

Stage 4: Risk Assessment

Aim: To identify the positive and negative health impacts of the proposal.

Learning objectives:

1. To conduct literature reviews to establish baseline data.
2. To conduct risk and epidemiologic analyses.
3. To use qualitative methods to identify health impacts.

The quantitative approach to HIA incorporates many of the elements of risk assessment laid out in environmental impact assessment and engineering. The risk assessment paradigm prescribes a sequence for four steps for assessing risks: (1) hazard identification, (2) exposure assessment, (3) dose-response assessment, and (4) risk characterization (i.e. evaluation of impact of changing exposure levels. Usually, but not necessarily this process is quantitative. Despite apparent objectivity, it is dependent on a series of assumptions and analytic choices.

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Analytical Procedures:

1. Assess qualitative evidence pertaining to each of the links in the causal chain(s) linking the policy with putative health outcomes.
2. If possible, use evidence from the literature to construct quantitative models and estimate potential health effects and their likelihood.
3. Conduct cost analyses when feasible and appropriate.

Products:

1. A brief summary and assessment of literature, expert opinion, etc.
2. Impact estimates, including probable direction, magnitude, distribution and likelihood.

(UCLA, 2003-2004)

During the risk assessment phase, evidence is gathered on the effects of the policy or program on health determinants and health outcomes. Typically the only new data generated in health impact assessments is through qualitative data collection. This may include focus groups, key informant interviews, participatory observation etc. It is often not practical or necessary to generate new quantitative data. Existing data from the literature is often sufficient. Systematic reviews of available research are an effective way to gather information (EPHIA, 2004). Appendix 7 provides a detailed resource list for sources of data related to specific health indicators.