What is Health Impact Assessment (HiA)?

Health Impact Assessment (HIA) is a “combination of procedures, methods, and tools by which a policy, program, or project may be judged as to its potential effects on the health of a population, and the distribution of those effects within the population” (Gothenburg consensus paper, WHO, 1999).

HIA is a “means of assessing the health impacts of policies, plans and projects in diverse economic sectors using quantitative, qualitative and participatory techniques” (WHO, 2010, para.2). It aims to avoid the transfer of hidden health costs and to “promote multi sector responsibility for health and wellbeing” (Quigley, den Broeder, Furu, Bond, Cave & Bos, 2006, p1) and relies on “understanding causal links so as to predict the consequences of proposed actions” (Kemm, 2003, p. 387).

HIA is a “formal process that aims to ensure public policies, programmes and plans enhance the potentially beneficial effects on health and wellbeing and reduce or mitigate the potential harm with innovative solutions” (Public Health Advisory Committee [PHAC], 2007, p.6).

What are the Health Impact Assessment (HIA) guiding principles?

The HIA principles include:

- Participation of decision makers and affected communities
- Equity (desire to reduce inequity in health determinants)
- Broad definition of health (wider determinants considered)
- Treaty of Waitangi
- Commitment to sustainable development (focus on future generations)
- Ethical use of evidence (best available and from different disciplines) (PHAC, 2007, p.33-34).

Why is HIA so important?

The main purpose of HIA is to enhance the policy making process, by “improving knowledge about the potential impact of a policy or programme” (Parry & Stevens, 2006).

HIA is important as it can:

- place public health on the agenda of “many different agencies and individuals and increases awareness of what determines health status” (Quigley et al., 2006, p.2)
- improve collaboration between different sectors and organisations (PHAC, 2007, p.6)
- influence decisions in policy fields other than health which seldom take health impacts into consideration (Puska, 2007, p.328)
- prevent health damage and enhance opportunities for health improvement (Quigley et al., 2006, p.4)
- identify health inequalities that may arise from a proposal (Quigley et al., 2006, p. 1)
- increase community participation, and is an effective way of promoting community wellbeing across sectors (PHAC, 2007, p.6)
- include local knowledge and experience which contributes to decision making processes (Lester & Temple, 2006, p.915)
- produce evidence based recommendations to adjust policies, programmes and projects to maximize health gain and reduce health inequality in exposure to health risk (Elliot & Williams, 2004, p.2)

For Agencies and Policy / Decision Makers

HIA assists “agencies to fulfil statutory obligations for community health and wellbeing, for example under the Local Government Act 2002, the Land Transport Management Act 2003 and the Building Act 2004. It also has strong links with sustainable development goals” (PHAC, 2007, p.6).

HIA helps policy makers “foresee how different options will affect health and so takes the health
consequences into account when choosing between options” (Stahl, Wismar, Ollila, Lahtinen & Leppo, 2006, p. 189).

HIA aims to have health considered in all policies (Kang, Jin Park, Eun Kim, 2011, p.201).

Quite simply, HIA considerations create better policy. Policies that consider health impacts are likely to be of high quality.

**For Communities**

HIA brings together evidence in the form of the “published academic literature on potential health impacts, local data and statistics as well as the lived experiences and aspirations of the communities that are the focus of the HIA” (Field, Arcus & Tunks, 2011, p.1).

In other words, HIA encourages more community involvement and more civic intelligence is developed (Schuler, as cited in Elliot & Williams, 2004, p. 232) which makes for horizontal relationships (not vertical) so that players share a common arena for collective decision making (Elliot & Williams, 2004, p. 242).

**What are the different types of Health Impact Assessments?**

Desktop and rapid HIA’s can be completed in a few days or weeks while comprehensive HIA’s may require months. The decision to conduct a rapid or a comprehensive HIA is often determined by available time and resources (Center for Disease Control and Prevention, 2011, para 5).

Often rapid appraisals are carried out as part of initial screening to ascertain if a more in depth or comprehensive assessment is needed (Chilaka, 2010, p. 118). Rapid HIA’s are also the most frequent in practice because they require less extensive resources” (Kang et al., 2011, p.203).

HIA’s have also been classified into “prospective (before execution), concurrent (during execution) and retrospective assessment (after the project has been implemented)” (Kemm, Perry & Palmer, 2004 as cited in Chilaka, 2010, p.119).

**What are the steps in a HIA?**

The main steps in a HIA are:

- **Screening** – to determine if an HIA is the best way to ensure health and equity issues are addressed effectively in the proposal
- **Scoping** – to establish the boundaries of the HIA incl. the focus of the HIA by identifying relevant determinants of health, develop a project plan.
- **Appraisal** – collect and analyse a range of quantitative and qualitative evidence for potential impacts of health and equity. Public engagement and dialogue is part of this stage. (Quigley et al, 2006, p.3)
- **Reporting with recommendations** – To bring together the information into a set of recommendations based on the best available evidence for decision makers.
- **Ongoing monitoring and evaluation** – To assess the development of the proposal and the influence and benefit of the HIA. (Adapted from the Health Development Agency 2002 as cited in PHAC, 2007, p.13).

**How are the determinants of health linked?**

HIA reviews the pathways of how the determinants of health may be affected by a proposed policy, programme or project (Quigley et al., 2006, p.2). The process focuses on outcomes (PHAC, 2007, p.6) and multiple layers of activity as outlined in Figure 1.

**Figure 1: Factors or determinants that affect our health and wellbeing**

Source: (Barton & Grant, 2006,p.252).
HIA identifies direct health impacts, for example, increased traffic causing increased traffic injuries. It also identifies indirect health impacts, such as the effect on health and wellbeing of the cost of high housing rentals. HIA first identifies the potential impacts of a policy on these health influences (determinants of health) (PHAC, 2007, p.11) as in Table 1.

