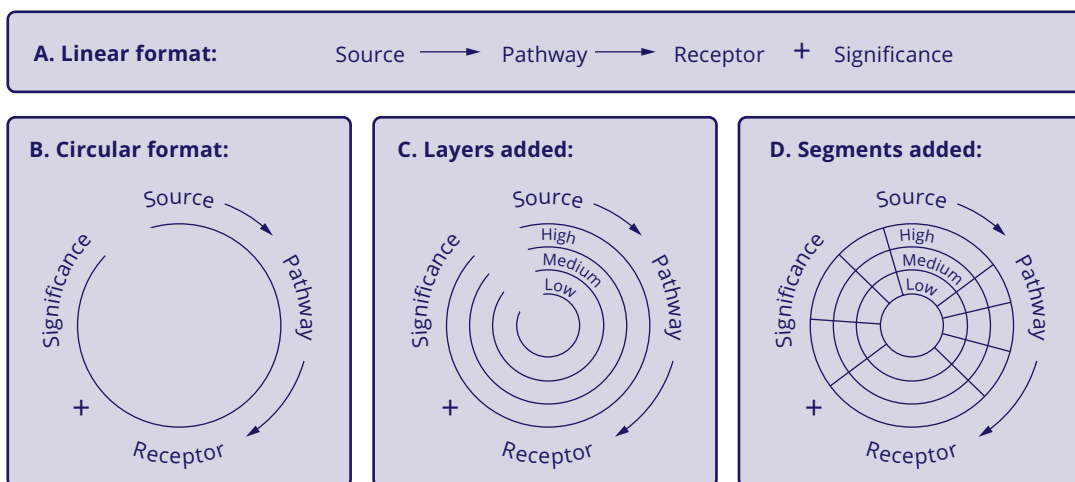




Figure T06 is a conceptual model of the steps undertaken during HIA scoping.

The model and its supporting text is adapted from Appendix B in *Human Health: Ensuring a High Level of Protection* (T1).

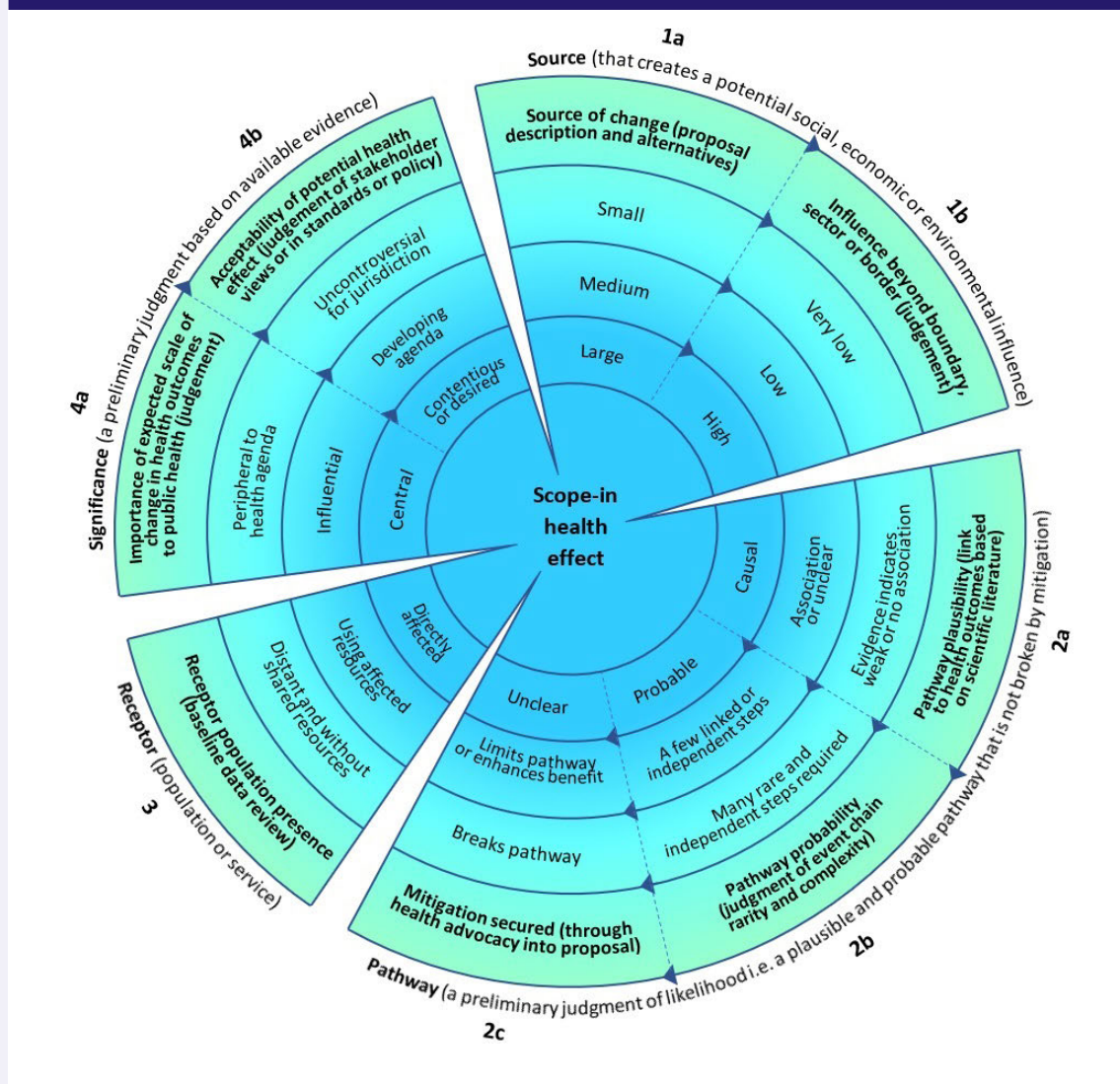
The conceptual model (steps 1a to 4b) assists in reaching consistent scoping decisions.

Read Figure T06 clockwise: start on the outside with the 'Source'.

Each segment is a step in proportionate HIA scoping, that is, source-pathway-receptor-significance.



Figure T06. Considerations while scoping health effects



The model works for health in environmental assessment and standalone HIA. It works at strategic and project level. Other approaches can also be used.

Other health pathway models can be used to illustrate the mapping and the logic behind a scoping analysis.

For example, the Driving Force-Pressure-State-Exposure-Effect-Action (DPSEEA) framework was developed by the WHO (T113, T114). The modified and enriched DPSEEA model (T115) (which incorporates social, economic and behavioural aspects alongside environmental exposures) is an alternative that is not shown here, but which can support this process. It displays the way in which various forces generate pressures that affect the state of the environment and ultimately human health. Action can be taken on all levels to minimise adverse health effects. The DPSEEA model can be particularly useful at the strategic level where there are higher levels of complexity and uncertainty.

Some steps (segments in [Figure T06](#)) have more than one consideration. For example, 'source' considers both the source itself (1a) and its effect beyond the boundary, sector or border (1b), which often differ. The circular format shows how the process can be iterative. For example, if a likely significant health effect is identified, further action should be considered at each step: mitigation can be considered so as to break the pathway (2c) before the final conclusion is reported.

Proposals may include features which avoid or mitigate likely significant health effects. These features may be identified and secured within the design or management regime at scoping stage, in which case these health issues will be scoped out of further assessment. If they are not secured at the scoping stage, such proposal features may be identified in the analysis stage. In all cases, links between the proposal description and the health assessment should be recorded in the assessment report.

The layers within each segment (working from the outside towards the centre) illustrate differentiating conclusions for each element of the preliminary assessment (e.g. whether a 'source' is small, medium or large). Layers closer to the centre indicate a conclusion supporting scoping the issue 'in' for further assessment, and layers towards the outside indicate a conclusion supporting scoping the issue 'out'. The segment conclusions need to be considered together before a scoping decision is made.

For example, an effect that should clearly be scoped 'in' would be a 'large source' with a 'high influence beyond the boundary' whose 'pathway is causal and probable without being broken by mitigation' and that affects 'nearby receptors directly'; and establishes an effect that is judged to be 'central to the public health agenda'.

At project level, this could be an influx of construction workers to a community. Although this type of demand is likely to be short term, it can also place a strain on local healthcare services. Commitments to address this additional demand might include financial contributions towards health and social services and/or healthcare provided by the developer.

Often it would not be so clear cut and there would be a range of conclusions at different levels across the segments. The overall decision on scoping is an informed professional judgement. [Figure T06](#) is transparent about the underlying reasoning for making a scoping decision. Following this process should allow most conceivable health effects of a proposal to be scoped out with confidence and with a shared understanding between the proposal proponent, the assessing or leading authority and the health authority. A successful health scoping exercise is proportionate, transparent and reasoned.

Table 06 provides some more detail on the terms used in the conceptual model ([Figure T06](#)).

Table 06. Terms for defining the <i>scope</i>	
Term	Notes
<b>1 Source</b>	
<b>1a The source itself</b>	The feature of the proposal from which change originates. This may be a facility, structure, process, activity, vehicle fleet or workforce. It may also be a change to the remit, conduct of institutions or other groups.
<b>1b The influence of the source beyond boundary, sector or border</b>	A strategic change may have effects beyond its source to other sectors or jurisdictions. At the project level, a source in the centre of a large development, or within an enclosed structure, and which is not publicly accessible, may have limited effect on population health. Occupational health considerations may be relevant.
<b>2 Pathway</b>	
<b>2a Pathway plausibility</b>	The aetiology reported in the scientific literature (i.e. whether there is established causation between the source and health outcomes, or the level of known association (including emerging or inconclusive evidence)). Only a brief literature review is proportionate at scoping.
<b>2b Pathway probability</b>	Whether the source directly leads to a change in health outcomes, or whether it would depend on a chain of events (some steps of which could be rare) for the effect to occur. This is a qualitative professional judgement based on available information.

**Table 06. Terms for defining the scope (continued)**

Term	Notes
<b>2c Mitigation secured</b>	<p>Whether the proposal proponent has committed formally to measures that break the source-pathway-receptor linkage (e.g. revised clauses or design).</p> <p>Typically, mitigation acts on the pathway, introducing some environmental, social or economic mediating measure between the source and receptor. This is because the source is usually fundamental to the proposal (i.e. removing it would negate the project or plan – though alternative technology or timing changes may be relevant).</p> <p>Proposal alternatives, such as an energy policy choosing offshore wind rather than onshore fossil fuel energy, may be a more relevant influence on the source than mitigation. Similarly, the receptor population is usually not removed (though they may be compensated as a last resort).</p> <p>As well as mitigation, secured enhancements may also be relevant to scoping positive health effects, confirming positive effect optimisation without requiring detailed assessment. Any mitigation relied upon at scoping should be reported.</p> <p>Similarly, during consideration of alternatives, features that are influential to health outcomes should be reported.</p>
<b>3 Receptor population</b>	
	<p>For health, receptors usually equate to population groups. Typically, this means community populations, but occupational groups, service users and service providers may also be relevant.</p> <p>Scoping typically establishes the presence of relevant receptors. It can be relevant to note the potential for a vulnerable receptor population to be present (as a sub-group of the general population receptor).</p> <p>Consideration should be given not only to those populations directly affected by the proposal (typically the most affected, e.g. those closest to a project) but also to the population that shares the resources affected by the proposal (e.g. who use the affected services).</p>

**Table 06. Terms for defining the scope (continued)**

Term	Notes
<b>4 Potential significance</b>	
<b>4a Importance of expected scale of change in health outcomes</b>	As part of determining health significance, it can be relevant to consider if the expected change in population health is 'important' given the scientific literature, baseline conditions and health priorities (local, regional, national or international as appropriate). More detail on this is discussed in the assessment section of this resource; at scoping, only a high-level data review and answer is needed.
<b>4b Acceptability of potential health effect (or desirability for a positive effect)</b>	As part of determining health significance, it can be relevant to consider if the expected change in population health is 'acceptable' for the setting given any consultation responses, regulatory standards and the policy context. Typically, there will be limited or no formal consultation views available at this stage. However, a judgement can be made on the likely acceptability, such judgement being informed by the health authority's formal or informal views expressed to the proposal proponent or leading/assessing authority. More detail on this is discussed in the assessment section of this resource; at scoping, only a high-level data review and answer is needed.

## Scoping tools

The tables on the following pages will assist in scoping and they reflect good practice when scoping health in environmental assessments and standalone HIA.

The tables are adapted from Appendix B in *Human Health: Ensuring a High Level of Protection (T01)*. They work for health in environmental assessments and standalone HIA and they can be adapted as appropriate.

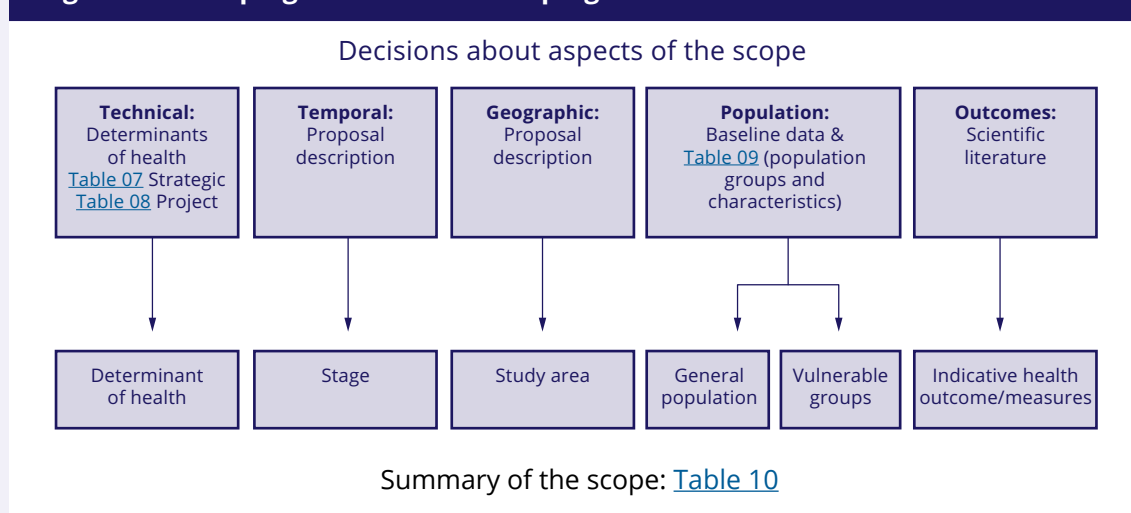
These tables can be used in a number of ways: internally as a tool to support consistent and proportionate scoping advice; and as tables within the assessment reports.

An EIA or SEA does not have to adopt the scoping tools discussed in this guidance to be compliant.

Use relatively quick high-level reviews and refer to [Figure T06](#).

The Institute supports a broad approach to health scoping as good practice.

[Figure T07](#) shows how the decisions taken in scoping are brought together to give the overall scope and it refers to the tables in this *Technical Guidance* which guide the user through the process.

**Figure T07. Scoping decisions and scoping tools**

### Determinants of health

'Scoping in' identifies determinants of health that are 'likely' and 'potentially significant'. [Table 07](#) and [Table 08](#) both scope **determinants of health**.

[Table 07](#) is for scoping at strategic level, for example, plans, programmes, policy or legislation. [Table 08](#) is for project scoping. It could also be used for a more detailed examination of strategic proposals.

The tables encourage a proportionate approach, to keep the assessment and conclusions focused: first, issues relevant to the proposal are considered and there is then an overall conclusion for the determinant of health. Thus, whole determinants of health are scoped in or out and the relevance of specific issues is indicated with a tick or a cross. It is good practice to include the rationale for key scoping decisions.

### Affected populations

[Table 09](#) scopes **population groups**. It is a reference table rather than one to complete.

As above, this also seeks to keep the scope proportionate: the first step is to identify broad population groups, including population groups that might be vulnerable. The next step is then to consider the relevant characteristics within each of these groups. This avoids scoping each characteristic in as a separate population.

Scoping by broad population or by category of vulnerability provides a short and consistent list of population groups that can be considered during an assessment of cumulative or overall inequalities or equity. For example, all effects that have been linked to 'young age' can be shown and an overall conclusion drawn for this population group. For more details see Part 5.

The broad population groups – for example, vulnerability due to age or income – may be most appropriate for strategic assessments.

