

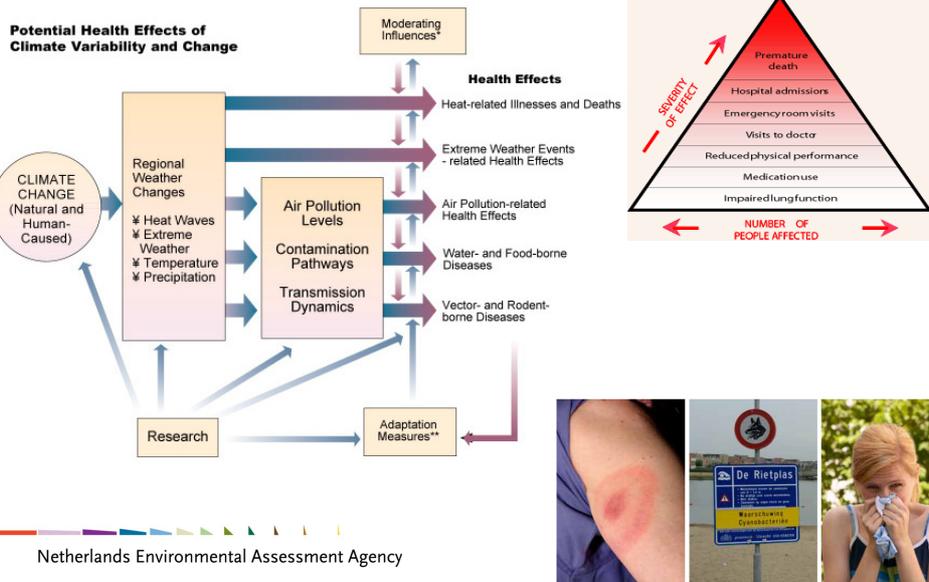
Netherlands Environmental Assessment Agency

Expert assessment of adaptation options on climate change and health

PBL in collaboration with
World Health Organization, Environment and Health Centre
Utrecht University, Copernicus Institute

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Climate Change and Health



PBL project Roadmap to a climate-proof NL

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Focus on CC and Health

- To assess the vulnerability of the Dutch population for potential health effects of climate change;
- To identify suitable and effective adaptation measures to protect human health against climate change;
- To develop a framework for weighing and appraisal of health-relevant adaptation options;
- Adaptation assessment: towards an adaptation strategy for climate change and health

Activities in 2010

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1. Health effects of climate change

- Update Health effects of Climate Change (PBL/ICIS)
- Expert survey on uncertainties surrounding climate change, health and adaptation (UU Copernicus/PBL)

2. Adaptation options

- Policy papers, literature, expert survey
- Expert discussion at PBL/WHO/UU workshop 'Policy options for climate change and health' (January 2010, Bonn)

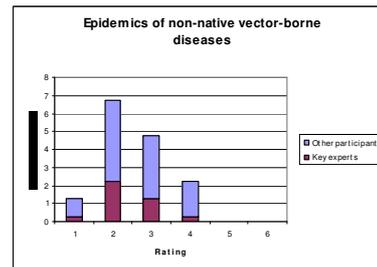
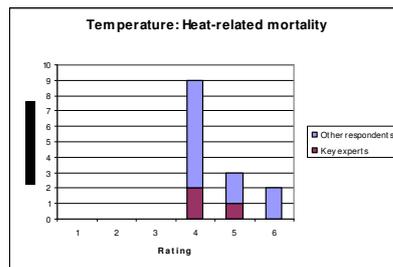
3. & 4. Expert assessment of adaptation options

- Technical assessment at PBL/WHO/UU workshop with international group of environment and health experts (January 2010, Bonn)
- Practical assessment in PBL workshop with Dutch group of policy makers, researchers and practitioners (planned for October 2010)

Health effects of climate change

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- Health effects update by PBL /ICIS
- Expert (online) assessment of health effects, level of precision of impact assessments, uncertainty, and implications for adaptation policy by UU Copernicus (*Van der Sluijs and Wardekker*)



'effective ignorance' (score1) - 'full probability density function' (score6)

Adaptation options

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Policy themes

- HEALTH IN ALL POLICY** - Ensure that all current and future mitigation and adaptation climate change measures, policies and strategies include health issues at all levels;
- HEALTH SYSTEMS** - Strengthen public health and health services to improve their capacity to prevent, prepare, and cope with climate change;
- AWARENESS RAISING** - Raise awareness to encourage healthy mitigation and adaptation policies in all sectors;
- RESEARCH, INFORMATION SYSTEMS, METHODS, AND TOOLS** - Sharing of best practices, tools, data and information and enhancing research.

