Introduction to Health Impact Assessment

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

Sonoma, CA • December 7, 2013
HIP is a national non-profit working to transform the policies and places people need to live healthy lives by increasing the consideration of health and equity in decision making.

Our Goals

Equity and justice
Democracy and transparency
Elevation of community voices
Sustainability
Improving health
Reducing health inequities
Qualities of a Healthy Community?

Meets basic needs of all
Transportation; Housing
Schools, parks, recreational facilities, child care,
libraries, financial services
Arts, music and culture
Health care

Quality and sustainability of environment
Air, soil and water; Noise
Open space
Energy use

Adequate levels of economic, social development
Living wage, safe and healthy job
Thriving economy
Education

Health and social equity

Social relationships that are supportive and respectful
Social and civic engagement
Supportive relationships
Safety
Good health is determined by more than money spent on the health-care system

<table>
<thead>
<tr>
<th>US Rank in World</th>
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<tbody>
<tr>
<td>Life Expectancy</td>
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<tr>
<td>Health Care Spending</td>
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Almost 50% of adults in the US suffer from at least one chronic illness and/or obesity. This has high costs for the health care system and for society.

Poor health is not distributed equally among all populations (SES, age and race/ethnicity) – life expectancy varies by as much as 20 years between zip codes in the same city.
Factors Responsible for Population Health

Health status is determined by:
Genetics: 20 – 30%
Health care: 10%
Social, environmental conditions, and behavior: 60 – 70%

*J Health Affairs, 2002*
Why Use a Health Lens?

A health lens can augment decision-making processes by highlighting:

- Unexpected consequences and benefits / Externalities
- Disparities related to health
- That money/economics is not the same as happiness

A health frame can be persuasive:

- Health is a shared value
- Health is an indicator of quality of life
- Surprise and concern about health inequities
Health Impact Assessment
A systematic process that uses an array of data sources and analytic methods and considers input from stakeholders to determine the potential effects of a proposed policy, plan, program or project on the health of a population and the distribution of those effects within the population. HIA provides recommendations on monitoring and managing those effects.

National Research Council of the National Academies, 2011
How does the proposed project, plan, policy affect recommendations lead to health outcomes
HIA Purpose

Through HIA report and communications

Improve the evidence base for legislative decisions
Make the health effects of a proposed policy explicit
Highlight differential impacts of proposals
Provide recommendations
Raise awareness among legislators and stakeholders

Through the HIA process

Engage & empower community
Recognize lived experience
Build relationships & collaborations
Improve transparency in decision making
### Steps of HIA

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
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<tbody>
<tr>
<td>Screening</td>
<td>Determines the need and value of a HIA</td>
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<tr>
<td>Scoping</td>
<td>Determines which health impacts to evaluate, methods for analysis, and a workplan</td>
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<tr>
<td>Assessment</td>
<td>Provides:</td>
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<tr>
<td></td>
<td>1) a profile of existing health conditions</td>
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<td>2) evaluation of potential health impacts</td>
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<tr>
<td>Recommendations</td>
<td>Provide strategies to manage identified adverse health impacts and maximize benefits to health</td>
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<tr>
<td>Reporting</td>
<td>Includes:</td>
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<tr>
<td></td>
<td>1) development of the HIA report</td>
</tr>
<tr>
<td></td>
<td>2) communication of findings &amp; recommendations</td>
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<tr>
<td>Monitoring</td>
<td>Tracks:</td>
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<tr>
<td></td>
<td>1) impacts on decision-making processes and the decision</td>
</tr>
<tr>
<td></td>
<td>2) impacts of the decision on health determinants</td>
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## Principles and Values of HIA

<table>
<thead>
<tr>
<th>HIA Principle</th>
<th>An HIA should . . .</th>
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<tbody>
<tr>
<td><strong>Democracy</strong></td>
<td>Involve and engage the public, and inform and influence decision-makers</td>
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<tr>
<td><strong>Equity</strong></td>
<td>Consider distribution of health impacts, pay attention to vulnerable groups and recommend ways to improve proposed decisions for affected groups</td>
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<tr>
<td><strong>Sustainable Development</strong></td>
<td>Judge short- and long-term impacts of a proposal</td>
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<td><strong>Ethical Use of Evidence</strong></td>
<td>Use evidence to judge impacts and inform recommendations, not set to support or refute a proposal; be rigorous and transparent</td>
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<tr>
<td><strong>Comprehensive Approach to Health</strong></td>
<td>Be guided by the wider determinants of health</td>
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Sample HIA Project Topics

HIA has been used throughout the U.S. in a broad array of decision contexts, in various sectors of government and society

State / Local Policies
Education: discipline, funding, integration, siting
Labor: paid sick days, hiring practices, pay equity, wages
Incarceration: diversion
Agriculture: farm to school, agricultural plans
Energy: wind farms, smart metering, cap and trade
Budget

Land Use and Transportation
New housing or mixed-use dvpt
Public housing redevelopment
Specific and General Planning
Zoning plans
Transit-oriented development
Transit corridor or station plans
Public transportation projects
Highway expansions
Waste facility siting
Natural resource extraction
A Health Impact Assessment of the Railroad Avenue Station Area Plan, Pittsburg, CA
Pittsburg, California
Suburb in San Francisco Bay Area
Historically working class, fishermen
Many newly arrived immigrants

- Projected to grow by 15%, substantially higher than region
- Increasing demand for commercial and residential development
- Attracting white collar workers seeking affordable housing
- 81% of Pittsburg residents travel outside the city to work
In 1999, the regional transit agency proposed a BART extension, including a stop in Pittsburg.

