

Health Impact Assessment



International Policies and Regulations for HIA

- ▶ Strategic Environmental Assessment Protocol
- ▶ Article 152 of the Amsterdam Treaty
- ▶ Health21 – Health for all
 - ▶ Scientific
 - ▶ Economic
 - ▶ Social
 - ▶ political
- ▶ Libreville Declaration



Health Impact Assessment



- ▶ A means of assessing the health impacts of policies, plans and projects in diverse economic sectors using quantitative, qualitative and participatory techniques
- ▶ Choice about alternatives
- ▶ Improvements to prevent disease
- ▶ Actively promote health

Health impact assessment

- ▶ Health impact assessment - a methodology which enables the identification, prediction and evaluation of the likely changes in health risk, both positive and negative, single or collective, of a policy programme, plan or development action on a defined population. These changes may be direct and immediate or indirect and delayed



Gothenburg consensus paper

- ▶ Values governing HIA:
 - ▶ Democracy
 - ▶ Equity
 - ▶ Sustainable development
 - ▶ Ethical use of evidence
- ▶ Elements of HIA
 - ▶ Evidence
 - ▶ Opinions
 - ▶ Informed understanding
 - ▶ Adjustment/options



Participatory Process

- ▶ Stakeholders:
 - ▶ Public
 - ▶ Developers
 - ▶ Planners
 - ▶ Local/national Gov't
 - ▶ Voluntary agencies
 - ▶ Health workers
 - ▶ Employers and Unions
 - ▶ Organisations carrying out the HIA



Why do we need HIA?

- ▶ 75-80% of influence on human population is out of the hands of ministries of health or health sector (Gulis, 2005)
- ▶ External decisions affecting:
 - ▶ Eating habits
 - ▶ Physical activity
 - ▶ Environment
 - ▶ Transport
 - ▶ Leisure time



European Union



- ▶ 2004 – 15-25 countries
- ▶ Population increased by 20% to >450 mill
- ▶ Gap in wealth & health between old and new member states
- ▶ Health policy – low political agenda
- ▶ Policy process is complex
- ▶ Maastricht Treaty (1992)
- ▶ Free trade

European Union

- ▶ 24 members – believe health is a cross-cutting theme
- ▶ HIA- potential to increase probability that this will occur.
- ▶ Voluntary status contrasts that of EIA and SEA which have statutory legal status
- ▶ Some Gov'ts recognise its potential and have experience of applying HIA at a local or national level



HIA Applied by EU Member States

COUNTRY	Administrative Level	Policy Sectors to which HIA has been applied
ENGLAND	National	Burglary reduction initiative;
	Regional	National Alcohol Strategy
	Local	London Mayoral strategies: transport, waste disposal Farmer's markets; Regeneration projects
WALES	National	Home energy efficiency scheme; Objective 1 programme; Tourism (National Botanical Garden)
	Local	Housing Renewal Scheme; Power Station Development
SWEDEN	National	Agriculture; Alcohol policy

HIA Examples - Wales

- ▶ Integrated wood processing plant in Newbridge:
 - ▶ In 2000, Powys County Council and Dyfed Powys Health Authority
 - ▶ Project appeared to have +ve and -ve health impacts
 - ▶ Refurbishment of an existing sawmill; construction of a wood fuel processing & electricity generating plant; building of an access road



Wood Processing Plant Newbridge

- ▶ Range products – sawn timber, wood fuel, co-products
- ▶ Fuel an 18MW electricity generating unit
- ▶ Heavy goods vehicles ↑ from 130-320/day
- ▶ HIA requested when planning consultation underway - <10wks
- ▶ Main health issues – respiratory illness to the consequences of unemployment



Mental Health Impacts of a Foot and Mouth Disease Outbreak in Wales

- ▶ National guidance and an HIA development programme set up
- ▶ The Welsh Health Impact Assessment Support Unit
- ▶ HIA was applied to the agricultural sector following 2001's outbreak of Foot & Mouth
- ▶ Extensive disease control policy
- ▶ Self limiting disease but economic consequences



Mental Health Impacts of a Foot and Mouth Disease Outbreak in Wales

- ▶ WAG recognised impacts on mental health and well-being
- ▶ Institute of Rural Health (IRH) to undertake a rapid assessment
- ▶ 6 month study
- ▶ Two areas focused on:
 - ▶ Anglesey
 - ▶ Montgomeryshire