Project assessments allow for more in-depth exploration of different characteristics, for example by focusing on young adults or the experience of shift workers.

Detailed data need not be presented to justify the inclusion of a group. A professional judgement can be made about a group's likely presence and how they may be affected by the proposal.

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Table 07. Strategic-level scoping tool for health determinants			
Scoped In/Out <sup>1</sup>	Determinant of health and specific issues, including risk factors	Relevance of individual issue to the assessment <sup>1</sup>	Rationale: summary <sup>2</sup>
In/Out	<b>Health inequalities:</b>		
	Health inequalities between population groups	✓ / X	
	Health inequalities between geographical areas	✓ / X	
In/Out	<b>Healthy lifestyles:</b>		
	Healthy lifestyles and leisure activity opportunities	✓ / X	
	Nutrition	✓ / X	
In/Out	<b>Safe and cohesive communities:</b>		
	Housing, buildings and connecting routes	✓ / X	
	Poverty, social exclusion and crime	✓ / X	
In/Out	<b>Socio-economic conditions:</b>		
	Education	✓ / X	
	Employment (including quality)	✓ / X	
In/Out	<b>Environmental conditions:</b>		
	Air quality	✓ / X	
	Water	✓ / X	
	Soil	✓ / X	
	Noise and vibration	✓ / X	
In/Out	<b>Health and social care services:</b>		
	Access to health and social care activities/services	✓ / X	
	Occupational safety and health	✓ / X	

1. Delete as appropriate

2. Text to summarise the scoping decision



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**Table 08. Project-level scoping tool for health determinants**

This table provides health determinants to scope in or out and health issues to discuss in the assessment as relevant. The scoping tool can be used by health in environmental assessments or standalone HIA reports. Health inequalities are addressed in [Table 10](#).

Scoped In/Out <sup>3</sup>	Determinant of health: and health issues, including risk factors, within each determinant of health	Relevance of individual issue to the assessment <sup>1</sup>	Rationale: summary <sup>2</sup>
In/Out	<b>Healthy lifestyles:</b>		
	Open space (green and blue) and physical activity (including in natural habitats)	✓ / X	
	Sports, leisure and recreational amenities and facilities (including play)	✓ / X	
	Sports, leisure and recreational connectivity and access (including safety)	✓ / X	
	Sports, leisure and recreational age, sensory and mobility considerations	✓ / X	
	Health promotion (including smoking cessation)	✓ / X	
	Substance misuse (including alcohol)	✓ / X	
	Problem gambling	✓ / X	
	Communicable illness (including STIs and other infections)	✓ / X	
Diet (including production and access to affordable healthy food options)	✓ / X		

**Table 08. Project-level scoping tool for health determinants (continued)**

Scoped In/Out <sup>1</sup>	Determinant of health: and health issues within each determinant of health	Relevance of individual issue to the assessment <sup>1</sup>	Rationale: summary <sup>2</sup>
In/Out	<b>Safe and cohesive communities: Housing:</b>		
	Dwelling mix for community needs (supply)	✓ / X	
	Community cohesion and social isolation	✓ / X	
	Indoor environment (indoor air quality, safety, hygiene and level of crowding)	✓ / X	
	Residential segregation	✓ / X	
	Outdoor environment (safety, green and blue spaces and proximity to disease vector habitats)	✓ / X	
	Affordability	✓ / X	
	Connectivity and access	✓ / X	
	Community services (including childcare and social services) accessibility and quality	✓ / X	
	Social housing	✓ / X	
	Specialist adaptations (e.g. age or disability)	✓ / X	
	Flood risk	✓ / X	
	Loss of existing housing	✓ / X	
In/Out	<b>Safe and cohesive communities: Built environment:</b>		
	Spatial planning, use classes, zoning and land allocations (including streets and routes, places, urban green space, parks, landscape)	✓ / X	
	Injury risk (including drowning and falls)	✓ / X	
	Waste management (including sanitation systems and wastewater reuse)	✓ / X	
	Access to shops, retail food resources, financial and commercial services	✓ / X	
	Susceptibility to major accidents and/or disasters (including earthquake, water surge, wildfire, landslide, pandemic etc.)	✓ / X	

<b>Table 08. Project-level scoping tool for health determinants (continued)</b>			
<b>Scoped In/Out<sup>1</sup></b>	<b>Determinant of health: and health issues within each determinant of health</b>	<b>Relevance of individual issue to the assessment<sup>1</sup></b>	<b>Rationale: summary<sup>2</sup></b>
In/Out	<b>Safe and cohesive communities: Transport:</b>		
	Road or route safety	✓ / X	
	Active travel (pedestrians and cyclists)	✓ / X	
	Public transport (access, connectivity and quality)	✓ / X	
	Health, education and social care journey times	✓ / X	
	Emergency response times	✓ / X	
	Community severance	✓ / X	
In/Out	<b>Safe and cohesive communities: Community safety:</b>		
	Police/security and emergency response	✓ / X	
	Actual and perceived crime	✓ / X	
In/Out	<b>Safe and cohesive communities: Community identity and society:</b>		
	Population in-migration (including effects on minorities, community cohesion and social isolation)	✓ / X	
	Population out-migration (including effects on minorities, community cohesion and social isolation)	✓ / X	
	Visual landscape/townscape change	✓ / X	
	Visual lighting change (night lighting, overshadowing or reflections)	✓ / X	
	Social networks and culture (including meeting spaces for voluntary, social, cultural or spiritual participation or sites of cultural significance)	✓ / X	

**Table 08. Project-level scoping tool for health determinants (continued)**

Scoped In/Out <sup>1</sup>	Determinant of health: and health issues within each determinant of health	Relevance of individual issue to the assessment <sup>1</sup>	Rationale: summary <sup>2</sup>
In/Out	<b>Socio-economic conditions: Education:</b>		
	School accessibility, capacity and quality	✓ / X	
	Adult skills development	✓ / X	
	Transitional arrangements (e.g. during construction)	✓ / X	
In/Out	<b>Socio-economic conditions: Socio-economic status:</b>		
	Employment (including quality and income)	✓ / X	
	Unemployment (including job insecurity)	✓ / X	
	Procurement and investment	✓ / X	
	Working conditions (rewards, controls and occupational hazards)	✓ / X	
	Family structure and relationships	✓ / X	
	Health inequalities, social exclusion and poverty	✓ / X	
In/Out	<b>Environmental conditions: Climate change:</b>		
	Extreme weather, heat stress and flood risk and fire injury risk	✓ / X	
	Exacerbation of chronic cardiovascular and respiratory conditions	✓ / X	
	Exposure to food-, water- and vector-borne infection or toxins	✓ / X	
	Food production and malnutrition	✓ / X	
	Population displacement, labour productivity and economic loss	✓ / X	
In/Out	<b>Environmental conditions: Air quality:</b>		
	Dust, particulates and aerosols (indoor and outdoor)	✓ / X	
	Plant, processes and vehicle emissions	✓ / X	
	Odour	✓ / X	

<b>Table 08. Project-level scoping tool for health determinants (continued)</b>			
<b>Scoped In/Out<sup>1</sup></b>	<b>Determinant of health: and health issues within each determinant of health</b>	<b>Relevance of individual issue to the assessment<sup>1</sup></b>	<b>Rationale: summary<sup>2</sup></b>
In/Out	<b>Environmental conditions: Water:</b>		
	Drinking water quality (including biological and chemical agents)	✓ / X	
	Drinking water – quantity or access	✓ / X	
	Bathing water quality (including biological and chemical agents, disease vectors)	✓ / X	
In/Out	<b>Environmental conditions: Soil:</b>		
	Mobilisation of historic pollution	✓ / X	
	Risk of new ground pollution (e.g. industrial agents or accidental spills)	✓ / X	
	Food resources and safety (e.g. agricultural land availability and quality)	✓ / X	
In/Out	<b>Environmental conditions: Noise:</b>		
	Plant, processes and vehicle disturbance	✓ / X	
	Vibration	✓ / X	
In/Out	<b>Environmental conditions: Radiation:</b>		
	Electro-magnetic fields, actual risk	✓ / X	
	Electro-magnetic fields, understanding of risk (risk perception)	✓ / X	
	Ionising, actual risk	✓ / X	
	Ionising, understanding of risk (risk perception)	✓ / X	

**Table 08. Project-level scoping tool for health determinants (continued)**

Scoped In/Out <sup>1</sup>	Determinant of health: and health issues within each determinant of health	Relevance of individual issue to the assessment <sup>1</sup>	Rationale: summary <sup>2</sup>
In/Out	<b>Health and social care services:</b>		
	Primary care accessibility, capacity and quality	✓ / X	
	Secondary care (including hospitals) accessibility, capacity and quality	✓ / X	
	Ambulance service accessibility, capacity and quality	✓ / X	
	Social services accessibility, capacity and quality (including use of community centres)	✓ / X	
	Health protection (including screening and epidemic response) accessibility, capacity and quality	✓ / X	
	Occupational health services accessibility, capacity and quality	✓ / X	
	Dental service accessibility, capacity and quality	✓ / X	
	Pharmacy accessibility, capacity and quality	✓ / X	
	Sexual health services accessibility, capacity and quality	✓ / X	
	Mental health services accessibility, capacity and quality	✓ / X	
	Transitional arrangements (e.g. during construction)	✓ / X	
	Recruitment and retention of staff	✓ / X	
Preparedness for emergency scenarios (major accidents and/or disasters)	✓ / X		

<b>Table 08. Project-level scoping tool for health determinants (continued)</b>			
<b>Scoped In/Out<sup>1</sup></b>	<b>Determinant of health: and health issues within each determinant of health</b>	<b>Relevance of individual issue to the assessment<sup>1</sup></b>	<b>Rationale: summary<sup>2</sup></b>
In/Out	<b>Wider societal benefits:</b>		
	Energy infrastructure	✓ / X	
	Transport infrastructure	✓ / X	
	Waste management infrastructure	✓ / X	
	Water infrastructure	✓ / X	
	Communication and IT infrastructure	✓ / X	
	Economic	✓ / X	
	Climate change (including improved air quality and preparedness for extreme weather events such as heat, storms and/or flooding)	✓ / X	
	Natural environment (including biodiversity, natural spaces and habitats)	✓ / X	

Adapted from Nowacki ([T116](#))

1. Delete as appropriate
2. Text to summarise the scoping decision
3. Delete as appropriate



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**Table 09. Scoping tool for population groups**

Population groups to consider when completing [Table 10](#) in relation to potentially significant inequalities.

**Population and associated characteristics within population**

**General population**

Residents

Construction workforce

Operational workforce

Decommissioning workforce

Service providers

Visitors to the area

Road users

Users of the proposal's services or the proposal's target population

**Vulnerability due to young age**

Children

Young adults

Unborn children (and their mothers)

**Vulnerability due to older age**

Older people

Frail older people

**Vulnerability due to income (low income or insecure income)**

Unemployed people

People on low incomes

People with shift work

People with low job security or with few progression prospects

People unable to work due to poor health

**Vulnerability due to health status**

People with existing poor physical or mental health (including where related to disabilities)

Carers of people with existing poor physical or mental health

**Vulnerability due to social disadvantage**

People who experience social isolation

People who experience discrimination (including people from black and minority ethnic groups and people who identify as being part of faith and belief groups)

**Vulnerability due to access and geographic factors**

People experiencing barriers in access to services, amenities or facilities (including barriers experienced by service providers)

People living in areas known to exhibit high deprivation or poor economic and/or health indicators

People in close proximity to the location of changes occurring as a result of the proposal activities. Although these groups may not be 'vulnerable', they are likely to be more sensitive to the changes

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**Table 10. Tool for the technical, temporal and spatial scopes of health**

Select one or more terms from each row for each determinant of health that is scoped in (i.e. create one row per determinant of health). Aim to keep a focused scope in all columns. Column 1 is informed by [Table 07](#) or [Table 08](#); and columns 4 and 5 by [Table 09](#).

1) Determinant of health	2) Stage	3) Study area	4) General population characterisation	5) Vulnerable population groups	6) Indicative health outcomes/ measures
<b>Strategic level:</b>	All stages	Neighbouring community (site-specific population)	Residents	Young age	Quality of life
Healthy lifestyles	Strategic level:		Construction workforce	Older age	Morbidity risk
Safe and cohesive communities	Piloting/ formulating	Wider community (local population)	Operational workforce	Income	Mortality risk
Socio-economic conditions	Commencement/ transition	Regional	De-commissioning workforce	Health status	Cardiovascular risk
Environmental conditions	Full rollout/ implementation	National	Service providers	Social disadvantage	Respiratory health
Health and social care services	Maintenance/ end- point transition	International	Visitors to the area	Access and geographic	Mental health
<b>Project level:</b>	<b>Project level:</b>		Road users		Communicable illness incidence
Healthy lifestyles	Construction		Users of the proposal's services		Non-communicable disease prevalence
Housing	Operation		Proposal's target population (specify)		Injury risk
Built environment	De-commissioning				Toxicology
Transport	Commencement/ transition				Obesity
Community safety	Full rollout/ implementation				Life expectancy
Community identity and society	Maintenance/ end- point transition				Hospital admissions
					Cancer risk

**Table 10. Tool for the technical, temporal and spatial scopes of health (continued)**

Select one or more terms from each row for each determinant of health that is scoped in (i.e. create one row per determinant of health). Aim to keep a focused scope in all columns. Column 1 is informed by [Table 07](#) or [Table 08](#); and columns 4 and 5 by [Table 09](#).

1) Determinant of health	2) Stage	3) Study area	4) General population characterisation	5) Vulnerable population groups	6) Indicative health outcomes/ measures
Education Socio-economic status Climate change Air quality Water Soil Noise Radiation Health and social care services Wider societal benefits					Time to diagnosis Time to treatment Wellbeing Sleep disturbance Cognitive performance Nutrition
E.g. Housing	Operation	Wider community (local population)	Residents	Older age Income Health status	Injury risk Quality of life Respiratory health

## Assessment checklists

Where it is appropriate and proportionate to undertake a health in environmental assessment or a standalone HIA within a short timeframe and with limited resources, [Table 07](#) (for strategic level) or [Table 08](#) (for project level) can be used as a checklist to systematically record the consideration of a range of determinants of health and relevant issues. The 'Rationale' section of these tables can be used to record brief preliminary assessment conclusions on 'likelihood' and 'potential significance', as well as 'recommendations or measures'. Broad population groups in [Table 09](#) should be cited to explain, and where feasible reduce, potentially significant inequalities.

### How to get started

A tip for developing preliminary conclusions is to rephrase the guide questions in Figures T09 and T10 in the *Manual* as statements. A generic example is provided below.

For [*determinant of health*], based on available information and professional judgement, the proposal has the potential to change 'risks to human health' in a way that is 'likely' to 'significantly' affect population health. With regards to likelihood, this means the change in population health is *plausible* given the scientific literature [*summarise evidence*]. It also means the change is *probable* in the context of this proposal [*summarise relevant activities*]. Furthermore, the causal pathway is not broken by committed mitigation. With regards to significance, the expected change in population health is judged to be *important* because it is of a scale that would be central to the public health agenda of the jurisdiction [*summarise relevant health priorities and baseline challenges*]. And/or the expected change is likely to be seen as contentious in terms of its acceptability [*summarise uncertainty and potential concern about the influence on health policy delivery or regulatory standards*]. The conclusion reflects potential for widening health *inequalities* between the general population of [*area*] and certain vulnerable population groups [*state population groups*].

## Setting health objectives

Objectives inform many scoping and assessment methodologies, particularly at the strategic level (e.g. an SEA). There are two types of objectives:

- Objectives established at the international, national and other levels
- Objectives of the legislation, policy, plan, programme or project

The former may only reflect narrow health responsibilities.

Considerations that could undermine population health may be overlooked, or opportunities to improve population health may be missed if the assessment does not have a health objective that suitably captures the implications for the wider determinants of health.

Recommended practice is to articulate and recognise the proposal's health objective in terms of:

- Improving physical, mental and social wellbeing
- Across current and future populations (including vulnerable groups)
- With regard to some or all of the following:
  - Health inequalities
  - Healthy lifestyles
  - Safe and cohesive communities
  - Socio-economic conditions
  - Environmental conditions
  - Health and social care services

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A generic health objective is provided below:

*The health objective is to improve the physical, mental and social wellbeing of current and future populations (including vulnerable groups and those who would be most affected by implementation of the proposal). Particular regard is to be paid to health inequalities, healthy lifestyles, safe and cohesive communities, socio-economic conditions (including education and employment), environmental conditions and health and social care services.*

## Selecting preferred options

Considering alternatives is a fundamental aspect of many proposals and their assessments, at both strategic and project level. Health in environmental assessments and standalone HIA can support this process from the health perspective.