WHO Europe. Protecting Health in an environment challenged by climate change: European Regional Framework for Action. Contribution of the Climate Change and Health Task Force to Fifth Ministerial Conference on Environment and Health in Parma, Italy, 10-12 March 2010.

Adaptation options (2)

Categories of options

1. **Capacity-building options that enhance the system's capacity to respond to health impacts of climate change**
 - **Example** - Establish a multi-sectorial committee that assesses, and through recommendations ensures that any new related legislation, policies and technologies properly address human health and climate change
2. **Instrumental options that facilitate institutional ability to respond**
 - **Example** - Introducing CC and Health in Health/Medical curricula and other (follow-up) training: risks, adaptation, mitigation
3. **Health-specific options that reduce or prevent health-specific impacts**
 - **Example** - Climate adaptive urban planning such as greening, water, parks, wind corridors, to consider health risks such as allergies and certain infectious diseases

Expert assessment: framework

Set of appraisal criteria

1. **Impact of adaptation option - including health gain, economic impact, social impact, environmental impact, and encroachment**
 - **Example** - Health gain: what is the potential magnitude of the health gain of this option?
2. **Approach and usefulness under uncertainty - addressing resistance, resilience, adaptive capacity, robustness, and flexibility**
 - **Example** - Flexibility: the option can be easily modified should reality turn out different than expected
3. **Other relevant aspects - including public support, equity, urgency, implementation time, spatial and institutional scale, and synergy with other policy fields (!)**
 - **Example** - Equity: do equity considerations play a role?

PBL/WHO/UU workshop 'Policy options for climate change and health' – January 2010

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1. Experts agreed on the list of adaptation options (after minor modification), classified in four themes and specified in three categories
2. Six options were selected based on highest potential health benefits and were scored by experts using all the score card criteria □
3. Experts agreed on a subsequent selection of six criteria which are most important for adaptation strategies / decision-making:
 1. Costs
 2. Co-benefits
 3. Encroachment on society
 -
 4. No regret
 5. Robustness
 6. Flexibility
4. Further analysis on expert assessment scores using the six criteria

Expert assessment: technical

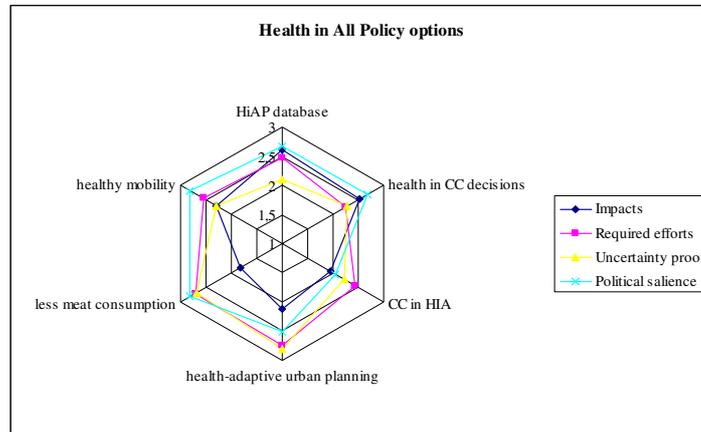
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Positioning of options along four dimensions

1. 'Potential impact': health gain, social impact, risk of not intervening;
 2. 'Required efforts' economic costs, indirect effects and synergies/conflicts with other policy and/or effects, and encroachment on society;
 3. 'Uncertainty-robustness': robustness, flexibility and consequences (no regret);
 4. 'Political support': public support, equity, urgency
- Averaged weighted scores, adjusted for inverse scores
 - Based on the scores the various adaptation options can be positioned accordingly, allowing insight into the appropriateness of the option relative to the dimension it addresses.

Findings for Health in All Policy theme

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'very high' (score1) – 'moderate' (score3) – 'very low' (score5)

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Expert assessment (practical)

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- What appraisal criteria (out of the four dimensions) are essential in policy and political processes on climate change, health and adaptation?
- What considerations play a role in implementation of adaptation options for CC and health?
- How to organise the process of adaptation planning for climate change and health?

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Towards an adaptation strategy for CC and Health

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