Stages of HIA – 2001 Foot & Mouth Outbreak in Wales

STAGE	NATURE OF WORK
1. Screening	Prelim assessment to determine if the situation poses health questions
2. Scoping	Process to broadly outline the possible hazards and benefits
3. Risk Assessment	Characterising the nature and magnitude of harmful and beneficial factors
4. Decision Making	WAG consideration of the report together with the risk assessment and potential impact on future policy decisions
5. Implementation & Monitoring	WAG to action and implement decisions made and to observe the consequences.

Mental Health Impacts of a Foot and Mouth and Mouth Disease Outbreak in Wales

- ▶ Significant impacts on mental health, the social structure in the community and on services.
- ▶ The report highlighted a potential increase in anxiety, stress, acute/chronic depression and suicide in the farming community, although it commented that levels could not be quantified at that stage.
- ▶ The study also noted the potential emergence of post-traumatic stress disorder among slaughtermen, and of special concerns for children.
- ▶ Long-term mental health impact was raised as a concern.
- ▶ A Wales Rural Stress Helpline & support funds.



HIA Cement Plant

- ▶ Take 20 mins to review Cook and Kemm (2004). Health Impact Assessment of Proposal to Burn Tyres in a Cement Plant.
- ▶ What are the key lessons learned?





REVIEW THE PAPER: HIA ON NOISE POLLUTION IN ROME
FOR DISCUSSION. WHAT ARE THE KEY POINTS RAISED?
ARE THEY APPLICABLE ELSEWHERE?

HIA of Air Pollution in Italian Cities

- ▶ 2002 – indicated that higher than expected mortality rates, hospital admissions, bronchitis etc were being encountered
- ▶ 2006 – second study of 13 Italian cities found the same
- ▶ PM10 and Ozone
- ▶ Study found 8220 deaths p.a attributable to $PM_{10} > 20 \mu g/m^3$
- ▶ 9% of all-cause mortality (excl accidents) in the population over 30yrs old.
- ▶ Action required through transport and energy production policies