Criteria are used by many methodologies to rank or choose between alternatives.

Without an appropriate range of key health concepts, the selection of a preferred option may overlook features that distinguish the alternatives in terms of beneficial and adverse population health outcomes.

There are usually trade-offs between determinants of health, and the key ones should be discussed.

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In 2020, the United Nations Economic Commission for Europe issued draft guidance on health in SEA ([T58](#)). This includes a series of questions, from a public health perspective, to distinguish between alternatives.

When looking at two or more alternatives, consider which alternative is better for:

- Narrowing health inequalities
- Promoting healthy lifestyles
- Promoting safe and cohesive communities
- Enhancing socio-economic conditions to enable people to thrive
- Enhancing environmental conditions to enable people to thrive and/or
- Improving access to good-quality health and social care

These questions were written for the purpose of addressing health in SEA, but they can also be applied in strategic HIA and can be used in assessments at project level.

## PART 4

# Analysis: tools and resources

### **At a glance**

Decide on the sensitivity of the population.

Decide on the magnitude of change that the proposal will cause.

Decide on the significance of each effect.

'Equity and equality' and 'ethical use of evidence' are guiding principles for HIA during analysis.



## Introduction

How should an impact be described? What is significant?

It is advisable to read this section when you already have an understanding of the introduction to HIA analysis in the *Manual*. This section presents a model and a reporting framework for the assessment. This means looking at the population, looking at what the proposal is expected to do and then setting out what the effects on health will be. In impact assessment terminology, this involves determining the significance of health effects.

The tools build on the section **Doing the Assessment** in the *Manual*.

They enable assessors and reviewers to reach consistent judgements about health significance and they also provide transparency about the way in which a judgement is reached.

They allow for a common approach across the determinants of health; for example, the tools work for determinants such as air quality and noise that may be quantified and for qualitative determinants such as social cohesion and the understanding of risk.

It is not always necessary to use all the criteria within the tools. Take a common-sense approach to applying the tools in a proportionate way in each assessment. An EIA or SEA does not have to use these tools to be compliant.

HIA is flexible, so the methods used can vary but the guiding principles should be the same, as shown in [Figure T01](#) on page 99.

When analysing the significance of an effect, there is always a degree of judgement and the HIA team needs to take uncertainty into account ([T117](#)) as well as use flexibility in the way that any given framework is applied ([T118](#)).

This guidance promotes conceptual models to enable the full range of evidence to be included, to show uncertainty and to enable consideration of what changes resulting from the proposal mean in terms of *importance*, *acceptability* or *desirability* for population health.

This guidance supports practitioners to articulate their reasoning and conclusions with a brief structured narrative. See [Figure T09](#), [Figure T11](#) and [Figure T12](#).

The conceptual model:

- Shows the thought process that builds to a decision on whether there is a significant population effect due to the proposal.
- Can be used as an *aide memoire*, crib sheet or workshop tool. The model is consistent with overarching EIA and SEA methods and sets out the concepts specific to health assessment.
- Can inform the methods statement for the health in environmental assessments or standalone HIA reports, but need not be reported in the format and detail presented here; for example, it could be referenced, summarised or tabulated.

Ehrlich and Ross ([T119](#)) see that a strength of the determination of significance is that it is neither clear cut nor objective. It is a complex decision that is not based on a tick box approach or a simple application of standards and regulations. It is instead a professional judgement that is based on an informed and subjective judgement by decision-makers. It uses cogent reasoning and it relies on evidence brought forth by the participants of the EIA. Importantly, this results in a decision that reflects the values of the person or organisation making the decision and also 'ideally ... society's values'.

Quoted from Cave et al ([T104](#))

## Presenting the findings

HIA reporting outputs usually take one of two forms:

- Ranking, or prioritising, effects, in other words a conclusion about the significance of an effect  
and/or
- Recommendations, for example, for further investigation or changes to the wording of a proposal

This section deals with ranking, or prioritising, effects. This *Technical Guidance* provides a consistent language and terminology to formulate conclusions on the nature of a health effect.

The terminologies and methods for this process vary and this can impede understanding between health stakeholders and impact assessment practitioners.

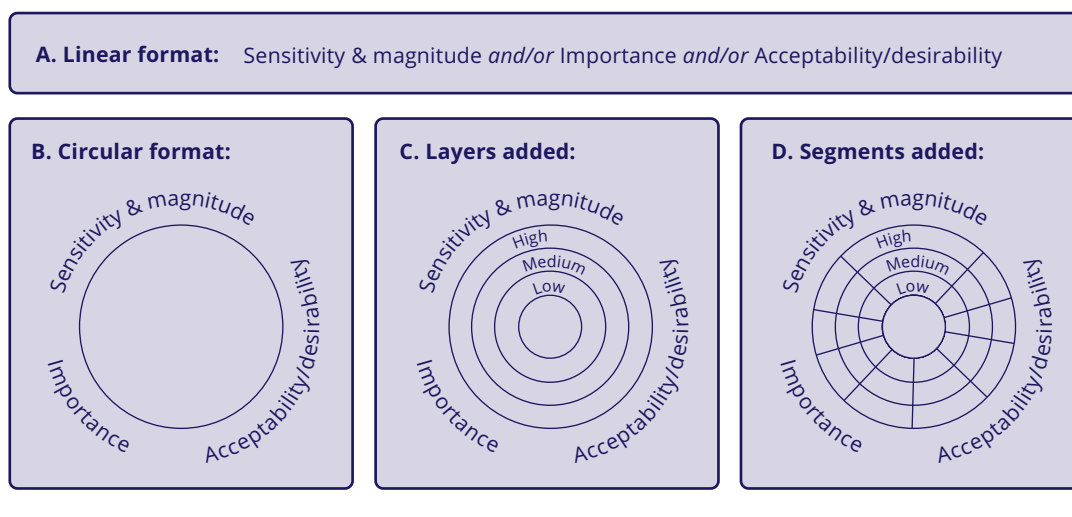
This guidance presents a qualitative conceptual model that can include other approaches, such as quantification.

'Significance' describes the ranking or prioritising effects, and it is also a statutory term within environmental assessment.

This *Technical Guidance* builds towards the conceptual model of 'significance' which is shown in [Figure T12](#).

[Figure T08](#) shows how the conceptual model is constructed. 'Layers' indicate a scale. 'Segments' present sub-considerations.

**Figure T08. Structure and elements of significance conceptual model shown in Figure T12.**



The figures for sensitivity and magnitude, [Figure T09](#) and [Figure T11](#) respectively, follow a similar format. The conclusions from these figures inform the final figure on significance, specifically [Figure T12](#). This allows for an examination of what it means for a health effect to be significant or not significant.

The next step is to take the findings from these three figures and present them as text. [Table 14](#) suggests how the findings could be presented as a reasoned narrative that explains how a decision on significance has been reached.

These concepts and tools could be used as a basis for a common understanding of methods for consistently and transparently determining health significance across a wide range of determinants of health. A common understanding and approach between the health authority, proposal proponent and leading/assessing authority would be beneficial (and could be agreed at the scoping stage). The approach could also be used by the health authority internally to support consistent and proportionate feedback on the proposal's health assessment if requested.

Analysis of multiple criteria is an established approach to determining significance across health in environmental assessments, such as in EIA and SEA ([T18](#)). Sensitivity and magnitude are two criteria that are commonly used. These are part of determining health significance but need to be broken down, for each determinant of health, to properly show how a finding has been reached. The sensitivity of the population and the magnitude of effect need to be considered in the context of other sources of evidence such as:

- Scientific literature
- Baseline conditions for the population
- Consultation for the proposal
- Health priorities in the jurisdiction
- Regulatory standards in the jurisdiction and
- Health policy context in the jurisdiction

A successful health assessment exercise is proportionate, transparent and reasoned.

[Figure T09](#) (sensitivity criteria), [Figure T11](#) (magnitude criteria) and [Figure T12](#) (criteria for significance) show how multiple criteria can, and need to, be considered. Not all criteria within these figures will be relevant in every case.

The focus should be on the most relevant criteria within each figure, depending on the determinant of health, population and proposal. [Figure T10](#) provides a hypothetical example of a judgement on relevant criteria to inform a narrative discussion on the sensitivity of a particular population.

The terms within each figure are not exhaustive and can be adapted to the specific context of the proposal. There is no clear cut-off between effects that are significant and those that are not significant. It is a matter of professional judgement. Transparency in this matter helps all parties to reach a consensus.

Each figure has a set of concentric circles. These correspond to assessment categories of high, medium, low and negligible (sensitivity and magnitude) or major, moderate, minor and negligible (significance) if appropriate. Points that are closer to the centre indicate a 'high sensitivity', 'large magnitude' or a 'significant health effect' depending on the figure. Layers towards the outside indicate a conclusion supporting a 'low sensitivity', 'low magnitude' or a 'not significant health effect'.

All the conclusions from the relevant segments need to be considered together before a decision is made. The overall decision on significance is a professional judgement, which may be informed by contextual factors as well as sensitivity and magnitude.

Taken together [Figure T09](#), [Figure T11](#) and [Figure T12](#) are transparent about the underlying reasoning for making a significance decision. This transparency supports thoroughness and consistency in the reasoned conclusions as to whether a likely health effect is significant. This approach does offer a nuanced discussion of relevant considerations, particularly given that sensitivity and magnitude at times do not assist with differentiating between proposal alternatives and mitigation options.

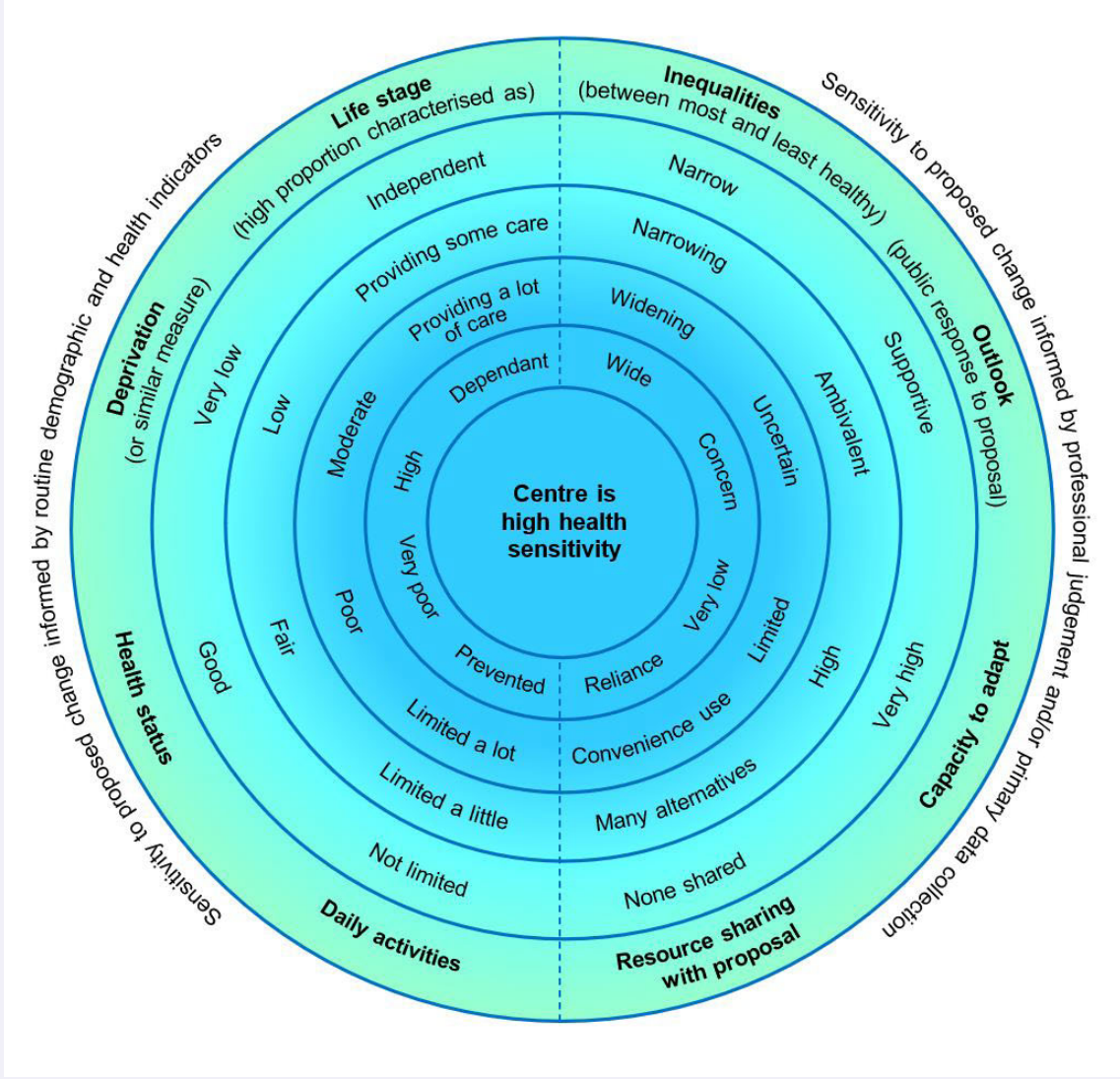
## Considering sensitivity

Sensitivity is the *sensitivity of the receptor to change*. It includes consideration of that receptor's capacity to accommodate changes brought about by the proposal.

[Figure T09](#) provides different components of *sensitivity*. It uses criteria (segments) and indicative classifications (levels) to explore, and explain, a finding of *sensitivity*. The conclusion may be summarised as a high, medium, low or negligible sensitivity to change.

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**Figure T09. Health sensitivity: conceptual model**



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**Table 11. Terms for defining *sensitivity***

Term	Definition
<b>Life stage</b>	Life-course analysis is often used in public health and reflects differing health sensitivities and needs at different ages. Typically, children and older people are particularly sensitive to change, including due to being dependants. Those providing care may also be more affected by proposal changes or less able to take advantage of proposal opportunities. Consider if particular age groups are likely to experience effects more strongly, e.g. pregnant women and their unborn children; the very young; the very old; or working-age people (benefiting from jobs). Also consider if some groups are more likely to use certain areas or environments, such as being at home during the day (for example, due to low economic activity or shift work); or whether people with higher levels of dependence on carers or public transport can access alternatives to, or respite from, proposal effects.
<b>Deprivation</b>	Deprivation is assessed and reported in both Ireland and Northern Ireland, albeit in slightly different ways. Regardless of the appropriate measure for the context, deprivation reflects an increased sensitivity due to lack of ownership of or access to assets, including those that support good health. Deprivation differences between areas are indicative of social gradients, which are central to the consideration of health inequalities. The potential for localised high deprivation within wider areas showing average or low deprivation should always be considered. Consider if the population is already stressed by limited resources or high burdens as well as if groups are affected that have reduced access to financial, social and political resources.
<b>Health status</b>	This is an overall self-reported measure of population health within the census statistics of both Northern Ireland and Ireland. Areas with a poor health status are typically of higher sensitivity. Consider the degree to which the population includes those with pre-existing conditions and/or a disability that would make them more susceptible to the change (particularly multiple or complex long-term health conditions).
<b>Daily activities</b>	People's ability to perform day-to-day activities is relevant, particularly where there are changes in access to services or community amenities. Ireland census asks about long-lasting conditions or difficulties affecting basic physical activities. The Northern Ireland census asks whether day-to-day activities are limited because of long-term health or disability. Consider the extent to which people affected are particularly reliant on access to healthcare facilities, staff or resources.

