Introduction to HIA tools and techniques
Based on an introduction course on HIA

MATRA-flex programme Czech Republic/ RIVM - 2007

Good and bad practices in the NL: does HIA work?
Brigit Staatsen

PEP workshop on transport and health
Steps in conducting the health impact assessment

- Policy analysis
- Profiling of communities
- Qualitative and quantitative data collection
- Impact analysis
- Establish priority impacts
- Recommendations developed
- Process evaluation
Policy analysis

• Historical setting: how has it developed

• Policy context: where lies the power

• Administrative context: how is it organized

• Stakeholders: who has a say
Profiling the community

• Define relevant indicator/outcome sets

• Health indicators
  - Population
  - Health status

• other indicators (relevant to transport)
  - air pollution (NO₂),
  - road traffic noise
  - traffic safety
  - Time spent cycling/walking

• Health outcomes:
  - Cardiovascular mortality
  - Injury
  - Sleep disturbance
Methods and tools for HIA (1)

Qualitative assessment:

- Questionnaires/checklists
  - WHO HIA website
  - Example NL: Integrated assessment checklist (attributed health risk, well being, risk perception, cost-benefit considerations)
- Expert opinions (Delphi, Consensus panels etc)
- Perception of stakeholders (Focus group discussion etc).
Why involve stakeholders?

- Information on policy/project context
- Adequately address health concerns
- Feasible recommendations
- Broad basis of support
- Democracy
- Transparency
Stakeholder involvement: tasks & responsibilities

• Support building
• Providing knowledge & contacts
• Monitoring process and product
• Decision making & management
Methods and tools (2)

**Quantitative assessment:**
- Policy/risk assessment model: change in exposure vs risk
- Health impact analysis: combining exposure data for population at risk with ‘best’ risk estimates from other studies – attributable risk
- Assessment of health risks by socio-economic position

**Impact analysis:**
- Analysis of qualitative & quantitative evidence, literature review
Example: HIA Schiphol Airport

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HIA Schiphol Airport:

*Double objective:*

expansion airport and air traffic AND no increase in environmental impacts

Phase 1: 1991 - 1993 HIA in EIA
  • qualitative and quantitative assessment
Phase 2: 1993 – 2001 In-depth epidemiological studies
  • using existing registries and additional surveys and panel studies

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Gains/benefits of HIA Schiphol Airport

- Positive influence risk communication process, dialogue stakeholders, choice relevant end-points
- Awareness health impacts
- Attention for impacts in areas further away from the airport
- Attention for risk perception
- Acceptance of new insights in relation noise exposure – annoyance/sleep disturbance
Lessons learnt/ doubts about the HIA Schiphol Airport

• High costs worthwhile? Still public concern…

• Define aims/criteria for exposures (noise levels) instead of health outcomes (annoyance) - changes in exposure!

• Economy vs health arguments in decision-making

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Overall lessons learnt *HIA in the Netherlands*

- Scopes, timeframe and applications vary, depending on subject/context/project – flexible instrument
- All HIAs address complex decision problems with strong policy and societal interests
- All involve forward-looking perspective - aimed at supporting policy development
- Use of same collective knowledge base and information - how to share
- Look at health determinants/exposure instead of health outcomes
- Use scenarios
- Stimulate expert consensus!!!!!
Summing up

- HIA is the art of using common sense
- Be proactive and daring
- Small steps – successful cases – demonstrations
- Process as important as content – expand networks and interest in public health as part of public policies!
- Mobilize resources to establish institutional/technical capacity to carry out HIA as part of SEA