



Informed Decisions ~ Enhanced Development

National and International Examples of HIA

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Types of HIA

- Program
 - a plan or system under which action may be taken toward a goal
- Policy
 - a high-level overall plan embracing the general goals and acceptable procedures especially of a governmental body
- Project
 - a planned undertaking
- Plans?



Steps of an HIA

■ **Screening**

- Identify projects or policies for which an HIA would be useful

■ **Scoping**

- Identify which health impacts should be included

■ **Risk assessment**

- Identify how many and which people may be affected
- Assess how they may be affected

■ **Recommendations to decision-makers**

- Create report suitable in length and depth for audience

■ **Evaluation** of impact of HIA on actual decision process





US HIA

Safe Routes to School, Sacramento CA

Program

- HIA of a safe routes to school program
- Brian Cole of UCLA and Candace Rutt of CDC



Steering Committee and Stakeholders

- City council
- Local schools
- Parents
- Teachers
- Safe routes to school non-profit
 - Program exists at 3 out of 27 schools



Safe Route to School

- Goal:
 - More walking and biking to school
 - Improve health and safety of students
 - Reduce traffic around schools

- 60% decline in walk/bike to school in last 25 years



Data

- Comprehensive HIA
- Evidence from scientific literature
- Grey literature--data about impacts from safe routes to school programs in other counties
- Baseline data on physical activity
- Qualitative and a little quantitative



Population

- Population characteristics
 - Ethnically diverse
 - Modest socio-economic status



Program

- Walk and bike days
- Class activities
- Competitions
- Benefits taught
- City staff and planning officials identify and correct safety hazards or barriers to walking to school



Question:

- What are the program's potential positive health impacts and negative health impacts?



They found...

- Major pathways
 - Physical activity
 - Pedestrian safety
- Minor pathways
 - Violence/crime
 - Exposure to air pollution



Question:

- What recommendations would you make to the county schools administration?
 - Remember to involve stakeholders in making recommendations



They found...

- Walking to school is an excellent way to get physical activity into children's lives
- Encourages pedestrian safety
- Might reduce crime with more eyes on the street



They found...

- BUT schools may end PE if kids walk to school
 - So, the authors argued that walking to school is not sufficient for all children to get their recommended amount of physical activity.



Evaluation

- Safe routes to school program was implemented county-wide
- No cut in PE





US HIA

Comments on Draft Environmental Impact Assessment

Project

- Rajiv Batia, San Francisco
Department of Public Health
- The Rincon Hill Area Plan proposes over 5500 new units of housing, over 65,000 square feet of retail and office space in close proximity to local and regional transit and the Central Business District along with new open space, and street, sidewalk and lighting improvements



Data

- Rapid HIA
- Scientific literature review
- Qualitative analysis



Information from the Draft EIA

- The listing prices for basic market rate units are \$625,000 which requires household incomes of \$157,000
- Less than 25% of San Francisco area homes are affordable to median income families.
- Only 7.3% of households currently earn enough to afford the median sale price of housing.



Information from the Draft EIA

- About one-half of San Francisco employees currently commute from outside of the city.
- Almost all of the fastest growing types of jobs don't offer salaries sufficient for two income earners to afford a one-bedroom unit



Information from the Draft EIA

- The inclusionary housing program allows a project developer to produce affordable housing units **outside** the project development.



Question

- What type of health and **environmental** health impact would you expect?



They found...

- The plan would encourage:
 - A greater proportion of higher income households employed and residing in San Francisco
 - A greater proportion of higher income non-worker households residing in San Francisco



What kind of health and environmental impacts would this have?

Health and Environmental Impact...

- Higher income households that remain in or relocate to San Francisco will reduce transportation demand



They found...

- The plan would encourage:
 - A smaller proportion of moderate-income and low-income households will be employed and reside in San Francisco



What kind of health and environmental impact would this have?

Health and Environmental Impact...

- Increased proportion of low-income and moderate-income households will live further from jobs increasing vehicle trips and distances
- Increased proportion of total San Francisco employees residing outside of the City will increase vehicle trips and distances



Recommendations

- What recommendations and comments would you make to the Environmental Review Officer?



Recommendations

- The plan may be inconsistent with governmental long range **environmental** planning goals to reduce automobile use (improve air quality and lessen green house gas).
- The plan may increase transportation burdens on moderate-income and low-income households whose members work in San Francisco.
- Additional **environmental** analysis was recommended



Evaluation

- Developer added additional affordable housing units to the plan on site





International HIA

Construction Phase of a Nuclear Power Plant

Steering Committee and Stakeholders

- Local administrator from the National Health Service—Lead agency
- City commissioner
- Power Plant Operations staff
- Building sub-contractors staff



Data

- Intermediate HIA
- Key informant information
- Grey literature (non-peer review)
- Qualitative Analysis



Context

- Planned construction of nuclear power plant in rural area on the North Sea
- 5 years of construction
- 20% increase in the rural population, mostly male and foreign



Question

- What kind of health impacts do you expect?



They found...

- Based on the knowledge of key informants who have built power plants before
 - A 20% increase in male population will have a local impact. Conflicts with the local male resident population may occur resulting in tension and fights, especially in pubs
 - Drunk driving
 - Prostitution and sexually transmitted infections



They found...

- Based on scientific evidence
 - Auto accidents leading to injury and possibly deaths
 - Good for local retail economy



Recommendations

- What recommendations would you make to mitigate health impacts?



Recommendations

- Conflict resolution and avoidance education for employees
- Pub on site
 - to reduce conflict
 - avoid drunk driving
- Health clinic on site
- Health and Police incident monitoring



Evaluation

- Recommendations were not implemented until pub fights and police-auto driver incidents increased

Implementation....