<b>Table 11. Terms for defining <i>sensitivity</i> (continued)</b>	
<b>Term</b>	<b>Definition</b>
<b>Inequalities</b>	This refers to descriptive measures of difference in exposure to health risk factors, and to differences in health status between groups of people (T8). Where inequalities between areas or populations are wide (or at risk of widening), this indicates greater sensitivity. Principles of equity may also be relevant. Consider if the population experiences a high degree of inequalities (disproportionate effects between groups, not only those defined in relation to discrimination such as age and gender, but also in relation to other factors that may affect health outcomes, such as socio-economic status) (T8).
<b>Outlook</b>	People's understanding or views of the proposal can be highly influential in terms of their psychological and even physiological response to proposal changes. Such views may change as the proposal is developed and may depend on trust in the proposal proponent and regulators. Where there are strong and persistent concerns, sensitivity, particularly to mental health effects, is higher. Consider if there are people with strong views (or high degrees of uncertainty) about the proposal who may anticipate risks to their health and wellbeing and thus be affected not only by actual changes, but also by the possibility of change.
<b>Capacity to adapt</b>	This is also known as resilience, the ability of the population or service to absorb the change or voluntarily (consciously or unconsciously) make small changes to their behaviour that lessen the effects of the proposal. For example, where a proposal causes a minor increase in use of health services, this may be within the usual capacity of the services. If this is the case, it will have no adverse effect on service quality for the resident population (or service providers). It should be noted that in line with the mitigation hierarchy, expecting behavioural change as a formal way to avoid or reduce an adverse effect is not recommended.
<b>Resource sharing with the proposal</b>	Where a proposal affects a resource (service, power supply, water supply, highway capacity, school places etc.), the effects may extend a great distance from the development boundary, e.g. regional hospital capacity being affected by a large workforce moving to an area as a result of a proposal. Where there is high resource sharing and a lack of easily accessible alternatives, the population that is sharing the resource may be more sensitive.



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Figure T10. Terms: judging health sensitivity

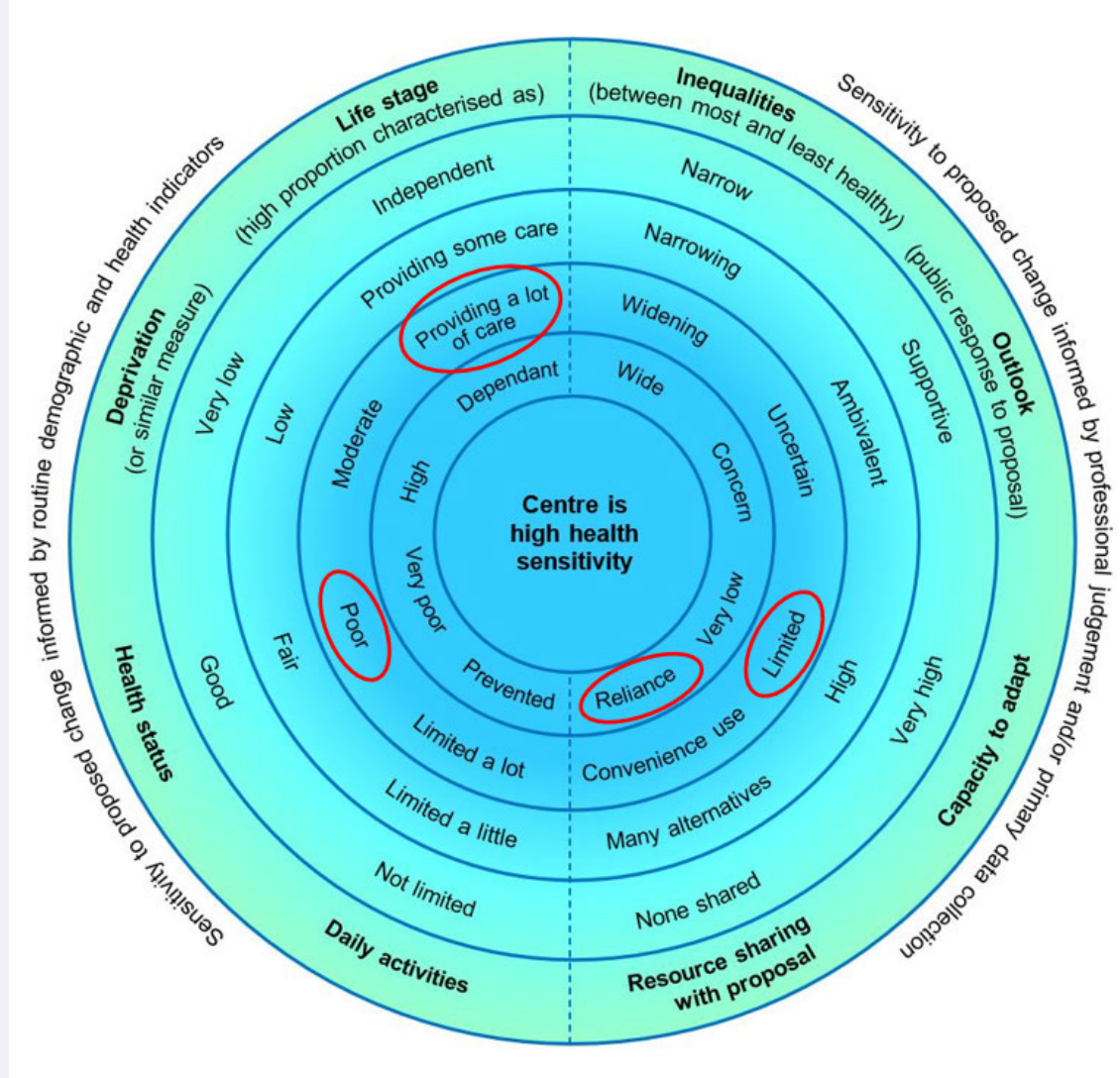


Figure T10 shows how the model provides the basis for a narrative description of the potential health effect. Thus, the findings in Figure T10 might be written up as follows:

*Literal phrasing:* In relation to *life stage* a high proportion of the population is characterised as **providing a lot of care**. The population's *health status* is characterised as **poor**. The population is **reliant** on the *resources shared with the proposal* and are judged to have a **limited capacity to adapt**. This population thus has a **medium or high** sensitivity.

*Refined phrasing:* Routine statistics show how, in [NAME OF AREA], a high proportion [y%] of the population provides care and a high proportion [z%] describes their health status as poor. Furthermore, the population, including carers, makes full use of the social care services affected by the proposal and are judged to have a limited capacity to adapt. This population is thus sensitive to change, with a ranking of medium to high sensitivity.

Data and context need to be added to the narrative to provide a robust conclusion.

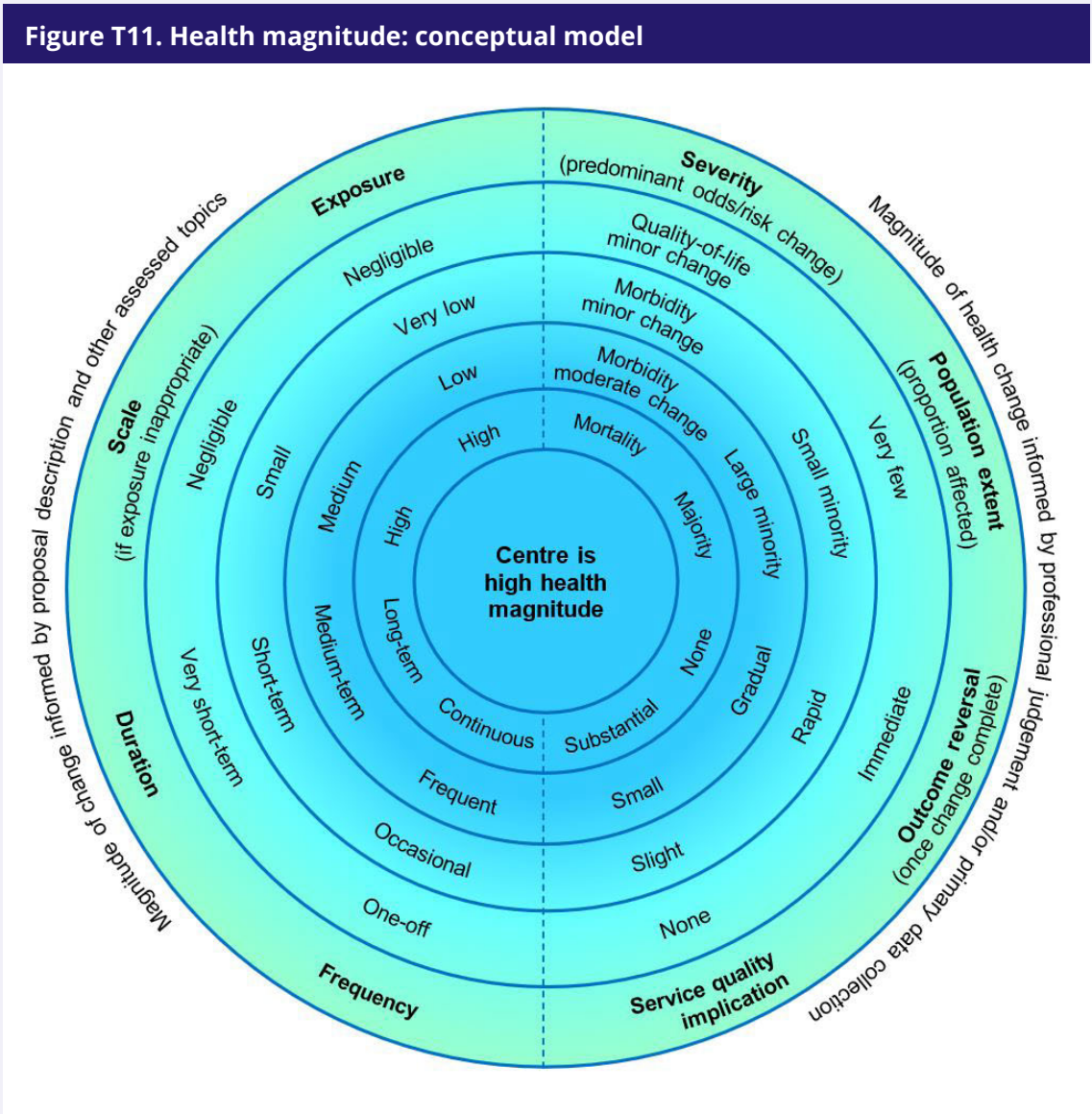
The analysis may start with a literal phrasing and this will be refined as the report is written up.

### Considering magnitude

Magnitude considers the characteristics of the change which would affect the receptor as a result of the proposal.

Figure T11 provides different components of *magnitude*. It uses criteria (segments) and indicative classifications (levels) to explore, and explain, a finding of *magnitude*. The conclusion may be summarised as a high, medium, low or negligible magnitude of change.

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**Table 12. Terms for defining *magnitude***

Term	Definition
<b>Exposure</b>	Exposure tends to vary with proximity of the population to the source, but also has an important time dimension relevant to health, e.g. low concentrations over a long period, or high concentrations over a short period. Exposure may particularly relate to projects.
<b>Scale</b>	The scale of change is a useful characterisation, particularly when exposure is not a relevant descriptive for the type of effect, for example, the scale of change in open space that is available for physical activity.
<b>Duration</b>	The length of time an effect occurs for is a key consideration for health. Typically, effects that continue for a long duration are of greater magnitude (including inter-generational effects). Where effects are best characterised as short term, other factors such as scale or exposure may still indicate that the change is of high magnitude (i.e. short-term effects are not automatically low magnitude). Appropriate reference periods for duration should be selected, as some proposals' activities can span weeks while others span decades. Strategic-level proposals will have longer-term implications than project-level proposals.
<b>Frequency</b>	How often would the population or service be affected? Effects that are frequent or continuous are likely to indicate greater magnitude. However, even where the effect would be occasional, other factors such as scale or exposure may still indicate that the change is of high magnitude (i.e. occasional effects are not automatically low magnitude).
<b>Severity</b>	Health severity relates to the type of health outcome affected, such as changes predominantly related to mortality, disease, nuisance or wellbeing. It may also relate to the type of change relative to the baseline conditions (for example, onset of new conditions, a change affecting existing conditions or change to day-to-day functioning). While changes in mortality indicate a higher magnitude than changes in wellbeing or quality of life (less severe), this should not preclude a large change in quality of life from being a high-magnitude effect. This underlines the importance of using this analysis of multiple criteria as a guide for writing a comprehensive narrative that contextualises each decision and the interrelationship between factors.

<b>Term</b>	<b>Definition</b>
<b>Population extent</b>	The proportion of the population (defined by the assessment) that is affected informs the decision on magnitude. Where most of the study area's population is affected, this would indicate a higher magnitude. This is not to downplay cases where only a few people are affected to a high degree. However, given that a population health conclusion is being reached, it is helpful to understand how widespread the change may be. For example, where only a few people are affected, this may indicate greater potential for targeted mitigation. Where feasible, the size of the affected population should be estimated quantitatively. It is noted that this measure is influenced by how the 'population' is defined. Also consider if there is likely to be substantial population displacement or influx. Where the effect is best characterised as only affecting a few individuals, this may indicate that a population health effect would not occur. Such individuals should still be the subject of mitigation and discussion, but in assessment and public health terms, the effect may not be a significant population health change.
<b>Outcome reversibility</b>	Some changes in health outcomes rapidly reverse once the source is removed, for example, the cessation of nuisance will lead to reduction in anxiety. In other cases, health effects may reverse at a slower rate, for example, gradual returns to physical activity levels once access is resorted to amenities. However, in some cases health effects should be considered permanent, indicating a higher magnitude.
<b>Service quality implication</b>	As well as direct changes to population health, there may be an associated or independent change in the quality of services that support or facilitate good health (including health services, schools, social care, etc.). For example, where direct population health reductions (or population influx) increase demand on services that consequently reduce in quality, the magnitude of the effect on health is amplified. Appropriately supporting services to avoid this can be an important aspect of mitigation.

## Judging significance

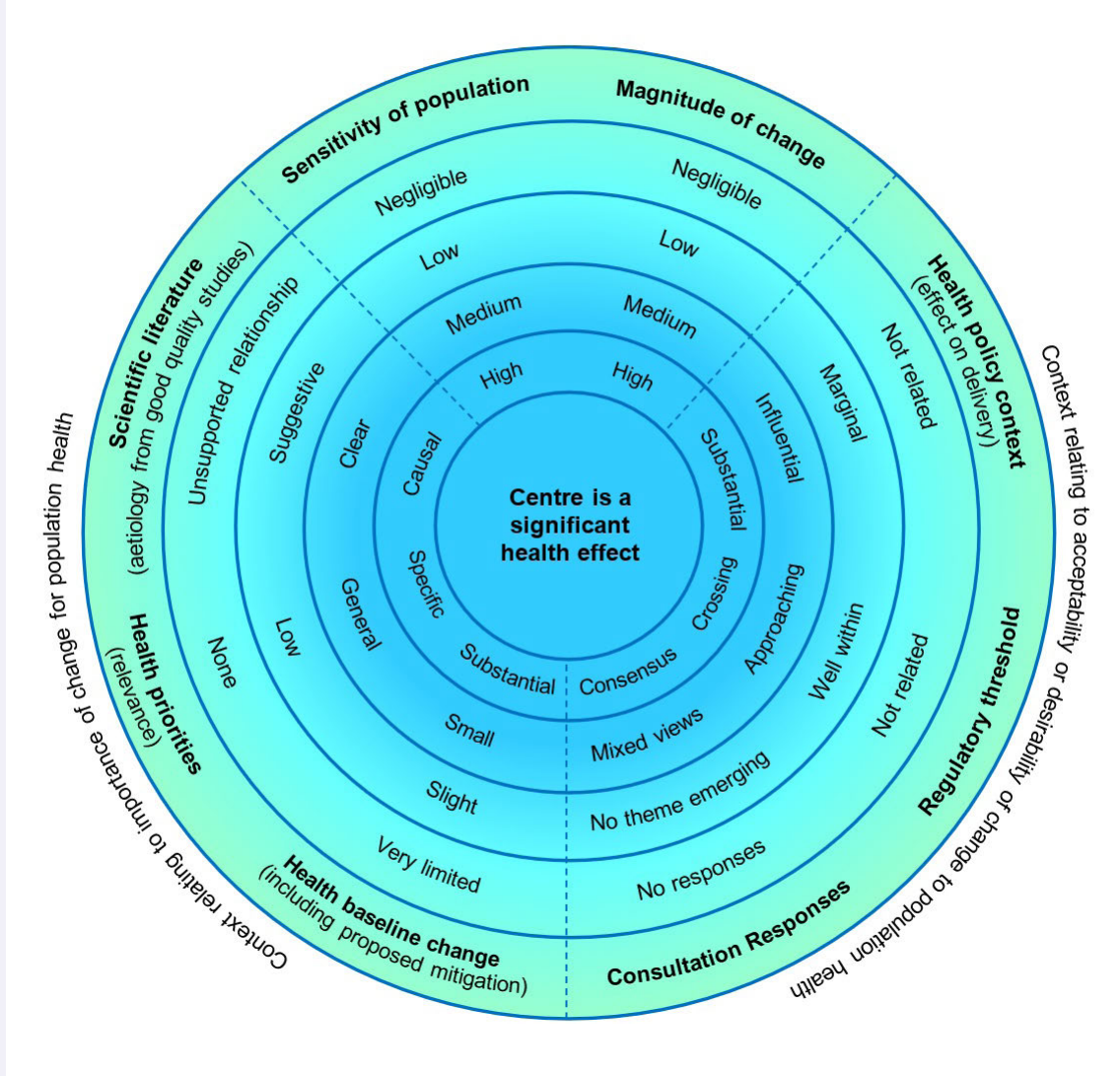
Significance relies on informed, expert judgement about what is important, desirable or acceptable with regards to changes triggered by the proposal in question (T18).

