

US EPA ARCHIVE DOCUMENT

Ports of Los Angeles and Long Beach Health Impact Assessment Scoping Meeting



Bannings Landing Community Center
February 10, 2010

Introduction to Health Impact Assessment

Health is a state of
complete physical, mental and social well-being
and not merely the absence of disease or infirmity.

HIA Definition



Health Impact Assessment

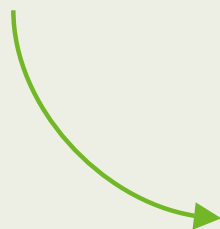
A combination of procedures, methods and tools that systematically judges the potential, and sometimes unintended, effects of a policy, plan, or project on the health of a population and the distribution of those effects within the population. HIA identifies appropriate actions to manage those effects.

International Association for Impact Assessment, 2006

HIA Addresses Determinants of Health



How does the proposed project, plan, policy



affect

- Housing
- Livelihood
- Transportation
- Education
- Air quality
- Water quality
- Noise
- Safety
- Nutrition
- Parks and natural space
- Private goods and services
- Public services
- Social networks
- Social equity



and lead to health outcomes

Factors Responsible for Population Health



HIA Purpose



Primary

- Judge health effects of a proposed project, policy or policy
- Provide recommendations
- Shape public decisions & discourse
- Analyze health disparities
- Make health impacts more explicit



Secondary

- Engage community
- Build consensus
- Build relationships & collaborations
- Provide forum for discussion of lived experience

Steps of a HIA



Screening	Determines the need and value of a HIA
Scoping	Determines which health impacts to evaluate, methods for analysis, and a workplan
Assessment	Provides: <ol style="list-style-type: none"> 1) a profile of existing health conditions 2) evaluation of potential health impacts 3) strategies to manage identified adverse health impacts
Reporting	Includes: <ol style="list-style-type: none"> 1) development of the HIA report 2) communication of findings & recommendations
Monitoring	Tracks: <ol style="list-style-type: none"> 1) impacts on decision-making processes and the decision 2) impacts of the decision on health determinants

NEPA and Comprehensive Health Analysis



HIA is one approach to conducting a comprehensive health analysis.

Language in the following laws, regulations and guidances support inclusion of a comprehensive health analysis in EIA:

National Environmental Policy Act

Council on Environmental Quality regulations

Executive Orders 12898 and 13045

CEQ guidance on Executive Order 12898

See FAQ for details

HIA & HRA



Health Risk Assessment overlaps significantly with HIA, in theory. In practice, HRA is used in much more limited manner and is not a comprehensive health analysis.

HRA as practiced	HIA
Purpose: to quantify the health effects from a change in exposure to a particular hazard	Purpose: to make evidence based judgments on the health impacts of a decision and to make health-promoting recommendations
Focus is on one contaminant - outcome pathway (diesel exposure - lung cancer)	Holistic approach to predict environmental and social exposures and impacts
Ignores existing inequities and vulnerabilities	Takes into account existing health inequities and vulnerabilities
Uses modeling to quantify all risks	Uses quantitative and qualitative methods

See FAQ for additional distinctions and details

HIA extends EIA



A more comprehensive analysis of health in EIA would include:

A systematic scoping of potentially significant direct, indirect and cumulative health impacts of the proposed action

Analysis of baseline health conditions and determinants of health

Analysis of direct, indirect, and cumulative health impacts of the proposed action

HIA extends EIA (cont'd)



EIA Category	Environmental Indicators	Extension to Health Indicators
Transportation	<ul style="list-style-type: none"> Vehicle trips Vehicle volume Auto level of service 	<ul style="list-style-type: none"> Access to retail Traffic injuries Physical activity Noise exposure
Housing	<ul style="list-style-type: none"> Need to construct new housing Displacement 	<ul style="list-style-type: none"> Quality of housing Crowding Homelessness Social isolation
Culture and Community	<ul style="list-style-type: none"> Physical division of a community Loss of cultural and historical resources 	<ul style="list-style-type: none"> Social support Cultural practices Community violence

Integrating HIA into EIA



Scope potential significant direct, indirect, and cumulative health impacts during EIA Scoping

Assess prioritized health concerns, including:

- New analyses (e.g., baseline health conditions, previously unanalyzed health impacts)

- Extensions of existing analysis (e.g., using vehicle trips and volume to predict traffic injuries and physical activity)

- Developing potential mitigation measures to address significant health impacts

Reporting and response to public comment in the DEIR and FEIR

Advantages of Integrating HIA into EIA



An integrated approach to HIA /EIA

- Builds on existing data and analysis
- Avoids duplication and redundancy
- Avoids fragmenting analysis
- Further engages community
- Addresses community concerns
- Can be conducted concurrently

HIA Step 2: Scoping



Objective

To create a plan and timeline for conducting a HIA that defines priority issues, research questions and methods, and participant roles.