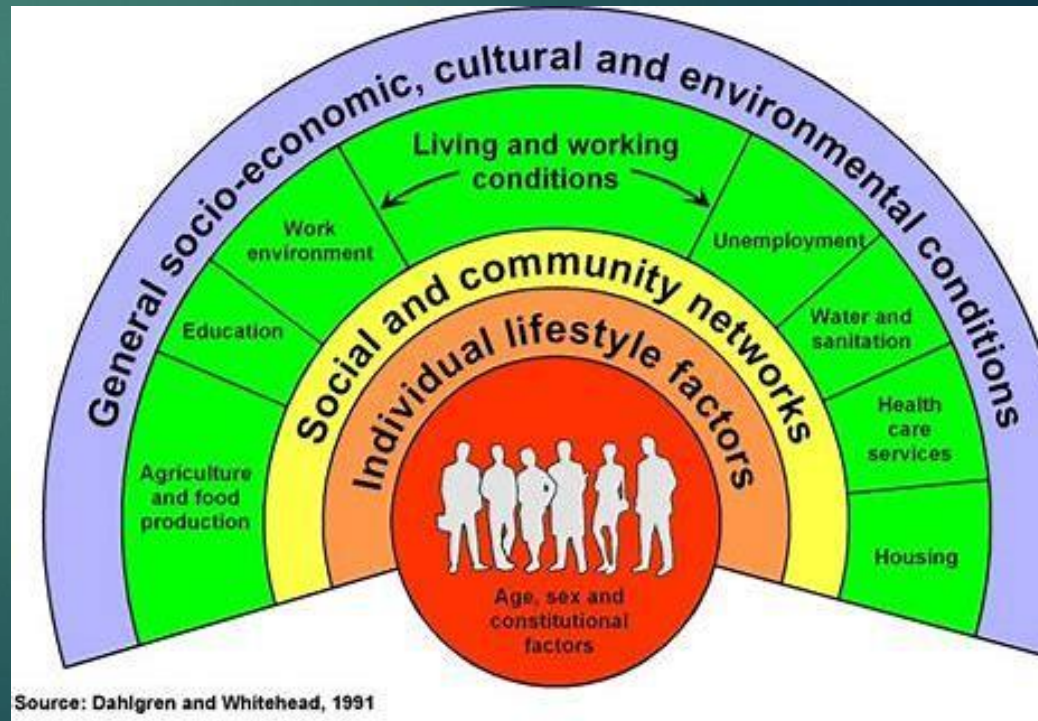


Stages of an HIA

- Screening - determining if an HIA is warranted/required
- Scoping - determining which impacts will be considered and the plan for the HIA
- Identification and assessment of impacts - magnitude, nature, extent and likelihood of potential health impacts,
- Decision-making and recommendations - explicit trade-offs in decision-making and formulating evidence-informed recommendations
- Evaluation, monitoring and follow-up - monitoring and management of health impacts

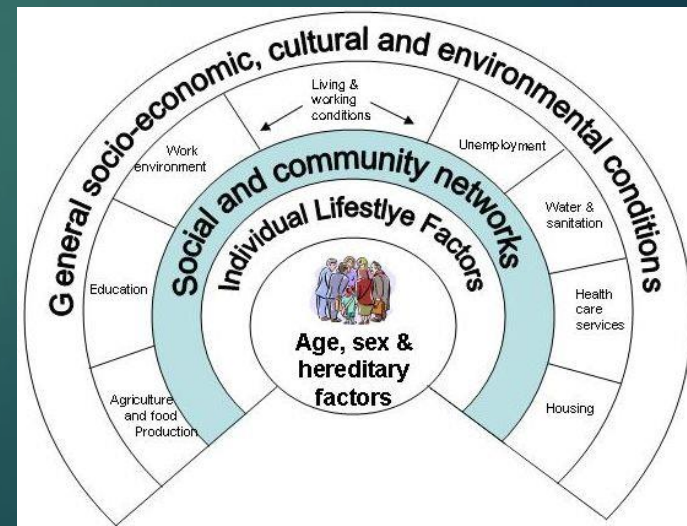
HIA of the EU Common Agriculture Policy

- ▶ Dahlgren, Nordgren, Whitehead, National Institute of Public Health, Sweden, 1996²¹
- ▶ Health impacts of
 - ▶ CAP of fruit and vegetable
 - ▶ CAP of dairy products
 - ▶ CAP of tobacco regime
 - ▶ CAP of alcohol regime



Models of determinants of health

- ▶ In the US the relative impacts that the various domains of health determinants have on early death have been estimated as follows:
- ▶ 30% from genetic predispositions
- ▶ 15% from social circumstances
- ▶ 5% from environmental exposures
- ▶ 40% from behavioural patterns
- ▶ 10% from shortfalls in medical care



Should public health be part of an integrated European agriculture and food policy?

- ▶ Agricultural policy influences what food is produced, how it is produced, processed and sold (Lock, 2017)
- ▶ Is diet merely a matter of public choice?
- ▶ With growing levels of obesity, food and nutrition is now at the top of the political agenda
- ▶ NHS savings £30bn by 2022 – focus more on health improvement and disease prevention (Treasury study, 2017)
- ▶ CAP – strategy which determines food policies across Europe



CAP – public health issues

- ▶ Impact on the poor from higher prices
- ▶ Externalised costs on non-communicable diseases such as obesity through subsidising animal fat, tobacco and alcohol and supplying insufficient amounts of fruit & veg
- ▶ Impacts of rural communities – rising rates of unemployment and socioeconomic inequalities
- ▶ Mental wellbeing – rural diseases such as Foot and Mouth
- ▶ CAP following World War II – prime health concern was under-consumption
- ▶ Goals – increase food security, raise production and deliver stability for farming communities
- ▶ Health foundation went – narrow subsidy-driven approach
- ▶ Industry challenged with environmental and safety issues – health agenda is still marginal

The Merseyside guidelines

- ▶ Apply screening criteria to select project or policy
- ▶ Establish steering group
- ▶ Agree terms of reference for assessment
- ▶ Select assessor
- ▶ Conduct assessment
- ▶ Appraise the assessment
- ▶ Negotiate favoured options
- ▶ Implement and monitor
- ▶ Evaluate and document