[Figure T12](#) provides different components of *significance*. It uses criteria (segments) and indicative classifications (levels) to explore, and explain, a finding that a health effect is *significant* or *not significant*.

The model brings together different types of evidence, e.g. scientific literature, public health priorities, regulatory standards and health policy. The model thus not only take into account a range of evidence sources, but also a diversity of professional perspectives, e.g. academics, public health practitioners, regulators and policy makers. This supports consensus building.



Figure T12. Health significance: conceptual model



**Table 13. Terms for defining *significance***

Term	Definition
<b>Sensitivity</b>	This refers to the sensitivity of the population affected (as informed by the analysis of multiple criteria discussed in Figure 9). It includes consideration of both the general population for an area and vulnerable groups as a sub-population relevant to sensitivities for the health issue being assessed. Conclusions on sensitivity may be influenced by contextual factors discussed below.
<b>Magnitude</b>	This means the magnitude of the proposed change and/or the magnitude of the health change (as informed by the analysis of multiple criteria discussed in <a href="#">Figure T11</a> ). Conclusions on magnitude may be influenced by contextual factors discussed below.
<b>Scientific literature</b>	<p>The literature can indicate if there is evidence to support an association between the proposal-related change, a relevant determinant of health and a relevant health outcome.</p> <p>It may be relevant to note well-evidenced thresholds, prerequisite conditions or population groups identified as being particularly susceptible. If appropriate, the type of relationship can be described, e.g. linear, exponential, etc. Databases such as PubMed can be searched for systematic reviews and meta-analyses.</p> <p>Scientific literature can indicate the aetiology and potentially the degree of change, but careful consideration should be given to the internal validity (quality of the study), the external validity (the generalisability of those findings to the particular context) and to the strength of evidence (including emerging evidence since the last systematic reviews or meta-analyses).</p> <p>Recognised hierarchies of study quality should be followed (i.e. searches for and use of systematic reviews, meta-analyses in the first instance and only resorting to grey literature where no better-quality studies are available).</p>
<b>Health priorities</b>	<p>These can identify if relevant determinants of health or health outcomes have been identified as particularly important locally, regionally or nationally.</p> <p>Health and wellbeing strategies, health needs assessments or similar can be reviewed.</p>

**Table 13. Terms for defining *significance* (continued)**

Term	Definition
<b>Baseline conditions</b>	<p>These can establish if relevant sensitivities or inequalities identified in the scientific literature are present. It may be relevant to note whether conditions differ from local, regional, national or international comparators, or if geographic or population features may amplify effects.</p> <p>Public health profiles and indicator sets can be used. The change in the health baseline will be informed by</p> <ul style="list-style-type: none"> <li>• the magnitude of any changes caused by the proposal and the sensitivity of the population who will experience, or be exposed to, those changes</li> <li>• factors which are specific to the proposal for example, measures for mitigation and enhancement</li> <li>• factors which are external to the proposal and which affect the future baseline, for example, the cumulative effects of other proposals</li> </ul>
<b>Health policy context</b>	<p>This can identify published local or national government position statements that raise particular expectations for the relevant proposal change, determinant of health or health outcome. The proposal may also affect existing health policy delivery to varying degrees (e.g. a substantial, influential or marginal effect on health policy delivery).</p> <p>The health policy context may include adopted local area development plans or references (implicit or explicit) to health in published planning or other sectoral policies. Wider international health policies or treaties may also be relevant.</p> <p>Where government policy has specific reference to delivering local health benefits in a project's study area (in contrast to a policy agenda of geographically unspecified or wider societal benefits), this can be partially relevant at the project level (i.e. the acceptability of certain effects may depend on whether the project supports delivery of those policy expectations or not).</p>
<b>Consultation response themes</b>	<p>These can indicate the extent to which stakeholders and the public support, or have concerns, uncertainty or ambivalence about, relevant determinants of health or health outcomes. Where there is consensus on a health issue (particularly between the affected community and the health authority), this may be influential in terms of the reasoned conclusion as to whether that effect is significant for the context.</p>



**Table 13. Terms for defining *significance* (continued)**

Term	Definition
<b>Regulatory standards</b>	Such standards (if applicable) can identify where there would be formal monitoring by regulators. Discussion may include modelling results on the extent to which regulatory or statutory limit values would be met, for example, the EU Directive 2008/50/EC (T120) based Air Quality Standards Regulations 2011 (T121) and The Air Quality Standards Regulations (Northern Ireland) 2010 (T122). It may also be relevant to discuss advisory guidelines. Limit values for occupational exposure tend to differ from non-occupational exposure. Where thresholds have been set, these do not mean that there would be no health effect below these levels. For example, in the case of fine particulate matter and nitrogen dioxide, there are non-threshold health effects (i.e. no known limit below which health effects may not occur). In such cases, an informed discussion about what is acceptable for the jurisdiction is appropriate, for example, giving the public confidence in thresholds set by government for the purpose of health protection having taken into account other social, economic and environmental considerations.

Any professional judgement on significance is based on a range of evidence sources and lines of reasoning. [Figure T12](#) in the *Manual* shows questions that lead to a conclusion on significance.

A reasoned conclusion may explore all three sets of questions. This can be recorded on [Figure T12](#) of this *Technical Guidance*.

It is helpful to the reader if the judgement about significance is presented as a narrative. This traces the way in which a decision is reached about each effect and its significance. This helps with presenting a reasoned conclusion and supporting evidence.

Checklists or matrices are sometimes used but they can become formulaic.

[Table 14](#) illustrates how various elements are introduced and integrated.

Strategic-level health assessments are likely to cover the points briefly; project-level health assessments may develop detailed content and supporting evidence against these prompts.

Depending on the methodology being adopted, step 8 (the residual baseline change, i.e. the effect after mitigation and/or enhancement measures have been taken into account) may or may not explicitly refer to sensitivity and magnitude; for example, a strategic standalone HIA may not do so if its output is focused on recommendations rather than ranking, or prioritising, effects.

The table is a guide only and other approaches are also acceptable.

[Table 14](#) illustrates a narrative and a reasoned conclusion. Each discussion of a determinant of health refers to a range of issues or risk factors. The qualitative assessment conclusion is presented as a narrative. The table format and use of emphasis is for

illustrative purposes. The assessment text should cross-refer to other parts of the report. The phrasing in steps 8 and 9 uses the [Figure T09](#), [Figure T10](#) and [Figure T12](#) criteria and classification terms. This is a 'literal phrasing'. See the discussion of [Figure T10](#) for detail on how this can evolve into a 'refined phrasing' as the report is written up.

**HEA** **HIA** **SL** **PL**

**Table 14. A (generic) narrative and reasoned conclusion example for a project-level health assessment**

	Aspect	Generic text
1.	Source of change (draw on <a href="#">Table 07</a> and <a href="#">Table 08</a> )	Project construction transport (determinant of health), including the health implications of changes in road traffic and road works affecting: road safety; travel times; accessibility; and active/sustainable travel (health issues).
2.	Population(s) affected, including vulnerabilities (draw on <a href="#">Table 09</a> )	Community residents and emergency services would be affected. The population groups relevant to this assessment, due to either proximity or another sensitivity are: the population close to the development (site-specific population); the wider community (local population); young-age vulnerability (children and young people as potentially more vulnerable road users); old-age vulnerability (older people as potentially more vulnerable road users); low-income vulnerability (people living in deprivation, including those on low incomes for whom travel costs or alternatives may be limiting); poor health vulnerability (people with existing poor physical and mental health in relation to health trip journey times); and access and geographical vulnerability (people who experience existing access barriers or for whom close proximity to project change increases sensitivity).
3.	Main population health outcome(s) or measure(s) (draw on column 6 of <a href="#">Table 10</a> )	For road safety, health effects may be associated with the severity or frequency of road traffic incidents. For accessibility, health effects may be associated with emergency response times or non-emergency treatment outcomes associated with delays or non-attendance. For active/sustainable travel, health effects may relate to physical health (e.g. cardiovascular health) and mental health conditions (e.g. stress, anxiety or depression) associated with obesity and levels of physical activity.
4.	Any known thresholds for effect	N/A. Transport air quality and noise effects and their relevant thresholds are assessed separately.

**Table 14. A (generic) narrative and reasoned conclusion example for a project-level health assessment (continued)**

	Aspect	Generic text
5.	Likelihood/ Causal pathway (draw on sections 1-3 of <a href="#">Figure T06</a> )	<p>The potential effect is considered likely because there is a <i>plausible</i> relationship between source-pathway-receptor:</p> <ul style="list-style-type: none"> <li>• <b>Source:</b> vehicles on the road network or changes in routes that link community residential, commercial or amenity services</li> <li>• <b>Pathway:</b> changes in driver delay, severance, pedestrian delay, pedestrian amenity and accidents and safety. This links with physical activity and active travel. It also links with emergency response times</li> <li>• <b>Receptors:</b> local road users, including drivers in, and passengers of, motor vehicles; pedestrians; cyclists; public transport; emergency services</li> </ul> <p>Furthermore, the potential effect is <i>probable</i> as no highly unusual conditions are required for the source-pathway-receptor linkage.</p> <p>The <i>scientific literature</i> shows an association between the types of changes that will be caused by the construction transport and road safety, travel times, accessibility and active/sustainable travel. The literature does not identify thresholds for effects. The assessment has had regard to the population groups identified in the literature that may be particularly sensitive. For example, children, pregnant women and cyclists (particularly older cyclists) are vulnerable in terms of road safety. The whole population benefits from a physically active lifestyle and this includes using active modes of travel. People with lower socio-economic status and older people typically face greater barriers in accessing healthcare due to poor transport.</p>
6.	Context in which professional judgement is reached.	<p>The <i>baseline</i> [<i>refer back to baseline</i>] indicates that relevant sensitivities and inequalities identified in the scientific literature may be present. It also shows how [<i>particular indicators</i>] differ from their local, regional or national comparators. The baseline does not identify any geographic or population features that suggest effects could be unusually amplified.</p> <p><i>Health priorities</i> as set out by [<i>name of health stakeholder</i>] identify health challenges for this area and are relevant for transport. These priorities include supporting active travel to reduce rates of obesity and prevent poor health; ensuring access to high-quality healthcare; and ensuring transport infrastructure that promotes social inclusion, wellbeing and social connection.</p>

**Table 14. A (generic) narrative and reasoned conclusion example for a project-level health assessment (continued)**

	Aspect	Generic text
	Contextual factors relating to acceptability of change in determinant of health for the setting	<p><i>Government policy</i> sets the following expectations for travel in the local area:</p> <ul style="list-style-type: none"> <li>• improving pedestrian and cycle links and opportunities</li> <li>• keeping local health facilities accessible to all</li> <li>• promoting cycling as a major mode of transport; connecting people to higher earning jobs</li> <li>• providing reliable public transportation services that are accessible to all, including those with long-term health conditions, impairments or disabilities; and ensuring affordable, reliable transport so everyone can access work, education and leisure</li> </ul>
7.	Mitigation secured ... and/or ... enhancements secured (for strategic level this may be policy wording edits)	<p>The following mitigation forms part of the project and has been taken into account as part of the assessment of construction transport health effects:</p> <ul style="list-style-type: none"> <li>• Measures set out in the Construction Environmental Management Plan and Construction Logistics Plan that limit and manage the timing and routes of construction-related transport</li> <li>• Early notice to emergency services of any roadworks, diversions or road closures</li> <li>• Maintaining of pedestrian and cycle routes during any roadworks or diversions to minimise discouragement of active travel</li> </ul>

**Table 14. A (generic) narrative and reasoned conclusion example for a project-level health assessment (continued)**

	Aspect	Generic text
8.	<p>Residual baseline change</p> <p>Sensitivity to proposal change (draw on <a href="#">Figure T09</a>)</p> <p>Magnitude of change due to the proposal</p> <p>... and/or ...</p> <p>Magnitude of health change (draw on <a href="#">Figure T11</a>)</p>	<p>The sensitivity of the general population is considered to be <b>low</b>. This reflects that routine statistics for [<i>name of area</i>] show that the <i>health status</i> of most people is <b>good</b>, and their <i>daily activities</i> are <b>not limited</b>. Furthermore, in terms of <i>resource sharing</i>, most people would only make occasional use of the roads affected by the construction, with <b>many alternative</b> routes. The score also reflects that the general population would have a <b>high capacity to adapt</b> to changes in traffic conditions (e.g. during the works on the junction).</p> <p>The sensitivity of vulnerable groups is considered <b>high</b>. It is estimated that, from a <i>life stage</i> perspective, a high proportion of pedestrians and cyclists in [<i>name of area</i>] are young people and older people (<b>dependants</b>) who, in terms of <i>resource sharing</i>, make frequent use of services where access is <b>reliant</b> on affected sections of the highway network (e.g. traveling to/from school or day care). Furthermore, the population has <b>moderate</b> levels of <i>deprivation</i>. Deprived populations face greater barriers compared to the general population and are therefore more sensitive to changes in access to care. Low incomes may compound barriers to access resulting in a <b>limited capacity to adapt</b>. Ambulance services (and the recipients of their care) are particularly sensitive to delays in response times (time taken to arrive and stabilise the patient). This is an issue of <b>concern</b> to the public, whose <i>outlook</i> was gauged through consultation.</p> <p>During construction, the magnitude of the change due to the development is small.</p> <p>In relation to road safety, the <i>scale</i> of change in road traffic incidents is <b>small to negligible</b>, with the <i>duration</i> of this change being <b>medium term</b>. The <i>frequency</i> of any incidents would be <b>one-off or occasional</b>, with the <i>severity</i> ranging from a <b>minor change in risk of injury through to mortality</b>. The number of additional road traffic incidents would be small so there would be <b>no, or slight, implications for healthcare services</b>.</p> <p>[Repeat for other health issues: travel times, accessibility and active/sustainable travel.]</p>

**Table 14. A (generic) narrative and reasoned conclusion example for a project-level health assessment (continued)**

	Aspect	Generic text
9.	Professional judgement on significance, including any differences between the general population and vulnerable group population and how these may change over time (draw on <a href="#">Figure T12</a> )	<p>The construction transport activities would be medium term and would cease on completion of the works.</p> <p>The population <i>health baseline change</i> is expected to be <b>very limited</b> as a result of the development. The assessment acknowledges that there is a <b>causal</b> pathway established in the <i>scientific literature</i>, relevant <i>health priorities</i> are of <b>specific</b> relevance and there would potentially be an <b>influential</b> effect on delivery of local <i>health policy</i> expectations.</p> <p>The assessment considers the mitigation that has been developed and is secured by planning conditions. This mitigation is early notice to emergency services of any roadworks, diversions or road closures and the promotion of active travel through traffic diversions and the maintenance of pedestrian and cycle routes during roadworks.</p> <p>There would be a differential effect between the general population and vulnerable groups, but the construction activities will have limited potential to widen inequalities due to the targeted use of mitigation. The conclusion is that the residual significance of the effect would be <b>negligible</b> for the general population and up to <b>minor adverse</b> (not significant) for vulnerable groups.</p>
10.	Describe any monitoring and adaptive management of likely significant adverse effects	In this case no monitoring is considered necessary.

