# Opportunities and challenges for health impact assessment within the scope of environmental impact assessment

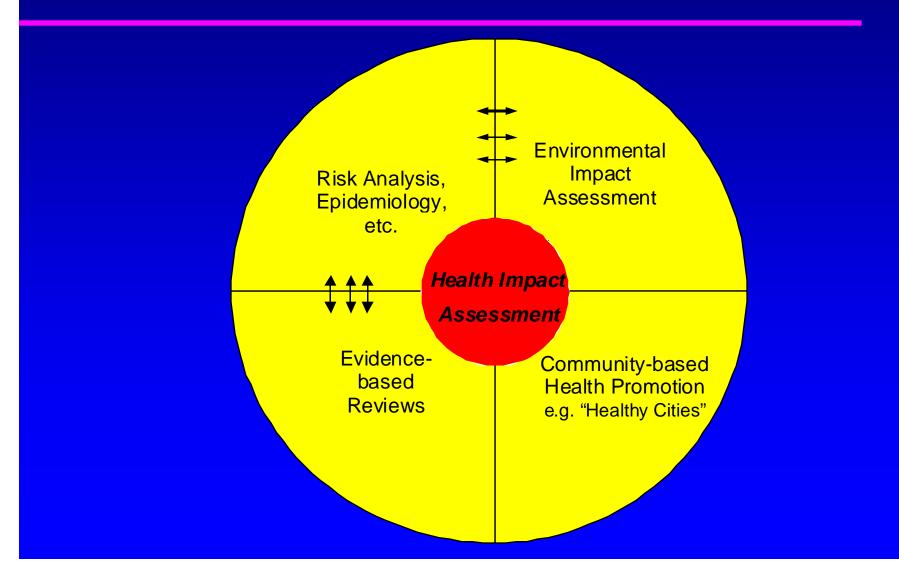
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#### Disciplinary foundations of HIA



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## EIA has established the logical and methodological foundation for HIA

- Cross-sectoral policy analysis
- Advisory expertise
- Transparency
- Stakeholder participation in scoping and review
- Structured frameworks
- Flexibility within a standardized framework
- Specific protocols and terminology

#### Phases of HIA parallel those in EIA

- Screening
- Scoping
- ◆ Impact assessment
- Reporting and review
- Evaluation and monitoring

#### National Environmental Policy Act requires an Environmental Impact Assessment (EIA)

The purpose of NEPA is to

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protect the "human environment" and "stimulate the health and welfare of man" (NEPA, 1979, sec. 2)
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### "Environmental Effects" under NEPA includes health and health relevant effects

- ◆ Ecological, aesthetic, historical, cultural, economic, social, or effects on health
- Relationship of people with the environment, including environmental justice issues
- Direct and indirect
- Cumulative resulting "... from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions."

# Many reasons explain the absence of health analysis in EIA

- "Environmentalist Roots"
- EIA focus on the physical environment
- ◆ Lack of public health mandates, standards, or guidance for embedding health in the EIA process (in contrast to effects on air quality, endangered species, vehicle traffic flow, etc.)
- Lack of standardized assessment protocols

#### Historical Problems with EIA

- Long documents
- "Boilerplate" analysis
- Mirrors established regulations
- Focus on adverse effects
- No assessment of trade-offs
- Often too late to affect design
- Funded by decision proponent
- "Reactive" public involvement

## Bringing health to EIA: Connecting the physical environment to health

Category of Effects in EIA	Physical Bovironmental Difects	Health or Social Outcomes
Transportation Systems	Traffic Hazards Environmental Noise Vehicle Emissions	Sleep disturbance; Traffic Injuries; Physical activity
Air Quality	Air pollutants Residential-industrial conflicts	Respiratory disease; Lung development; Premature mortality
Housing	Displacement Inadequate housing Crowding	Stress, hunger, respiratory disease, poor sanitation, homelessness
Recreational resources	Park space per capita, Geographic distribution?	Physical and mental health benefits of parks and greenspace;

### Bringing health to EIA: Opportunities for expanded consideration of health impacts

Category of Diffects in ELA	Physical Buvironmental Effects	Health or Social Outcomes
Transportation Systems	Automobile Level-of-Service Vehicle Trips	Walkability Trips
Air Quality	Air emissions "Excess" cancer rates	Asthma and heart disease
Housing	Number of housing units, Displacement	Health related trade-offs made in response to a lack of affordable housing, homelessness
Recreational resources	Availability of recreational resources	Physical activity influenced by recreational amenities, social, aesthetic and safety factors that support utilization

### Bringing Health to EIA: Opportunities for public health agencies

- Assisting in the development of health-related sections of an EIA as a "Cooperating Agency"
- Participating in public review of an EIA during scoping and review of draft EIAs
- Providing technical support to other agencies and stakeholder groups involved in the preparation and review of an EIA

#### Putting Health in EIA: Some next steps

- Identify key pathways between environmental effects and health effects relevant for EIA
- Develop and apply new methods for exposure analysis and health effects forecasting using interdisciplinary methods
- Develop qualitative research methods
- Identify routine data sources
- Engage the "community" in research
- Work towards better guidance and standards

### Lessons learned from countries outside the U.S.

- Importance of broad political support
- ◆ Value of enabling legislation (N.Z, Quebec)
- ◆ Casting HIA as a resource rather than an imposition (e.g. tools to assess environmental justice)
- ◆ Judicious use of purpose-driven community participation coupled with technical analysis

#### For more information

http://www.ph.ucla.edu/hs/health-impact

http://ehs.sph.berkeley.edu/hia/