

Using Health Impact Assessments to Advance Healthy Port Communities

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What is a Health Impact Assessment

Definition: ...a combination of procedures or methods by which a policy, program, or project may be judged as to the effects it may have on the health of a population (WHO Regional Office for Europe, 1999)

How is an HIA different?

- **Traditional public health science (epi) searches for disease causes**
- **HIA aims to evaluate how social decisions can impact health**

Value

- **Focuses attention of decision-makers (usually with no health background) on the health consequences of policies**
- **Contributes demand for info on health consequences in policy/planning**
- **Strengthens actions to prevent health harms (not just responding)**

The “typical” HIA process

Screening	Determine the need for and value of an HIA
Scoping	Determine which health impacts to evaluate, the methods for analysis, and the workplan to complete the assessment
Appraisal	Use data, research, expertise, and experience to judge the magnitude and direction of potential health impacts
Reporting	Communicate the results to stakeholders and decision-makers
Monitoring	Track the effects of the HIA and the decision on health

Common Health Impacts of Ports that an HIA can address

Sources of health risk

- Air Pollution
- Noise Pollution
- Light Pollution
- Water Pollution
- Traffic
- Involuntary displacement
- Employment conditions (+/-)
- Negative Neighborhood Livability Effects
- Homelessness and Loss of Social Cohesion

Health Impacts

- Asthma
- Chronic disease including heart disease, strokes, cancer
- Pneumonia
- High blood pressure
- Depression
- Violence and child abuse
- Children's cognitive development
- Memory loss
- Injuries

Some ports operate 24 hours a day, 7 days per week

Bayport

People who live in 327 homes located in the Bayport noise-mitigation zone are in the throes of trying to decide whether to accept the Port of Houston's offer of \$40,000 per home owner, in exchange for granting the port an easement on their property. Owners who accept the payment give up their right to sue

Right: Residents of La Porte's Bay Colony subdivision can see the Bayport Container Terminal Cranes from their yards.

(information and photo from www.ultimatepasadena.com)



Tips and Strategic Issues

Impact often dependent on relationship with decision-makers and/or level of involvement of community

Political vs technical strategies

Who is the decisionmaker?

The “balloon” model of ports (regional approach)

Learning lessons from our predecessors

- Others using health impact assessments
- Other ports
- Others in similar negotiating positions

Pro's and Con's of using HIA's

Pro's

- Supports primary prevention
- Evidence-based approach (even when local data is lacking)
- Flexible to research needs and available resources
- Can be used as a community engagement, organizing tool
- Can bring together non-traditional community coalitions
- Can result in mitigation of harms and community benefits programs

Con's

- Non-binding
- Timing is critical
- Can mitigate harms, but rarely derails projects
- If abused or poorly managed, can end up co-opting communities
- Local nature means that “wins” won't necessarily translate to improvements in other port communities and could even harm them

END

Completed and current initiatives on Ports HIAs

- Oakland
<http://www.humanimpact.org/component/jdownloads/finish/8/118/0>
- Longbeach
- Regional effort in Houston area

Emission Sources from Bayport

1. Trucks

7060 trucks^a/day idling at Bayport for 1 hour (408 acres)
9080 vehicles^b/day on Port Rd. (2 miles)
9080 vehicles^b/day on SH 146 (37.5 miles)
2765 vehicles^b/day on Toddville Rd^c

2. Ships

6.1^d post-panamax^e ships/day
Tugboats
Coastguard
Maintenance & Misc.

3. Trains

Trains idling in yard
Trains along SH 146 (miles)
Railyard equipment

4. Terminal Equipment^f

Container Cranes (electric): 11 40-ton Portainers
3 30-ton Portainers
4 50-ton Davy-Morris shore cranes
Yard Cranes (diesel): 11 30-ton Paccoco cranes
3 30-ton Peiner cranes
7 40-ton Davy-Morris cranes
14 40-ton Bardella cranes
Other Cranes (diesel): 5 30,000-pound top lifters
2 82-ton capacity mobile cranes
Other Equipment: 68 heavy-duty yard tractors
70 heavy-duty yard chassis
Yard trucks^g

5. Power Plant

50 - 54 MW Substation



Small Particulate (PM_{2.5})

Fine particles found in diesel exhaust lodge deep in the lungs

National recommended maximum is 15 $\mu\text{g}/\text{m}^3$

- micrograms per cubic meter

1998 Sonoma Study shows downtown Houston at 16.5 $\mu\text{g}/\text{m}^3$

Bayport will contribute additional PM 2.5

EPA concludes negative health effects occur at 13.5 $\mu\text{g}/\text{m}^3$

Key Questions to Decisionmakers

1. Can the developers provide an example of a port they have developed that is situated near residential and tourist areas that would serve as a model?
2. How much of the port revenues would benefit local government?
3. How much funding would be allocated by the Port for mitigation and community benefits, and who would have control of those funds?
4. Will special use permits be used to limit the health impact of port expansion or development?
5. What are the projections for jobs benefits within the local economy (not including short-lived construction jobs)?
6. What recourse measures will the community have to ensure a positive impact on the community?

Ways to measure and monitor health impacts within port communities continue to develop, creating an opportunity for establishing widely shared standards not only for measuring and monitoring, but also for developing acceptable standards and practices by ports.

Examples of Port HIAs

Longbeach

Oakland <http://www.humanimpact.org/component/jdownloads/finish/8/118/0>

- (summarize process, impact)