Take a population health approach. This includes considering the degree of change in risk factors that mediate the relationship between determinants of health affected by the proposal and population health outcomes.

## PART 5

# Cumulative effects

### **At a glance**

A proposal may affect multiple determinants of health for a given population group.

If multiple types of health effect are concentrated to a particular population, additional recommendations or mitigation may be required.

Multiple effects may be due to the proposal in isolation, or when in combination with other new proposals.

The aim is to take a step back to see the overlaps in a proposal's effects and its relationship with other new proposals.

Issues of equity (fairness) for vulnerable groups may be revealed and can be addressed.



## Introduction

This section looks at cumulative effects. What does this mean?

In this guidance, cumulative effects relate to either the combined effects of a single proposal or the combined effects of the proposal and other new proposals.

The term *cumulative effects* is also used in licensing and planning when considering densities or concentrations of, for example, hot-food takeaways, betting shops or payday loan shops. In this context it describes a process that sets thresholds on, or determines the combined effects of, these amenities. This could be part of a HIA but it is not what is meant by cumulative effects in this guidance.

The cumulative effects of a proposal might mean that one population group experiences several changes to their determinants of health, or in less technical language, everything happens to the same people.

This can happen when different aspects of the same proposal overlap. This is known as **intra-proposal effects** and also as in-combination effects. For example:

- A community living close to a construction site may experience increased noise due to construction site activities as well as congestion on the local road network due to construction vehicles.
- At the strategic level, the impact of new legislation may be both to increase the cost and to reduce the availability of a health-promoting product, or service, for rural communities.

Cumulative effects can also happen if one proposal is carried out at the same time as (concurrently), or soon after (consecutively), another proposal. This is known as **inter-proposal effects**. For example:

- The construction traffic of two different projects might use the same route and thus impose a double burden on a community, or
- Two or more new policies may target the same population group.

In SEA and EIA, this is known as cumulative assessment.

At the strategic level, a cumulative assessment of health effects may overlap with, or inform, a wider assessment of policy coherence ([T123](#)). For example, as part of a strategic-level HIA there may be a cumulative assessment pulling together the multiple ways in which a new policy affects the health of particular population groups. The analysis can consider how the new policy itself may affect a range of health determinants for a particular population group (intra-proposal effects). The analysis may also consider the ways in which integration of the new policy with other new policies may affect the health determinants of a population group (inter-proposal effects). Such analysis can support policy coherence against agreed objectives, such as the 'generic health objective' discussed in Part 3 of this *Technical Guidance*, or against the Sustainable Development Goals.

The tables below enable strategic- and project-level cumulative effects to be demonstrated for health, and they require the experience of vulnerable groups to be compared with that of the general population. This keeps a focus on inequalities.

The tools can be adapted to suit the context for each proposal. For example, the tables could support a structured narrative, rather than tabulated consideration of the cumulative effects. They are suitable for health in environmental assessments and standalone HIA, and at both the strategic and project levels.

The cumulative effects can vary by geography, for example, the greatest effect for those closest to a project site, or they may refer to a population defined by another characteristic, such as people with existing poor health.

[Table 15](#) considers effects geographically. It determines if people may experience a differential or disproportionate effect as a result of the proposal, considering all its changes, due to membership of a spatially defined population group, for example, the local population v. the regional population.

- For each scoped-in determinant of health, collate the 'study area' population scope defined in column 3 of [Table 10](#).
- This means listing all determinants of health that relate to the 'neighbouring community (site-specific population)', then in a separate column all determinants of health that relate to the 'wider community (local population)', and so on for regional, national and international.
- For each study area, reach a professional judgement on the cumulative significance in terms of the experience of the population. Ask, compared to the individual effects already assessed, what is the experience of, for example, the 'neighbouring community' due to reduced air quality, increased noise and increased employment opportunity? It may be appropriate to explore whether the effect, due to shared geography, is the same for the general population and for people who are more sensitive, which could be for a range of reasons. This could be done by drawing together the individual assessment 'general population' conclusions and then separately the individual assessment 'vulnerable group' conclusions.
- For vulnerable groups, focus on any overall change in effect due to the combination of proximity to change, for example local v. regional, in the context of generally increased sensitivity. The particular reasons for vulnerability, young age for example, and the combined influences from multiple changes in determinants of health are considered in detail within [Table 16](#).

[Table 16](#) show effects by vulnerable group. It determines if people experience a differential or disproportionate effect from the proposal, considering all its changes, due to membership of a vulnerable population group.

- For each scoped-in determinant of health, collate the 'vulnerable population groups' scope defined in column 5 of [Table 10](#).
- This means listing all determinants of health that relate to 'young age' vulnerability, then in a separate column all determinants of health that relate to the 'old age' vulnerability, and so on for vulnerability in relation to 'low income', 'poor health', 'social disadvantage' and 'access and geographical'.
- For each vulnerable population group, reach a professional judgement on the cumulative significance in terms of multiple determinants of health being affected. Ask, compared to the individual effects already assessed, what, for example, is the effect on 'young people' of reduced air quality, increased noise and increased employment opportunity?

Think about whether, within a population, the same people are impacted by the different effects. Think about the timings of the different effects. Consider the potential for additive and synergistic (multiplying) relationships. Combined effects may, or may not, be more significant. If a 'net' effect conclusion is not appropriate, as positive and negative effects do not necessarily cancel each other out, describe more than one effect. Would further mitigation be required?

Together these tables identify any significant inequalities and can also prompt further mitigation. A similar exercise can be undertaken for inter-proposal cumulative effects.

The cumulative assessment is easier when geographical groups and vulnerable groups are defined consistently at scoping for each health determinant, for example, so that all health determinants relevant to the 'local' study area can be collated and considered, giving a clear link between the individual and cumulative assessments.

Even though cumulative effects are often key to identifying ways to address significant health inequalities, they are often not well articulated within assessments.

Strategic level assessments in particular should consider the cumulative effects of how many small changes in risk factors from multiple projects, individually not-significant, may together significantly affect population health and health inequalities. Clear strategic level decisions or measures may be the most appropriate way to address such effects.

**HEA** **HIA** **SL** **PL**

**Table 15. Intra-proposal effects and scores for population groups, by geography**

	Site-specific	Local	Regional	National and international
	Name (e.g. of ward)	Name (e.g. of council)	Name (e.g. of region)	Name (e.g. NI or RoI)
Cumulative effects relate to the combined population health influences from ...	[List determinants and their stage, e.g. construction transport]	[List determinants and their stage]	[List determinants and their stage]	[List determinants and their stage]
The general population intra-proposal cumulative effect is ...	[Score, e.g. minor adverse, not significant]	[Score]	[Score]	[Score]
For relevant vulnerable groups, based on combined proximity and increased sensitivity, the effect is ...	[Score, e.g. minor adverse, not significant]	[Score]	[Score]	[Score]
This reflects that ...	[Brief discussion]	[Brief discussion]	[Brief discussion]	[Brief discussion]

HEA HIA SL PL

**Table 16. Intra-proposal effects and scores for vulnerable groups**

	Young people	Older people	Low income	Poor health	Social disadvantage	Access and geographical
Cumulative effects relate to the combined population health influences from ...	[List determinants and their stage, e.g. construction transport]	[List determinants and their stage]	[List determinants and their stage]	[List determinants and their stage]	[List determinants and their stage]	[List determinants and their stage]
The intra-proposal cumulative effect for this group, taking account of differing effects across geographic levels, is ...	[Score, e.g. minor adverse, not significant]	[Score]	[Score]	[Score]	[Score]	[Score]
This reflects that ...	[Brief discussion]	[Brief discussion]	[Brief discussion]	[Brief discussion]	[Brief discussion]	[Brief discussion]
Statement on intersectionality (those with multiple vulnerabilities)	<p>The following combinations of vulnerability may be particularly relevant for this proposal: [list]</p> <p>Those experiencing multiple vulnerabilities would benefit from being targeted with the following mitigation: [list]</p> <p>For those experiencing multiple vulnerabilities, the score is considered to be: [list]</p> <p>Notwithstanding being the focus of targeted mitigation, an effect on 'population' health [would/would not] be expected.</p>					

## Equity and cumulative effects

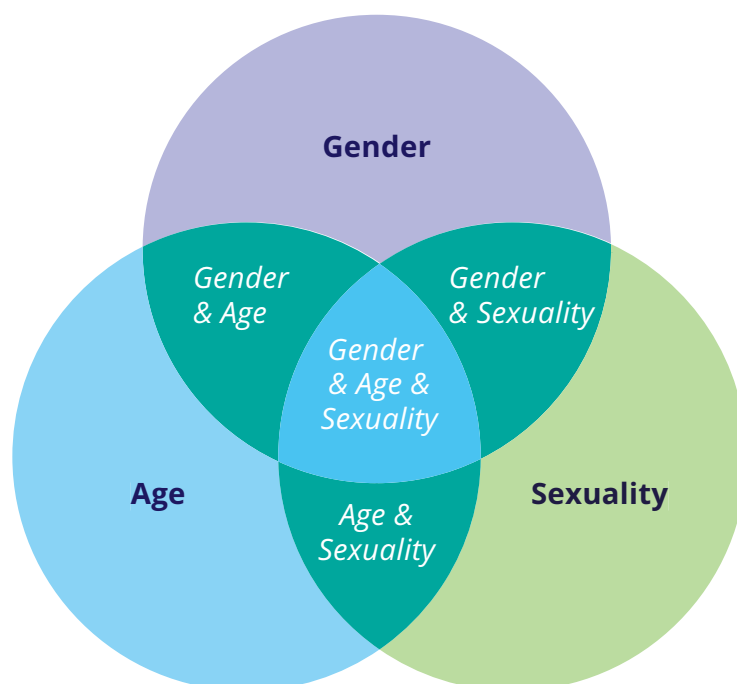
Intersectionality theory addresses the way in which the effects of sex/gender and race/ethnicity interact to marginalise people and shows that these effects cannot be simply added up. It allows for the study of health and disease at different intersections of identity, social position, processes of oppression or privilege, and policies or institutional practices (T124, T125).

Figure T13 shows how domains, such as age, gender and sexuality, overlap.

The focus here is on groups of people who are affected. It is also worth noting that the smallest number of people will be in the centre of the figure where all three categories overlap. The assessment will need to judge whether the number of people affected is a factor in deciding significance. The way in which this judgement is reached is important for equity.

Intersectionality is important and should inform mitigation. For example, the assessment may identify significant inequalities between the general population and vulnerable groups for one or more determinants of health. Allocating resources to vulnerable groups can be an appropriate response and can be one way of addressing equity.

**Figure T13. Vulnerability and diminishing population size**



Participation and engagement, particularly for those with marginalised voices, lead to a more equitable process ([T126](#)) and, in turn, to effective public policies ([T127](#)). An equitable process is a necessary precondition for equitable outcomes.

[Table 17](#) shows how participation is central to achieving equity. This can take the form of community-centred actions which contribute to both health equity and wellbeing and to improvements in policy, design and mitigation.

**HEA** **HIA** **SL** **PL**

**Table 17. Community-centred actions for health equity and wellbeing**

Actions	Common approaches
Build community capacities to take action on health and reduce health inequities. Members of the public identify local issues, devise solutions and build sustainable social action.	Community development Asset-based methods Social network approaches
Enhance individuals' capabilities to provide advice, information and support or organise activities in their or other communities, using life experiences and social connections to reach out to others.	Peer support and education Health trainers Befriending and volunteer schemes
Involve communities and local services working together at any stage of the planning cycle, leading to more appropriate, equitable and effective services.	Area-based initiatives Healthy towns and cities Co-production
Connect individuals and families to community resources, practical help, group activities and volunteering opportunities.	Social economy

From Boyce and Brown ([T127](#)) after South ([T128](#))



## PART 6

# Making *recommendations* or *securing measures*

This final section provides a table for formulating *recommendations* and/or *measures*. Note that the term *recommendations* is contrasted with the term *measures*.

Standalone HIAs, with no requirement for a statutory output, tend to present *recommendations* that do not have to be resolved at a given point and which a decision-maker can decide to accept or reject.

Environmental assessment requires a proponent to commit to *measures* for mitigation and/or enhancement and any decision about permission to proceed is contingent upon these *measures*. These are typically negotiated between the parties and then set out in legal agreement.

Standalone HIAs have less authority to effect change if the proponent is not bound to the *recommendations* in the HIA reports. It is therefore good practice for all forms of HIA to move beyond making *recommendations* and to formally secure *measures* for mitigation and/or enhancement. It is acknowledged that this can be challenging.

- The reader should be familiar with the introduction to health assessment reporting in the *Manual*.
- The *Manual* notes that the actions to manage the effects of a proposal will carry greater weight, and have a greater chance of being implemented, if they are secured as 'measures'. These can be either for mitigation or for enhancement.

HEA HIA SL PL

**Table 18. Making recommendations and/or securing measures**

Consideration	To complete <i>Project-level example in italics</i>
Determinant of health	<i>Socio-economic status: operational employment.</i>
Effect significance without measure (if applicable)	<i>The effect is considered to be not significant and is scored as minor beneficial for vulnerable groups.</i>
Recommendation/measure wording (SMART*)	<i>Provide a scheme of preferential access to operational training schemes and apprenticeships for young people who are Not in Education, Employment, or Training (NEET).</i>
Effect significance with measure (if applicable)	<i>The effect is considered to be significant and is scored as moderate beneficial for vulnerable groups.</i>
Indicative costs to implement (if applicable)	<i>Cost neutral for already committed apprenticeship scheme. Administrative costs estimate X.</i>
Trigger for commencement	<i>Project training and apprentice scheme commencement.</i>
Length of time to continue	<i>The duration of the project training and apprentice scheme.</i>
Target population (including vulnerable groups)	<i>Young people in the local and regional area who are NEET.</i>
Eligibility, equity and equality (if applicable)	<i>Safeguarding considerations. No discrimination, e.g. on gender or disability. Eligibility subject to working standards and project security checks.</i>
Securing mechanism	<i>Condition of planning permission.</i>
Review date	<i>Annual from commencement.</i>
Linked indicator (linked to monitoring)	<i>Number of NEET, local and regional (indicator ID: X).</i>
Further action (linked to adaptive monitoring)	<i>Review of barriers to, or early exit outcomes for NEETs from, project training and apprentice scheme.</i>
Recommendation/measure notified to (proposal proponent and/or the public)	<i>Local planning authority and project proponent. ..... (e.g. organisation(s)/person(s))</i>