- Pub on site
- Mobile health clinic on site
- Conflict resolution classes mandated

Fights and conflicts with local population decreased drastically





International HIA

Regional Planning Guidance for the West Midlands, UK

Plan

- HIA on entire plan was too big
- HIA on Transport and Accessibility Chapter



Steering committee

- Deputy regional director of Public Health
- Administrator
- Consultant in Public Health Medicine
- Specialist Registrar in Public Health
- Transport Planning Manager

Sponsored by Regional Assembly and others



Data

- Comprehensive HIA
- Scientific literature review
- Quantitative and qualitative analysis



Context

- Regional planning guidance is issued to local authorities to influence their local plans, development plans and transport plans



Transport Goals

- Protect and enhance the built and natural **environment**
- Improve **safety** for all travelers
- Contribute to an efficient and sustainable **economy**
- Promote **accessibility** to everyday facilities for all especially those without a car
- Promote the **integration** of all forms of transport and land use planning
- **Decrease car use**, priority to public transport, demand management, parking and other charges and restricting parking availability
- Locating facilities closer to people's residences and closer to public transport links.



Scenarios

- The assessment evaluated a number of hypothesized scenarios based on the priorities listed in the Draft RPG
- One scenario
 - Congestion charging in the city centre



Congestion Charging

- Motorists entering a defined central zone between the hours of 7 am and 7 pm are required to pay a charge of £2.50 each day that they enter the zone
- Charges can be prepaid at a wide choice of locations



Congestion Charging

- Cameras monitor entry and a penalty charge (£100) is made for any vehicle that enters the zone without paying
- Good system of public transportation exists



Question

- What are the potential health impacts of a congestion charging scheme?



They found..

Intermediate Factor	Health Impact
More use of public transport	Users walk more Subject to inconvenience if public transport unsatisfactory
Fewer vehicle miles Less emissions	Fewer injuries Less atmospheric pollution Less CO ₂ emissions
Less congestion in city centre roads	Better, more people-friendly environment Less vehicle noise Cleaner atmosphere Less stress for drivers
More congestion on circumferential routes	Vehicle noise Worse living environment
More parking at peripheral locations	Nuisance to residents
Have to pay charge	Reduced disposable income for those who have to drive into the city More money for city to use on transport
Prosperity of city centre businesses - may increase or decrease	Income, security of employment and quality of life of those working for businesses



Evaluation

- No outcomes reported





US HIA

Massachusetts Low Income Home Energy Assistance Program
--Child Health Impact Working Group

Policy

- Goal is to evaluate the implications of policy, regulations, and legislation for children's health and well-being.



Steering Committee and stakeholders

From area universities and hospitals

- Pediatricians
- Public health researchers
- Lawyers
- Health economists



Data

- Comprehensive HIA
- Scientific literature review
- Qualitative Analysis



Context

- Rapidly rising fuel costs
- There have been no legislative or policy adjustments in \$ in recent years
- The federal program is currently underfunded



Context

- There is no state funding
- Not all eligible populations apply
- Scientific evidence indicates that non-medical factors, such as energy costs, influence child health and well-being



They found...

- High energy costs force budget trade-offs that jeopardize child health.
 - Families spend less on food, medications, and housing in order to pay high energy costs.



What do you think the short and long term health impacts on children might be?

Short and Long term impacts...

- Short term
 - “Heat or eat” – food insecurity & other nutritional risk due to trade-offs between energy and food expenditures
 - Seasonal food insecurity
- Long term
 - Poor growth
 - Malnutrition – infection cycle leading to increased illness
 - Cognitive, developmental deficits of malnutrition affecting school performance



They found...

- High energy costs force the use of risky alternative sources of heat.
 - Families use ovens, stoves, space heaters, or fireplaces to replace or augment primary heating systems.



What do you think the short and long term health impact on children might be?

Short and Long term impacts...

■ Short term

- Increased risk of contact burns
- Increased risk of carbon monoxide poisonings
- Increased risk of house fires

■ Long Term:

- Possible long-term health consequences of burns, carbon monoxide exposure
- Economic impact of preventable hospitalizations



They found...

- Unhealthy housing conditions
 - Limited ability to afford appropriate housing, resulting in exposure to unhealthy housing conditions:
 - Rodent & cockroach infestation
 - Water leaks and mold
 - Peeling paint and lead paint



What do you think the short and long term health impact on children might be?

Short and Long term impacts...

■ Short Term

- Increased incidence & severity of asthma
- Increased incidence of lead poisoning
- Preventable injuries from fires, burns, falls
- Increased rates of infectious diseases, such as diarrhea and respiratory conditions

■ Long Term

- Increased health care utilization, including emergency department visits and hospitalizations
- Missed school due to illness
- Cognitive and developmental deficits due to lead poisoning



They found...

- High energy costs result in unpaid bills, arrearages and utility disconnection.
 - Families make partial rent or mortgage payments or miss an entire payment because of unaffordable energy bills.



What do you think the short and long term health impact on children might be?

Short and Long term impacts...

■ Short term

- Potential cold exposure
- Increased use of alternative heating sources
- Possible loss of utilities required for basic health and safety: light, refrigeration, cooking, water heating
- Increased risk of housing instability due to utility disconnection

■ Long Term

- Adverse physical health impacts, including lack of primary care, untreated or under-treated medical conditions, growth delay
- Adverse mental health impacts, including anxiety, depression, behavioral disorders
- Adverse behavioral, developmental and educational impacts, including developmental delay, grade repetition



Recommendations

- What kind of recommendations should be made?



Recommendations

- Fully fund the federal program
- The state should supplement the federal funding
- Outreach eligible clients who are not on the program
- Combine the program with housing subsidy programs
- Collect data for monitoring



Evaluation

- State matched the federal funds for the energy assistance program





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