HIA Screening, Scoping and Assessment

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Screening for HIA

Screening is the first and most fundamental step of the assessment process. It should always be applied irrespective of the policy, program or project to be evaluated.
Screening determines whether...

1) An HIA is feasible and likely to yield useful information.

2) It is not necessary to conduct an HIA but recommendations can be made on how negative health impacts can be ameliorated.

3) It is not yet possible to decide one way or the other, due to inadequate information. The screening process should be repeated after obtaining further information.
Screening Criteria

◆ Significance: Likelihood of significant health impacts
  (see Training manual)

◆ Value
  – Added value of HIA to policy-making process
  – Valuation of added information
  – Impact of added information

◆ Evidence

◆ State of current knowledge

◆ Data availability

◆ Feasibility: Available resources to conduct HIA (time, $, personnel)
Screening algorithm

1. Significant health impacts?
   - Yes or Uncertain → 2
   - No → 4

2. Potentially unfamiliar info.?
   - Yes or Uncertain → 3
   - No → 4

3. Results likely to be valued?
   - Yes or Uncertain → 5
   - No → 4

4. No → 6

5. Sufficient data?
   - Yes or Uncertain → 6
   - Yes → 9
   - No → 5

6. Sufficient resources?
   - Yes or Uncertain → 6
   - Yes → 9
   - No → 5

7. Worthwhile?
   - Yes or sufficient for mini-HIA → 6
   - Yes → 9
   - No → 5

8. Timely results?
   - Yes or Uncertain → 8
   - Yes → 9
   - No → 5

9. Mini-Rapid HIA warranted?
   - Yes → Full HIA
   - No → No HIA

All responses "yes"?
- Yes → Full HIA
- No → No HIA
For stronger, more sound screening decisions

- Develop standing procedures for screening
- Involve multiple parties with range of expertise, including stakeholders
- Document steps, decisions and evidence

*Decisions to not examine an issue may be more important than conclusions about an issue that is selected for examination.*
Examples of screening checklists

1. British Columbia
2. London Health Authority
3. UCLA

(see appendices in the training manual)

Vary by:
- Purpose
- Available resources
- Policy/project being considered
- Training of the person who completes the screening
Scoping
Scoping for HIA

Scoping establishes the foundation under which the health impact assessment is conducted; it is about designing and planning the HIA.
Scoping aims to identify…

- Objectives for the HIA;
- Key issues that should be considered;
- Project team and consultants;
- Necessary resources.
Key elements of scoping

1. **What** will the HIA examine?
   - Outcomes of interest
   - Key pathways
   - Policy comparisons

2. **How** will the HIA proceed?
   - Procedures for systematically gathering and evaluating evidence
   - What impacts will be quantified and how

3. **Who** will be involved
   - Analysts
   - Stakeholders
   - Consultants
Developing a logic framework

Developing a logical framework is an essential step in the scoping process. It illustrates the putative causal pathways and likely positive and negative health effects for the proposed program or policy. Logic frameworks serve three primary purposes:

- Organize existing knowledge
- Communicate information
- Guide analyses
General flow of a logic framework

**Policy**
e.g. tax cut

**Proximate effects**
e.g. increased family income, decreased government revenue

**Intermediate outcomes on determinants of health**
e.g. education, housing, funding for publicly-subsidized health care, etc.

**Health outcomes**
e.g. mortality, injury/disease rates, years of healthy life, etc.
Safe Routes to School Logic framework

**Policy Components**
- Parental and child education
- Build/improve pedestrian and bike facilities
- Traffic calming
- Traffic enforcement
- Increased law enforcement patrols
- Crossing Guards
- Parental Monitoring (e.g. "walking school bus")

**Proximal Impacts**
- Walkability/bikeability of routes to school
- Parental and children's perceptions of risks/barriers/benefits

**Intermediate Outcomes**
- Motor vehicle use
- Exposure to air pollution
- Short-term physical activity
- Long-term patterns of physical activity

**Health Outcomes**
- Asthma
- Obesity
- CVD risk factors
- Insulin sensitivity
- Cancers
- Osteoporosis
- Mental Health
- Unintentional injury
- Intentional injury
Impact assessment
Basic framework for risk assessment