\* **SMART:**

**S**pecific

**M**easurable, meaningful, motivating

**A**chievable, agreed, attainable.

**R**elevant, reasonable, realistic and resourced, results-based

**T**ime bound, time-based, time limited, time/cost limited, timely, time-sensitive.

# References

- T1. Cave B, et al. Human health: ensuring a high level of protection. A reference paper on addressing Human Health in Environmental Impact Assessment as per EU Directive 2011/92/EU amended by 2014/52/EU. International Association for Impact Assessment and European Public Health Association. 2020. <https://www.iaia.org/uploads/pdf/Human%20Health%20Ensuring%20Protection%20Main%20and%20Appendices.pdf>
- T2. World Health Organization. Health Promotion Glossary. Geneva. 1998. <https://www.who.int/publications/i/item/WHO-HPR-HEP-98.1>
- T3. European Commission. Environmental Impact Assessment of Projects: Guidance on Screening (Directive 2011/92/EU as amended by 2014/52/EU). Luxembourg: European Union. 2017. [http://ec.europa.eu/environment/eia/pdf/EIA\\_guidance\\_Screening\\_final.pdf](http://ec.europa.eu/environment/eia/pdf/EIA_guidance_Screening_final.pdf)
- T4. Directive 2014/52/EU of the European Parliament and of the Council amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment. *Official Journal of the European Communities* 2014; **L 124**: 1-18. <http://eur-lex.europa.eu/eli/dir/2014/52/oj>
- T5. European Parliament, Council of the European Union. Directive 2001/42/EC of the European Parliament and of the Council on the assessment of the effects of certain plans and programmes on the environment. 'Official Journal of the European Communities'. 2001. <http://data.europa.eu/eli/dir/2001/42/oj>
- T6. United Nations Economic Commission for Europe. Protocol on strategic environmental assessment to the convention on environmental impact assessment in a transboundary context (done at Kiev (Ukraine), on 21 May 2003). Geneva. 2017. <https://unece.org/environment-policy/publications/protocol-strategic-environmental-assessment-convention>
- T7. Last JM. A dictionary of epidemiology. 4th ed. Oxford: Oxford University Press; 200
- T8. World Health Organization Regional Office for Europe. Environmental Health Equity Resource Package. Copenhagen: WHO Regional Office for Europe. 2019. <https://www.euro.who.int/en/EHinequalities2019resourcepack>
- T9. Constitution of the World Health Organization. 1946. [http://www.who.int/governance/eb/who\\_constitution\\_en.pdf](http://www.who.int/governance/eb/who_constitution_en.pdf)
- T10. The Helsinki statement on Health in all Policies. Helsinki, Finland: The 8th Global Conference on Health Promotion. 2013. [https://www.who.int/healthpromotion/conferences/8gchp/8gchp\\_helsinki\\_statement.pdf](https://www.who.int/healthpromotion/conferences/8gchp/8gchp_helsinki_statement.pdf)
- T11. IAIA. What is impact assessment? Fargo, ND, USA: International Association for Impact Assessment. 2010. [https://www.iaia.org/uploads/pdf/What\\_is\\_IA\\_web.pdf](https://www.iaia.org/uploads/pdf/What_is_IA_web.pdf)
- T12. One Health Initiative Task Force. One Health Initiative Task Force report. American Veterinary Medical Association,. 2008. <https://www.avma.org/resources-tools/reports/one-health-ohitf-final-report-2008>
- T13. Cave B, Curtis S, Coutts A, Aviles M. Health impact assessment for regeneration projects. Volume II: Selected evidence base. London: East London and the City Health Action Zone and Queen Mary, University of London. 2001. <https://webarchive.nationalarchives.gov.uk/20130316025347/http://www.apho.org.uk/resource/item.aspx?RID=47697>

- T14. Dhaliwal M, Linou N. Issue brief - planetary health. New York, NY: United Nations Development Programme. 2017. <https://www.undp.org/content/undp/en/home/librarypage/hiv-aids/issue-brief--planetary-health.html>
- T15. Kindig D, Stoddart G. What Is Population Health? *American Journal of Public Health* 2003; **93**(3): 380-3. <http://dx.doi.org/10.2105/AJPH.93.3.380>
- T16. Foldspang A, Birt CA, Otok R. ASPHER's European List of Core Competences for the Public Health Professional. 5th Edition (preliminary). Brussels, Belgium: Association of Schools of Public Health in the European Region (ASPHER). 2018. [https://www.aspher.org/download/199/04-06-2018\\_aspher\\_s\\_european\\_list\\_of\\_core\\_competences\\_for\\_the\\_public\\_health\\_professional.pdf](https://www.aspher.org/download/199/04-06-2018_aspher_s_european_list_of_core_competences_for_the_public_health_professional.pdf)
- T17. IAIA. Risk assessment in EIA. Accessed 2021. <https://www.iaia.org/wiki-details.php?ID=22>
- T18. European Commission. Environmental Impact Assessment of Projects: Guidance on the preparation of the Environmental Impact Assessment Report (Directive 2011/92/EU as amended by 2014/52/EU). Luxembourg: European Union. 2017. [http://ec.europa.eu/environment/eia/pdf/EIA\\_guidance\\_EIA\\_report\\_final.pdf](http://ec.europa.eu/environment/eia/pdf/EIA_guidance_EIA_report_final.pdf)
- T19. European Commission. Environmental Impact Assessment of Projects: Guidance on Scoping (Directive 2011/92/EU as amended by 2014/52/EU). Luxembourg: European Union. 2017. [http://ec.europa.eu/environment/eia/pdf/EIA\\_guidance\\_Scoping\\_final.pdf](http://ec.europa.eu/environment/eia/pdf/EIA_guidance_Scoping_final.pdf)
- T20. Cave B, Fothergill J, Pyper R, Gibson G, Saunders P. Health in Environmental Impact Assessment: a primer for a proportionate approach. Lincoln, England: Ben Cave Associates Ltd, IEMA and the Faculty of Public Health. 2017. [https://www.academia.edu/43935454/Health\\_in\\_Environmental\\_Impact\\_Assessment\\_A\\_Primer\\_for\\_a\\_Proportionate\\_Approach](https://www.academia.edu/43935454/Health_in_Environmental_Impact_Assessment_A_Primer_for_a_Proportionate_Approach)
- T21. Mindell J, Ison E, Joffe M. A glossary for health impact assessment. *JEpidemiolCommunity Health* 2003; **57**(9): 647-51. <http://dx.doi.org/10.1136/jech.57.9.647>
- T22. Vanclay F, Esteves AM, Aucamp I, Franks D. Social Impact Assessment: Guidance for assessing and managing the social impacts of projects. Fargo ND: International Association for Impact Assessment. 2015. [http://www.iaia.org/uploads/pdf/SIA\\_Guidance\\_Document\\_IAIA.pdf](http://www.iaia.org/uploads/pdf/SIA_Guidance_Document_IAIA.pdf)
- T23. de Leeuw E. Engagement of Sectors Other than Health in Integrated Health Governance, Policy, and Action. *Annual Review of Public Health* 2017; **38**(1): 329-49. <http://dx.doi.org/10.1146/annurev-publhealth-031816-044309>
- T24. Leppo K, Ollila E, Peña S, Wismar M, Cook S. Lessons for policy-makers. In: Leppo K, Ollila E, Peña S, Wismar M, Cook S, eds. Health in all policies: seizing opportunities, implementing policies. Finland: Ministry of Social Affairs and Health; 2013: 325-37. <https://bit.ly/3iknLSx>
- T25. McIntyre D, Mooney G, editors. The Economics of Health Equity. Cambridge: Cambridge University Press; 2007. <https://www.cambridge.org/core/books/economics-of-health-equity/B454135BC2BC01805AF432DBF5400FB4>

- T26. de Leeuw E. Cities and Health from the Neolithic to the Anthropocene. In: de Leeuw E, Simos J, eds. *Healthy Cities The Theory, Policy, and Practice of Value-Based Urban Planning*. New York: Springer; 2017: 3-30. [https://link.springer.com/chapter/10.1007/978-1-4939-6694-3\\_1](https://link.springer.com/chapter/10.1007/978-1-4939-6694-3_1)
- T27. United Nations. The Universal Declaration of Human Rights. 1948. <https://www.un.org/en/about-us/universal-declaration-of-human-rights>
- T28. United Nations. International Covenant on Economic, Social and Cultural Rights. 1967. [https://treaties.un.org/pages/ViewDetails.aspx?src=IND&mtdsg\\_no=IV-3&chapter=4&clang=\\_en](https://treaties.un.org/pages/ViewDetails.aspx?src=IND&mtdsg_no=IV-3&chapter=4&clang=_en)
- T29. Committee on Economic, Social and Cultural Rights,. Twenty-second session. Agenda item 3. Substantive issues arising in the implementation of the International Covenant on Economic, Social and Cultural Rights. General Comment No. 14 (2000). The right to the highest attainable standard of health (article 12 of the International Covenant on Economic, Social and Cultural Rights). Geneva: United Nations. 2000. <https://bit.ly/3ma7Yqr>
- T30. United Nations. Sustainable Development Goals. 2015. <https://sustainabledevelopment.un.org/?menu=1300>
- T31. United Nations. The Sustainable Development Agenda. Accessed 2021. <https://www.un.org/sustainabledevelopment/development-agenda/>
- T32. HM Government of Great Britain & Northern Ireland. Corporate report: Implementing the Sustainable Development Goals. 2019. Accessed 2020. <https://www.gov.uk/government/publications/implementing-the-sustainable-development-goals/implementing-the-sustainable-development-goals--2>
- T33. Government of Ireland. The Sustainable Development Goals National Implementation Plan 2018-2020. Dublin. 2018. <https://www.gov.ie/en/publication/7cde9f-the-sustainable-development-goals-national-implementation-plan-2018-/>
- T34. World Health Organization. Working towards achieving the Sustainable Development Goals: a WHO toolkit. Geneva: World Health Organization. 2018. <https://apps.who.int/iris/handle/10665/274261>
- T35. Green L, Gray BJ, Ashton K. Using health impact assessments to implement the sustainable development goals in practice: a case study in Wales. *Impact Assessment and Project Appraisal* 2019: 1-11. <http://dx.doi.org/10.1080/14615517.2019.1678968>
- T36. World Health Organization Regional Office for Europe. Advancing public health for sustainable development in the WHO European Region. Copenhagen, Denmark. 2018. <https://www.euro.who.int/en/about-us/governance/regional-committee-for-europe/past-sessions/68th-session/documentation/background-documents/advancing-public-health-for-sustainable-development-in-the-who-european-region>
- T37. Menne B, et al. Health and well-being for all: an approach to accelerating progress to achieve the Sustainable Development Goals (SDGs) in countries in the WHO European Region. *European Journal of Public Health* 2020; **30**(Supplement\_1): i3-i9. <http://dx.doi.org/10.1093/eurpub/ckaa026>

- T38. Pan-European Commission on Health and Sustainable Development. Rethinking policy priorities in the light of pandemics: a call to action. Copenhagen, Denmark, World Health Organization Regional Office for Europe. 2021. <https://www.euro.who.int/en/health-topics/health-policy/european-programme-of-work/pan-european-commission-on-health-and-sustainable-development/rethinking-policy-priorities-in-the-light-of-pandemics-a-call-to-action/rethinking-policy-priorities-in-the-light-of-pandemics-a-call-to-action>
- T39. King LJ, et al. Executive summary of the AVMA One Health Initiative Task Force report. *Journal of the American Veterinary Medical Association* 2008; **233**(2): 259-61. <http://dx.doi.org/10.2460/javma.233.2.259>
- T40. Delgado C, Rosegrant M, Steinfeld H, Ehui S, Courbois C. Livestock to 2020: the next food revolution. Washington, DC: International Food Policy Research Institute,. 1999. <https://idl-bnc-idrc.dspacedirect.org/bitstream/handle/10625/30755/121863.pdf?sequence=1>
- T41. Torrey EF, Yolken RH. *Beasts of the Earth: Animals, Humans, and Disease*: Rutgers University Press; 2005. <https://www.jstor.org/stable/j.ctt5hnx6j>
- T42. Taylor LH, Latham SM, Woolhouse ME. Risk factors for human disease emergence. *Philos Trans R Soc Lond B Biol Sci* 2001; **356**(1411): 983-9. <http://dx.doi.org/10.1098/rstb.2001.0888>
- T43. Food and Agriculture Organization, World Organisation for Animal Health (OIE), World Health Organization. The FAO-OIE-WHO Collaboration - Sharing Responsibilities and Coordinating Global Activities to Address Health Risks at the Animal-Human-Ecosystems Interfaces - A Tripartite Concept Note. 2010. [https://www.oie.int/fileadmin/Home/eng/Current\\_Scientific\\_Issues/docs/pdf/FINAL\\_CONCEPT\\_NOTE\\_Hanoi.pdf](https://www.oie.int/fileadmin/Home/eng/Current_Scientific_Issues/docs/pdf/FINAL_CONCEPT_NOTE_Hanoi.pdf)
- T44. Birley M, Peralta G. *Health Impact Assessment: A Good Practice Sourcebook*. Manila, Philippines: Asian Development Bank,. 2018. <http://dx.doi.org/10.22617/TIM189515-2>
- T45. IOGP, IPIECA. *Health impact assessment: a guide for the oil and gas industry*. International Association of Oil and Gas Producers and International Petroleum Industry Environmental Conservation Association,. 2016. <https://www.ipieca.org/resources/good-practice/health-impact-assessment-a-guide-for-the-oil-and-gas-industry/>
- T46. Humboldt-Dachroeden S, Rubin O, Sylvester Frid-Nielsen S. The state of One Health research across disciplines and sectors – a bibliometric analysis. *One Health* 2020; **10**: 100146. <http://dx.doi.org/10.1016/j.onehlt.2020.100146>
- T47. Brand C, et al. The climate change mitigation effects of daily active travel in cities. *Transportation Research Part D: Transport and Environment* 2021; **93**: 102764. <http://dx.doi.org/10.1016/j.trd.2021.102764>
- T48. Haines A, et al. Public health benefits of strategies to reduce greenhouse-gas emissions: overview and implications for policy makers. *Lancet* 2009; **347**(9707): 2104-14. [http://dx.doi.org/10.1016/S0140-6736\(09\)61759-1](http://dx.doi.org/10.1016/S0140-6736(09)61759-1)



- T49. Patz JA, Frumkin H, Holloway T, Vimont DJ, Haines A. Climate change: challenges and opportunities for global health. *JAMA* 2014; **312**(15): 1565-80. <http://dx.doi.org/10.1001/jama.2014.13186>
- T50. Woodcock J, et al. Public health benefits of strategies to reduce greenhouse-gas emissions: urban land transport. *The Lancet* 2009; **374**(9705): 1930-43. [http://dx.doi.org/10.1016/S0140-6736\(09\)61714-1](http://dx.doi.org/10.1016/S0140-6736(09)61714-1)
- T51. Wilkinson P, et al. Public health benefits of strategies to reduce greenhouse-gas emissions: household energy. *The Lancet* 2009; **374**(9705): 1917-29. [http://dx.doi.org/10.1016/S0140-6736\(09\)61713-X](http://dx.doi.org/10.1016/S0140-6736(09)61713-X)
- T52. Markandya A, et al. Public health benefits of strategies to reduce greenhouse-gas emissions: low-carbon electricity generation. *Lancet* 2009; **374**(9706): 2006-15. [http://dx.doi.org/10.1016/S0140-6736\(09\)61715-3](http://dx.doi.org/10.1016/S0140-6736(09)61715-3)
- T53. United Nations. Transforming our world: the 2030 Agenda for Sustainable Development. 2015. <https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf>
- T54. Pongsiri MJ, et al. Planetary health: from concept to decisive action. *Lancet Planet Health* 2019; **3**(10): e402-e4. [http://dx.doi.org/10.1016/S2542-5196\(19\)30190-1](http://dx.doi.org/10.1016/S2542-5196(19)30190-1)
- T55. Government of Ireland. S.I. No. 435/2004 - European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004. 2004. <http://www.irishstatutebook.ie/eli/2004/si/435/made/en/print>
- T56. HM Government of Great Britain & Northern Ireland. The Environmental Assessment of Plans and Programmes Regulations (Northern Ireland) 2004. 2004. <https://www.legislation.gov.uk/nisr/2004/280/contents/made>
- T57. Office of the Deputy Prime Minister. A practical guide to the Strategic Environmental Assessment Directive. Practical guidance on applying Directive 2001/42/EC "on the assessment of the effects of certain plans and programmes on the environment". London, England: Scottish Executive, Welsh Assembly Government, Department of the Environment, Northern Ireland, Office of the Deputy Prime Minister. 2005. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/7657/practicalguidesea.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/7657/practicalguidesea.pdf)
- T58. United Nations Economic Commission for Europe. Draft guidance on assessing health impacts in strategic environmental assessment. Geneva: UNECE. 2020. [https://www.unece.org/fileadmin/DAM/env/eia/documents/WG.9\\_2020/Final\\_documents/2004508E.pdf](https://www.unece.org/fileadmin/DAM/env/eia/documents/WG.9_2020/Final_documents/2004508E.pdf)
- T59. Council of the European Communities. Council Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment. *Official Journal of the European Union*, 1985; **L 175**: 40-8. <http://data.europa.eu/eli/dir/1985/337/oj>
- T60. HM Government of Great Britain & Northern Ireland. The Planning (Environmental Impact Assessment) Regulations (Northern Ireland). 2017. <https://www.legislation.gov.uk/nisr/2017/83/made>