Tasks

Key points

Tools

Resources

Purpose of this Scoping Meeting



Types of questions we want to discuss

Are the pathways an accurate representation of the health impacts of concern?

Are there missing impacts?

Are there pathways or sub-pathways we can eliminate?

What can you say about the magnitude of the impacts, based on your knowledge and experience?

What relevant data sources exist for each pathway?

Purpose of this Scoping Meeting



Types of questions for future conversations, after we have an idea of what would be in the HIA scope

Should a HIA be conducted?

On what should a HIA be conducted?

How would significance of impacts be determined?

Who would pay for a HIA?

How would the results of a HIA be used?

Progress to Date



HIP has

Identified potential issue areas to be included in the scope of a 'generic port HIA'

Drafted pathway diagrams for each issue area

Reviewed literature related to each pathway

Developed draft research questions related to baseline conditions

Developed draft research questions related to impacts analysis

Generic Port HIA - Nine Issue Areas



Air Quality

Noise

Water Quality

Traffic and Rail Volume & Pedestrian Hazards

Displacement

Employment

Neighborhood Infrastructure

Neighborhood Livability

Tax Revenue and Funding

Examples of Evidence Supporting Pathways



<p>Air quality</p>	<p>Exposure to local traffic-generated air pollution during pregnancy increases risk of preeclampsia and preterm birth in Southern California women (Wu et al., 2009)</p>
<p>Noise pollution</p>	<p>Exposure to 70 dB(A) traffic noise during the day is associated with a 30% increase in likelihood of having a myocardial infarction compared to noise exposure below 60 dB(A) (Babisch et al., 2005)</p>
<p>Traffic volume & ped hazards</p>	<p>There is a statistically significant relationship between traffic volume and the number of vehicle collisions involving a pedestrian (Hess et al., 2004)</p>

Examples of Evidence (cont'd)



<p>Employment</p>	<p>Men who were unemployed were 1.5 - 3.25 times more likely than those who were employed to have ischemic heart disease. (Yarnell et al., 2005)</p>
<p>Neighborhood livability</p>	<p>There is a statistically significant association between measures of neighborhood socioeconomics and adverse health conditions including mortality, infant/child health, chronic diseases among adults, and mental health. (Pickett and Pearl, 2001)</p>
<p>Port tax revenues</p>	<p>Access to public parks and recreational facilities has been linked to reductions in crime, and in particular, to reduced juvenile delinquency. (Trust for Public Land, 2006)</p>

Examples of Data



<p>Employment</p>	<p>In Census tracts near the ports, unemployment is generally higher than the rest of LA County. In 2000, 7.4% of Long Beach residents were unemployed vs. 5.1% of county residents.</p>
<p>Neighborhood infrastructure</p>	<p>In 2002, median home prices in Wilmington and Carson were 54% and 66% of the LA County median.</p>
<p>Traffic & rail volume</p>	<p>Police, fire and EMT officials reported 491 delays at at-grade crossings in Riverside between 2002-2007. Responder delays averaged 3 minutes and were as long as 21 minutes.</p>

Examples of Data



LA County Health Survey

Air pollution

Asthma: **10.6 %** of children in Long Beach were diagnosed or had an attack in the past 12 months vs. **7.9%** in LA County overall

Heart disease: **10.3%** of adults in Long Beach were diagnosed with coronary heart disease, angina, or had a heart attack vs. **7.7%** in LA County overall

Noise pollution

Physical Activity: **50.9%** of adults in Long Beach were active (met physical activity guidelines) vs. **53.2%** in LA County overall

Neighborhood livability

Crime: YTD burglaries in the Harbor area have increased 33% from 2009 to 2010 and 45% from 2008 to 2010

Exercise #1a



Reviewing Pathway Diagrams

Visit each pathway diagram to familiarize yourself with them

Ask facilitator at each diagram clarifying questions

Exercise #1b

Collecting Initial Input

3 Guiding Questions:

Considering all of the pathways you see here today, do you think there are entire pathway diagrams or larger issue areas that are missing?

Are there issue areas/pathway diagrams we can eliminate? If so, why?

Other comments about the pathways?

Exercise #2: Round 1

Provide Feedback on Pathways

Is the pathway an accurate representation of the health impacts of concern?

What is missing from the diagram? Are there any links or boxes represented here that we could eliminate? If so, why?

Exercise #2: Round 2



Provide Feedback on Pathways

Based on your experience, what can you say about the magnitude of the impact of this pathway?

Which specific paths in this pathway represent impacts that would affect the most people or have the biggest health impacts?

Exercise #2: Round 3



Provide Feedback on Pathways

Are there data sources and methods we should know about that are relevant to the pathways?

Are there potential feasible mitigations measures that could address the health impacts?