In early 2006, City of Pittsburg and the MTA drafted a specific area plan for the station, including:

- Rail station at freeway median
- 1,590 units housing, 15% affordable
- 446,000 sq ft of retail, commercial, and office space
- Parking: 2,400 residential, 4,000 commercial/office/retail, 350 for rail
- Pedestrian and biking improvements
Health was not being considered explicitly

Regional transportation collaborative interested

Decision-makers (city council & planning dept) seemed open to the HIA

Had time to conduct the HIA before plan was adopted

Funding available
Scoping

Process
- Steering committee identified issues
- Focus groups prioritized
- Steering committee refined

Stakeholders involved
- Community organization
- Transportation advocate
- Health advocates

Health Determinants
- Transportation
  - public transit, driving, walking
- Housing
- Jobs
- Retail and public services
- Air quality
- Noise
Potential changes to health through changes in air quality

Transit Oriented Development near freeway

- Δ walking & biking
- Δ public transit use
- Δ driving
- Δ in proximity of residents/ sensitive uses to the freeway/air pollutants

Δ # of cars on freeway & local roads

Δ # of residents exposed

Δ in regional air quality

Δ in local air quality

Δ asthma

Δ other respiratory disease

Δ in premature mortality

Δ in cardiovascular disease
Air Quality Assessment Data

- Air quality modeling
- Statistical forecasting of mortality, asthma & respiratory disease
- Vehicle Trip Generation Distribution Models
- Travel Behavior Data (commute times, mode, ridership)
- Literature review
- Air Emission Data

Pittsburg TOD HIA – Air Quality
<table>
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<tr>
<th>Air Quality</th>
<th>Project site is greater than a one mile from most heavy industry, but is within 2,100 feet of Hwy 4</th>
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<td>Estimated average annual traffic for Hwy 4 in 2006 was 119,000 vehicles per day</td>
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<tr>
<td></td>
<td>Hwy 4 contributed between 0.2 to 2 μg/m³ PM$_{2.5}$, depending on distance from highway</td>
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<tr>
<td></td>
<td>Annual average PM$_{2.5}$ concentration at nearest monitor between April 2007-April 2008 was 8 μg/m³ – below state standard of 12 μg/m³</td>
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Attributable PM$_{2.5}$ concentrations from new residential uses at one of the proposed housing development sites.
Project helps to reduce growth of regional vehicle trips and air pollutant emissions

Existing traffic on Hwy 4 is the primary cause of air pollution in the future plan area

Expected pollution exposure in housing near freeway will be associated with a modest increased hazard of premature deaths, asthma hospitalizations, and lower respiratory symptoms

RECOMMENDATION: Buffering residents from one of the sites away from the freeway would result in one fewer premature death each year; if not possible, filtered HVAC systems should be used in new housing construction
Existing Conditions - PEQI
Reporting & Communication

Reports
Report and executive summary

Presentations

Communication
Presentation of results to community & decision-makers
Meetings with Planning Department
Meetings with City Council
Outcomes

Specific Plan adopted by City Council with several recommendations from the HIA included.

Affordable housing inclusions
  health used as an argument for keeping high levels of affordable housing in plan

Air quality mitigations
  HVAC recommendation included

Noise mitigations
  Triple-paned windows recommendations included

Transportation recommendations
  Bicycle-friendly design enhanced
Questions?
HIA Screening

Decide whether an HIA is feasible, timely, and would add value to the decision-making process

Essential Tasks

Define the decision and its alternatives

Work with potential partners to evaluate the proposal based on criteria

Example Screening Questions

Is the proposal likely to affect health and inequities? If so, how?

Is health already being considered in the decision-making process?

Is the HIA likely to be successful? (e.g., will decision-makers listen?)

Does the public have health concerns about the proposal?
"Health in All Policies" and "Healthy Public Policy" include many strategies for integrating a health perspective into planning and policy making.

Health Impact Assessment is one tool within the HiAP and HPP framework.
HIA Screening – Your Turn

1. Identify policies/plans/projects of interest that could benefit from an HIA

2. Decide whether a HIA is feasible, timely, and would add value to the decision-making process

Is the proposal likely to affect health and inequities? If so, how?

Is health already being considered in the decision-making process?

Is the HIA likely to be successful? (e.g., will decision-makers listen?)

Does the public have health concerns about the proposal?
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Thank you!!!