- T61. Government of Ireland. S.I. No. 296/2018 - European Union (Planning and Development) (Environmental Impact Assessment) Regulations. 2018. <https://www.irishstatutebook.ie/eli/2018/si/296/made/en/print>
- T62. Government of Ireland. Poverty Impact Assessment (PIA). Accessed 2021. <https://www.gov.ie/en/collection/002bfd-impact-assessment/#poverty-impact-assessment-pia>
- T63. Department of the Taoiseach. Cabinet Handbook. Dublin. 2006. [https://govacc.per.gov.ie/wp-content/uploads/Revised\\_RIA\\_Guidelines\\_June\\_2009.pdf](https://govacc.per.gov.ie/wp-content/uploads/Revised_RIA_Guidelines_June_2009.pdf)
- T64. Government of Ireland. Impact Assessment. 2020. <https://www.gov.ie/en/collection/002bfd-impact-assessment/>
- T65. Office for Social Inclusion. Guidelines for Poverty Impact Assessment. 2008. [http://www.socialinclusion.ie/documents/PIAGuidelineswithnewEU-SILCfigures\\_000.pdf](http://www.socialinclusion.ie/documents/PIAGuidelineswithnewEU-SILCfigures_000.pdf)
- T66. Irish Human Rights and Equality Commission. Implementing the Public Sector Equality and Human Rights Duty. 2019. [https://www.ihrec.ie/app/uploads/2019/03/IHREC\\_Public\\_Sector\\_Duty\\_Final\\_Eng\\_WEB.pdf](https://www.ihrec.ie/app/uploads/2019/03/IHREC_Public_Sector_Duty_Final_Eng_WEB.pdf)
- T67. Irish Human Rights and Equality Commission. 7 Steps Towards Human Rights and Equality in the Workplace. A Framework for Building a Culture of Equality and Human Rights in the Workplace. Accessed 2021. <https://www.ihrec.ie/guides-and-tools/human-rights-and-equality-for-employers/building-a-culture-of-human-rights-and-equality-in-the-workplace/>
- T68. Northern Ireland Civil Service, Northern Ireland Human Rights Commission. NICS Human Rights Impact Assessment Proforma. 2021. Accessed 2021. <https://nicshumanrightsguide.com/tools-resources/hriaproforma>
- T69. Government of Ireland. Irish Human Rights and Equality Commission Act 2014. 2014. <http://www.irishstatutebook.ie/eli/2014/act/25/enacted/en/html>
- T70. Northern Ireland Executive Office. Human Rights Impact Assessment proforma. 2006. <https://www.executiveoffice-ni.gov.uk/publications/human-rights-impact-assessment-proforma>
- T71. Northern Ireland Executive Office. Human rights and public authorities. Accessed 2021. <https://www.executiveoffice-ni.gov.uk/articles/human-rights-and-public-authorities>
- T72. Government of Ireland. European Convention on Human Rights Act. 2003. <http://www.irishstatutebook.ie/eli/2003/act/20/enacted/en/print.html>
- T73. European Court of Human Rights. European Convention on Human Rights, as amended by the protocols. 2010. <https://www.echr.coe.int/pages/home.aspx?p=basictexts>
- T74. House of Commons Library. How might Brexit affect human rights in the UK? 2019. Accessed 2021. <https://commonslibrary.parliament.uk/how-might-brexit-affect-human-rights-in-the-uk/>
- T75. Irish Human Rights and Equality Commission. Assisting the Effective Implementation of the Public Sector Equality and Human Rights Duty, Tool for an evidence-based assessment of equality and human rights issues. 2020. <https://www.ihrec.ie/app/uploads/2020/09/IHREC-Tool-for-an-Evidence-Based-Assessment-of-Equality-and-Human-Rights-Issues.pdf>

- T76. HM Government of Great Britain & Northern Ireland. Human Rights Act. 1988. <https://www.legislation.gov.uk/ukpga/1998/42/contents>
- T77. Irish Human Rights and Equality Commission. Human Rights Explained: guide to human rights law. Dublin. 2015. [https://www.ihrec.ie/download/pdf/ihrec\\_human\\_rights\\_explained.pdf](https://www.ihrec.ie/download/pdf/ihrec_human_rights_explained.pdf)
- T78. Equality Commission for Northern Ireland. Practical guidance on Equality Impact Assessment. 2005. [https://www.equalityni.org/ECNI/media/ECNI/Publications/Employers%20and%20Service%20Providers/Public%20Authorities/EQIA-PracticalGuidance\(2005\).pdf](https://www.equalityni.org/ECNI/media/ECNI/Publications/Employers%20and%20Service%20Providers/Public%20Authorities/EQIA-PracticalGuidance(2005).pdf)
- T79. Irish Human Rights and Equality Commission. Equal Status Acts. 2000-2018. Accessed 2020. <https://www.ihrec.ie/guides-and-tools/human-rights-and-equality-in-the-provision-of-good-and-services/what-does-the-law-say/equal-status-acts/#:~:text=The%20Equal%20Status%20Acts%202000,membership%20of%20the%20Traveller%20community.>
- T80. HM Government of Great Britain & Northern Ireland. Northern Ireland Act. 1998. <https://www.legislation.gov.uk/ukpga/1998/47/contents>
- T81. DAERA. Thinking rural: the essential guide to rural proofing. Department of Agriculture, Environment and Rural Affairs. 2015. <https://www.daera-ni.gov.uk/publications/thinking-rural-essential-guide-rural-proofing>
- T82. Government of Ireland. Equal Status Act. 2000. <http://www.irishstatutebook.ie/eli/2000/act/8/enacted/en/html>
- T83. Irish Human Rights and Equality Commission. The Employment Equality Acts 1998-2015 – A Summary. Accessed 2021. <https://www.ihrec.ie/guides-and-tools/human-rights-and-equality-for-employers/what-does-the-law-say/eea-summary/>
- T84. Government of Ireland. Employment Equality Act. 1998. <https://www.irishstatutebook.ie/eli/1998/act/21/enacted/en/html>
- T85. HM Government of Great Britain & Northern Ireland. The Northern Ireland Protocol. 2020. <https://www.gov.uk/government/publications/the-northern-ireland-protocol>
- T86. Equality Commission for Northern Ireland. Protection of Equality and Human Rights After Brexit. 2021. Accessed 2021. <https://www.equalityni.org/Footer-Links/News/Delivering-Equality/Equality-and-Human-Rights-after-Brexit>
- T87. Department of the Taoiseach. Revised RIA Guidelines, How to conduct a Regulatory Impact Assessment. Dublin. 2009. [https://www.gov.br/casacivil/pt-br/assuntos/governanca/regulacao/documentos/guias-de-air/ireland-revised\\_ria\\_guidelines\\_june\\_2009.pdf](https://www.gov.br/casacivil/pt-br/assuntos/governanca/regulacao/documentos/guias-de-air/ireland-revised_ria_guidelines_june_2009.pdf)
- T88. Department for the Economy. Regulatory impact assessment (RIA) guidance. Accessed 2021. <https://www.economy-ni.gov.uk/articles/regulatory-impact-assessment-ria-guidance>
- T89. Department for the Economy. Regulatory impact assessment guidance. Belfast. 2019. <https://www.economy-ni.gov.uk/publications/regulatory-impact-assessment-guidance>
- T90. Government of Ireland. Quality and Fairness - A Health System For You. Dublin: Department of Children and Health. 2001. <https://www.gov.ie/en/publication/7c86d7-quality-and-fairness-a-health-system-for-you/>

- T91. Northern Ireland Executive Office. Effective Policy Making - Workbook Four - A Practical Guide to Impact Assessment. 2008. <https://www.executiveoffice-ni.gov.uk/publications/effective-policy-making-workbook-four-practical-guide-impact-assessment>
- T92. Government of Ireland. Social Impact Assessment (SIA). Accessed 2021. <https://www.gov.ie/en/collection/002bfd-impact-assessment/#social-impact-assessment-sia>
- T93. Department of Public Expenditure and Reform, Department of Health. Social Impact Assessment. 2019. <https://www.gov.ie/en/policy-information/615fe5-social-impact-assessment-framework/>
- T94. Department of Health. Healthy Ireland Framework. A framework for improved health and wellbeing 2013-2025. Government of Ireland. 2013. <https://assets.gov.ie/7555/62842eef4b13413494b13340fff9077d.pdf>
- T95. den Broeder L, Vanclay F. Health in SIA. In: Fehr R, Viliani F, Nowacki J, Martuzzi M, eds. Health in impact assessments: opportunities not to be missed. Copenhagen, Denmark: World Health Organization Regional Office for Europe; 2014: pp 69-88. <http://www.euro.who.int/en/health-topics/environment-and-health/health-impact-assessment/publications/2014/health-in-impact-assessments-opportunities-not-to-be-missed>
- T96. Islands of Innovation. Innovation Policies for Sustainable European Islands. 2021. <https://www.interregeurope.eu/islandsofinnovation/>
- T97. Government of Ireland. Our Rural Future - Rural Development Policy 2021-2025. 2021. <https://www.gov.ie/en/publication/4c236-our-rural-future-vision-and-policy-context/>
- T98. Northern Ireland Department for Regional Development. Regional Development Strategy (RDS) 2035. London: Crown. 2010. <https://www.infrastructure-ni.gov.uk/publications/regional-development-strategy-2035>
- T99. Scottish Government. Islands (Scotland) Act. 2018. <https://www.legislation.gov.uk/asp/2018/12>
- T100. Scottish Government. Island Communities Impact Assessments: guidance and toolkit. 2020. <https://www.gov.scot/publications/island-communities-impact-assessments-guidance-toolkit/>
- T101. Environmental Protection Agency. Draft 'Guidelines on the information to be contained in Environmental Impact Assessment Reports'. County Wexford, Ireland. 2017. [https://www.epa.ie/publications/monitoring--assessment/assessment/EPA\\_EIAR\\_Guidelines.pdf](https://www.epa.ie/publications/monitoring--assessment/assessment/EPA_EIAR_Guidelines.pdf)
- T102. European Commission. Implementation of Directive 2001/42 on the assessment of the effects of certain plans and programmes on the environment. 2004. [https://ec.europa.eu/environment/archives/eia/pdf/030923\\_sea\\_guidance.pdf](https://ec.europa.eu/environment/archives/eia/pdf/030923_sea_guidance.pdf)
- T103. Government of Ireland. Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment. Prepared by the Department of Housing, Planning and Local Government. 2018. <https://www.gov.ie/en/publication/53aee9-guidelines-for-planning-authorities-and-an-bord-pleanala-on-carrying/>

- T104. Cave B, Pyper R, Fischer-Bonde B, Humboldt-Dachroeden S, Martin-Olmedo P. Lessons from an International Initiative to Set and Share Good Practice on Human Health in Environmental Impact Assessment. *International Journal of Environmental Research and Public Health* 2021; **18**(4). <http://dx.doi.org/10.3390/ijerph18041392>
- T105. O'Mullane M. Health Impact Assessment and policy development: Republic of Ireland and Northern Ireland: Manchester University Press; 2015. <http://dx.doi.org/10.7228/manchester/9780719091933.001.0001>
- T106. Cynulliad Cenediaethol Cymru. Public Health (Wales) Act. Cardiff; 2017. [www.legislation.gov.uk/anaw/2017/2/contents/enacted](http://www.legislation.gov.uk/anaw/2017/2/contents/enacted)
- T107. Walpita YN, Green L. Health Impact Assessment (HIA): A Comparative Case Study of Sri Lanka and Wales: What Can a Developing Country Learn From the Welsh HIA System? *Int J Health Serv* 2020: 20731420941454. <http://dx.doi.org/10.1177/0020731420941454>
- T108. Cynulliad Cenediaethol Cymru. The Well-being of Future Generations (Wales) Act. Cardiff; 2015. [www.legislation.gov.uk/anaw/2015/2/contents/enacted](http://www.legislation.gov.uk/anaw/2015/2/contents/enacted)
- T109. World Health Organization. Communicating the economics of social determinants of health and health inequalities. Geneva. 2013. <https://www.who.int/publications/item/9789241505536>
- T110. Public Health England. Guide for local authority public health and planning teams to improve the use of HIAs in spatial planning London. 2020. <https://www.gov.uk/government/publications/health-impact-assessment-in-spatial-planning>
- T111. Chang M. Delivering sustainable healthy homes and communities in Northern Ireland. Town and Country Planning Association with Healthy Cities Belfast for the Northern Ireland Housing Executive. 2016. <https://www.nihe.gov.uk/Documents/Research/Health-and-welfare/delivering-sustainable-healthy-homes.aspx?ext=>
- T112. Environmental Protection Agency. State of Environment Report. 2020. Ireland's Environment. An Integrated Assessment. Co. Wexford, Ireland. 2020. <https://www.epa.ie/our-services/monitoring--assessment/assessment/irelands-environment/state-of-environment-report/>
- T113. von Schirnding Y. Health in Sustainable Development Planning: the role of indicators; 2002. <https://apps.who.int/iris/handle/10665/67391>
- T114. Corvalán C. Linkage methods for environment and health analysis: technical guidelines. A report of the health and environment analysis for decision-making (HEADLAMP) Project. Geneva: United Nations Environment Programme, United States Environmental Protection Agency, World Health Organization, 1996. [http://whqlibdoc.who.int/hq/1997/WHO\\_EHG\\_97.11.pdf](http://whqlibdoc.who.int/hq/1997/WHO_EHG_97.11.pdf)
- T115. Reis S, et al. Integrating health and environmental impact analysis. *Public Health* 2015; **129**(10): 1383-9. <http://dx.doi.org/10.1016/j.puhe.2013.07.006>
- T116. Nowacki J. The integration of health into environmental assessments - with a special focus on strategic environmental assessment. [Dissertation at the University Bielefeld, Germany]. Copenhagen: WHO Regional Office for Europe. 2018. <https://www.euro.who.int/en/health-topics/environment-and-health/health-impact-assessment/publications/2018/the-integration-of-health-into-environmental-assessments-with-a-special-focus-on-strategic-environmental-assessment-2018>

- T117. ICMM. Good practice guidance on Health Impact Assessment. London, UK: International Council on Mining & Metals. 2010. <http://www.icmm.com/en-gb/guidance/health-safety/guidance-hia>
- T118. McCallum LC, Ollson CA, Stefanovic IL. An adaptable Health Impact Assessment (HIA) framework for assessing health within Environmental Assessment (EA): Canadian context, international application. *Impact Assessment and Project Appraisal* 2018; **36**(1): 5-15. <http://dx.doi.org/10.1080/14615517.2017.1364026>
- T119. Ehrlich A, Ross W. The significance spectrum and EIA significance determinations. *Impact Assessment and Project Appraisal* 2015; **33**(2): 87-97. <http://dx.doi.org/10.1080/14615517.2014.981023>
- T120. European Parliament, Council of the European Union. Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe. 2008. <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32008L0050:EN:NOT>
- T121. Government of Ireland. S.I. No. 180/2011 - Air Quality Standards Regulations 2011. 2011. <http://www.irishstatutebook.ie/eli/2011/si/180/made/en/print>
- T122. HM Government of Great Britain & Northern Ireland. The Air Quality Standards Regulations (Northern Ireland). 2010. <http://www.legislation.gov.uk/nisr/2010/188/made>
- T123. Franklin P, Greer SL, Falkenbach M. Policy coherence as a driver of health equity. Copenhagen, World Health Organization Regional Office for Europe. 2019. <https://apps.who.int/iris/bitstream/handle/10665/324736/9789289054119-eng.pdf?sequence=1&isAllowed=y>
- T124. Bauer GR. Incorporating intersectionality theory into population health research methodology: Challenges and the potential to advance health equity. *Social Science & Medicine* 2014; **110**: 10-7. <http://dx.doi.org/10.1016/j.socscimed.2014.03.022>
- T125. Hankivsky O, et al. An intersectionality-based policy analysis framework: critical reflections on a methodology for advancing equity. *Int J Equity Health* 2014; **13**: 119. <http://dx.doi.org/10.1186/s12939-014-0119-x>
- T126. Knight EK. Shifting public health practice to advance health equity: recommendations from experts and community leaders. *J Public Health Manag Pract* 2014; **20**(2): 188-96. <http://dx.doi.org/10.1097/PHH.0b013e31829959fb>
- T127. Boyce T, Brown C. Engagement and participation for health equity. Copenhagen: WHO Regional Office for Europe. 2017. \_
- T128. South J. A guide to community-centred approaches for health and wellbeing. Full report. London: Public Health England. 2015. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/768979/A\\_guide\\_to\\_community-centred\\_approaches\\_for\\_health\\_and\\_wellbeing\\_full\\_report.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/768979/A_guide_to_community-centred_approaches_for_health_and_wellbeing_full_report.pdf)









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