Table 1: Categories and examples of health determinants

<table>
<thead>
<tr>
<th>Categories of determinants of health</th>
<th>Examples of specific health determinants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social and cultural factors</td>
<td>Social networks, family connections, racism, cultural and spiritual participation, perception of safety</td>
</tr>
<tr>
<td>Economic factors</td>
<td>Income level, affordability of housing, access to employment</td>
</tr>
<tr>
<td>Environmental factors</td>
<td>Housing conditions and location, waste disposal, urban design, noise, transmission of infectious diseases e.g., exposure to pathogens</td>
</tr>
<tr>
<td>Population-based services</td>
<td>Access to quality education, housing, public transport, health care, disability support, childcare</td>
</tr>
<tr>
<td>Individual/behavioural factors (these are affected by all of the above)</td>
<td>Personal behaviours (e.g., smoking, physical activity, nutrition, alcohol and drug use), personal safety, employment status, educational attainment, stress levels</td>
</tr>
<tr>
<td>Biological factors (unlikely to be affected by policy)</td>
<td>Biological age, genetics</td>
</tr>
</tbody>
</table>

Is there a concrete example such as how Transport Planning and Health are linked?

Dr Alistair Humphrey, Canterbury Medical Officer of Health, presented this HIA information to the Canterbury Regional Transport Committee in August 2010. This is extracted from his talk.

From Lack of Active Transport to Renal Failure

The causal relationships or pathway between transport interventions and health outcomes from increased physical activity is simply illustrated in Figure 2.

Figure 2: From Lack of Active Transport to Renal Failure

Cautionary Note: In drafting this causal pathway it is acknowledged that there are many interrelated factors that determine an individual's health. The point of this pathway is to demonstrate a logical link between a health outcome and physical activity. (Alison Bourn)
What is an example of health impacts e.g. associated with housing?

Health impacts are the health consequences of particular actions. They can be beneficial (positive) or harmful (negative) (PHAC, 2007, p.7). For example, the health impacts or consequences from poor or inadequate housing (the social determinant of health) conditions include:

- **Dampness and cold.** Older housing tends to be damp and cold, not insulated and without central heating systems. Children and adults living in such conditions have a higher risk of developing respiratory conditions.

- **Overcrowding in housing.** This is associated with increased risk of infectious diseases, such as meningococcal disease, tuberculosis and rheumatic fever, as well as with stress.

- **High housing costs.** This can negatively affect health by reducing the amount households can spend on healthy food and heating.

- **Poor indoor air quality.** Known aggravators include second-hand tobacco smoke, nitrogen dioxide (from gas cookers and unflued heaters) toxic moulds, and dust mites. This can improve or aggravate respiratory conditions, allergic reactions and toxic reactions.

- **Ambient outdoor air quality.** This is affected by emissions from domestic home heating. Ambient outdoor air quality can lead to increases in hospital admissions and deaths.

- **Community and neighbourhood safety.** People’s sense of their safety can have a large impact on their mental health and wellbeing.

- **Housing improvements.** These include better insulation and heating systems. Improvements can reduce the incidence of respiratory conditions and consequent hospitalisations. (Adapted from PHAC, 2007, p.7-8).

What are some of the challenges for HIA work?

- The lack of capacity and people with the ability or willingness to undertake HIA is a barrier to its use in most places (Stahl et al., 2006).

- The lack of availability of resources - time, expertise, data availability, finances, which all influence the quality of the HIA (Morgan, 2009, p.820).

- The results of the HIA are heavily dependent on the robustness of the assumptions (Morgan, 2009, p.820) made at the beginning of the HIA.

What is the relationship between HIA and Health in All Policies?

Health Impact Assessment (HIA) is a tool to meet Health in All Policies (HiAP) goals (Bidwell, 2011, p.4) and prompts policy makers to make necessary modifications or policy improvements (Stahl et al., 2006, p. 194).

It is difficult to “see how Health in All Policies could become a reality without HIA or a similar approach” (Stahl et al., 2006, p.204).

In effect, the HIA systematic processes which explore the probable health consequences of different policy options are useful tools for all policymakers.

**In summary, HIA is a practical aid that is:**

- **based on evidence**
- **focused on outcomes** and
- **encourages collaboration** between a range of stakeholders (PHAC, 2005, p.3)

The “ultimate test of an HIA is whether not it effectively informed and influenced decision making for the benefit of population wellbeing” (Ball, 2011, p.16).

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References


Other Information Sheets in this Canterbury Health in All Policies Partnership (CHIAPP) 2012 series:

CHIAPP Information Sheet 1: Background Information on Health in All Policies (HiAP) (March, 2012)

CHIAPP Information Sheet 2: Background Information on Health Impact Assessment (HIA) (March, 2012)

CHIAPP Information Sheet 3: International Literature on Health in All Policies (HiAP) and Health Impact Assessment (HIA) activity (March, 2012)

CHIAPP Information Sheet 4: New Zealand examples of Health Impact Assessment (HIA) activity (March, 2012)

CHIAPP Information Sheet 5: Best Practice Guidelines for Collaborative working (March, 2012)


CHIAPP Information Sheet 7: Other HiAP Best Practice Guidelines (March, 2012)

CHIAPP Information Sheet 8: Impact of Canterbury earthquakes on the work of CHIAPP (March, 2012)

CHIAPP Information Sheet 9: Lessons Learnt and Optimum Ways of Working Collaboratively with HiAP / HIA (March, 2012)