- Affected population
- Health Risks (i.e. exposure)
- Proposed Policy or Project
- Health Outcomes

Change in population → Change in health risks → X → Health Risks

Screening Scoping Assessment 10/4/06
Components of impact assessment

1. **Exposure assessment**
   - Proximate effects of policies on determinants of health
   - Example: effect of improved pedestrian infrastructure on levels of physical activity

2. **Dose-response assessment**
   - Identifying and applying appropriate effect parameters
   - Example: What is the effect of income on mortality?

3. **Outcome assessment**
   - Effects of health determinants on health outcomes
   - Example: How much will mortality change given an increase in income attributable to a policy change?
Buford Highway
Estimating projected increases in walking

Walking in two San Diego neighborhoods (Saelens et al, 2003)

Avg LOS = B (2.0)
Avg min. walked/week = 65

Avg LOS = A- (1.4)
Avg min. walked/week = 138
Buford Highway
Estimating projected increases in walking

Increased walking based on improved walkability

Before

Avg LOS = D (4.1)
Avg min. walked/week = 51

After

Est’d LOS = B- (2.4)
Est’d min. walked/week = 62 -175
City of Los Angeles Living Wage

- Employees working on city contracts must be
  - paid at least $7.99/hour
  - provided health insurance, or an additional $1.25/hour

- Covers approximately 10,000 workers
City of Los Angeles Living Wage Logic framework

**Policy**

- Living Wage Ordinance

**Proximal Impacts**

- Increased income

**Intermediate Outcomes**

- Health Care
- Housing
- Childcare
- Education (workers' children)
- Health Behaviors
- Stress
- Social Support

**Health Outcomes**

- Physical Health Outcomes
- Mental Health Outcomes
## City of Los Angeles Living Wage

### Current distribution wages and health insurance

<table>
<thead>
<tr>
<th>Wages</th>
<th>Health Insurance</th>
<th>No. workers subject to LA living wage ordinance</th>
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<tbody>
<tr>
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**Screening Scoping Assessment 10/4/06**

22
City of Los Angeles Living Wage
Modeling the effect of income on mortality (Backlund et al, 1996)
Why stratify in HIA Analysis

1. Political concern about disparities and equity
2. Differential exposure
3. Sensitive populations:
How to stratify for HIA analysis
Example: Living Wage HIA

Stratification
- Differential proximate effects depending on baseline characteristics
  - With/without health insurance (2)
  - Wage categories (3) determine marginal income increase

- Differential distal effects
  - Annual household income above/below $22,500/year (1980$) (2)

\[2 \times 3 \times 2 = 12\] strata
Methodological challenges to impact assessment in HIA

1. Loose linkages
2. Unknown proximate effects
3. Thin evidence base
4. Small effect sizes (esp. single interventions)
5. Uncertainty about differential effects (ethnicity, gender, current health status, etc.)
Short-cuts: Credible analysis in the face of real-world constraints

- Checklists
- Logic framework with brief assessments of evidence for important links
- Adapted models (*e.g.* living wage model)
- Combining existing research with local documentation
- Descriptive information for each element of risk analysis but stop short of full modeling
Assessing credibility

1. Is evidence for and against each finding presented?
2. Are assumptions fully documented?
3. Is sensitivity analysis conducted?
4. Are limitations discussed and given due weight?
5. Are differential impacts considered? (i.e. “winners” and “losers, not just aggregate impact)
6. Are the findings theoretically disprovable? (i.e. would different inputs yield different conclusions?)
Elements of an HIA policy brief

1. Summary and background to the proposed policy/project
2. Summary of the health impacts (short summary of results)
3. Direct (i.e. proximate non-health) effects
4. Health impact pathways examined (scope of the HIA)
5. Summary of the methodology
6. Key findings
   - General, aggregate effects
   - maximizing benefits/minimizing harm
   - differential effects on disadvantaged and vulnerable populations
7. Why examine health impacts? (rationale for the HIA)
8. Limitations