



**ISSUE BRIEF SERIES: EXPLORING THE SOCIAL DETERMINANTS OF HEALTH  
HEALTH IMPACT ASSESSMENT – MAY 2011**

*This is one in a series of 10 issue briefs on the social determinants of health. The series began as a product of the Robert Wood Johnson Foundation Commission to Build a Healthier America and continues as a part of the Foundation's Vulnerable Populations portfolio.*



## **Health Impact Assessment: A Tool for Promoting Health in All Policies**

### **1. Introduction**

Despite growing awareness that social factors—such as education, income and the conditions where people live, learn, work and play— have powerful impacts on health,<sup>1</sup> decisions about policies and programs that shape these factors are often made without considering their potential health consequences. Recognition of this problem has increased interest in an approach called *Health Impact Assessment (HIA)*—the systematic assessment of the health effects of implementing policies outside of the health sector.

### **2. What is Health Impact Assessment?**

*"[Health impact assessment is] A combination of procedures, methods and tools that systematically judges the potential, sometimes unintended, effects of a policy, plan, programme or project on the health of a population, including the distribution of those effects within the population, and identifies appropriate actions to manage those effects."<sup>2</sup> (International Association for Impact Assessment, 2006)*

Health Impact Assessments (HIAs) seek to identify the health consequences of plans, projects and policies traditionally considered to be outside the health sector domain. With the dual goals of maximizing health benefits and minimizing adverse health effects, HIAs aim to help stakeholders and policy-makers weigh the merits and drawbacks of a proposed project, compared with alternate approaches.<sup>3</sup> HIAs may focus on health consequences not only for the overall population, but also for

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vulnerable subgroups. Ideally, the HIA process includes collaboration among all of the different sectors that need to be involved<sup>4</sup> and engages stakeholders who will be affected by the decisions being considered.

In many cases, HIAs include assessments of the relatively direct health effects of proposed policies or programs by examining health status measures like asthma or obesity rates.<sup>5</sup> For example, a 2005 Child Health Impact Assessment of the Massachusetts Rental Voucher Program studied how substandard housing conditions could influence rates of child asthma, burns, lead poisoning and injuries.<sup>6</sup> Many HIAs also focus on health effects less directly, examining how policies or programs influence outcomes like racial segregation, employment, schooling or income that are recognized as key determinants of health. For example, an HIA addressing school discipline policies focused on their effects on academic achievement as a predictor of health, building on a large body of evidence linking educational attainment to health outcomes (see the “Education and Health” issue brief in this series).<sup>7-9</sup>

### ELECTRICITY “SMART METERING” IN CHICAGO, IL

The National Center for Medical-Legal Partnership and non-profit Citizens Utility Board in Chicago plan to conduct an HIA focused on the potential health effects of "smart metering" technology for monitoring home electricity usage in Chicago. In addition to considering how automatic service disconnections might affect risks of potentially life-threatening exposures to heat or cold, the HIA will also consider effects of energy prices on vulnerable populations including children, seniors and disabled persons. The findings should guide decisions about implementing the new technology more widely.

<http://www.healthimpactproject.org/hia/us/advanced-metering-infrastructure>

An HIA follows a series of well-defined steps (see Table 1). The first steps focus on identifying whether a proposed policy or program is likely to have significant health effects, either overall or for particularly vulnerable subgroups, and on assessing the scope and extent of those effects. These findings provide the basis for recommending appropriate actions to be considered by community members, other stakeholders and policymakers. The final step focuses on evaluating whether the HIA has been effective, both in shaping the decision-making process and in improving relevant health outcomes.

*Table 1. Steps in the process of conducting an HIA. Modified from CDC Healthy Places website<sup>10</sup> and the North American HIA Practice Standards Working Group.<sup>11</sup>*

<b>SCREENING</b>	Determines whether an HIA is appropriate for a given policy proposal. What is the added value of considering the health impacts of this proposal? Will the HIA have an impact on decision-making? Are the necessary resources (e.g., time, staff, expertise, data) available to conduct the HIA?
<b>SCOPING</b>	Establishes a plan for conducting the HIA. What are the pathways through which this proposal is likely to affect health? Will the policy affect specific populations more than others? How and with what data sources might the pathways to health be studied, and can the data be obtained in a timely fashion? Which key stakeholders need to be involved?
<b>ASSESSMENT</b>	Describes the baseline health and social conditions of the groups likely to be affected by the proposal and then assesses how the proposal may affect those baseline conditions.
<b>RECOMMENDATIONS</b>	Based on the assessment, develops practical recommendations to improve the health consequences of the proposed action, including measures to mitigate adverse effects.
<b>REPORTING</b>	Engages decision-makers, community members and other stakeholders in discussing HIA findings and recommendations.
<b>MONITORING AND EVALUATION</b>	Evaluates HIA process according to practice standards and initial plan, impact on decision making, and actual versus HIA-predicted health effects.





The scope of an HIA depends on several factors, including the extent and quality of relevant evidence, time constraints that result from policy-making schedules, and available resources such as staff time, funding and expertise. Streamlined “rapid” or “desktop” HIAs may be conducted with more limited resources, while more comprehensive and rigorous HIAs require additional capacity. In either case, HIAs can incorporate a wide range of qualitative and quantitative methods to evaluate potential health impacts. While most HIAs collect information prospectively, retrospective and concurrent HIAs have been conducted as well.<sup>5,11,12</sup> The extent of community involvement may vary with resource and time constraints, but community engagement and capacity-building are a vital component of HIA.<sup>13</sup> Some examples of potential stakeholder involvement are highlighted in Table 2.

**Table 2. Ways in which community stakeholders can be involved in the HIA process.**  
*Adapted from table courtesy of Jonathan Heller, Human Impact Partners, Oakland, CA; <http://www.humanimpact.org/hia#roles>*

HIA STEP	EXAMPLE OF STAKEHOLDER ROLES
<b>PROCESS OVERSIGHT</b>	<ul style="list-style-type: none"> <li>• Develop agreement to collaborate with HIA practitioners on HIA conduct</li> <li>• Identify agency/ organization to oversee HIA</li> </ul>
<b>SCREENING</b>	<ul style="list-style-type: none"> <li>• Identify priority health issues</li> <li>• Understand decision-making context</li> </ul>
<b>SCOPING</b>	<ul style="list-style-type: none"> <li>• Identify issues through outreach to affected communities</li> <li>• Prioritize research questions</li> <li>• Establish HIA timeline and focus</li> </ul>
<b>ASSESSMENT</b>	<ul style="list-style-type: none"> <li>• Lead or participate in field observations</li> <li>• Conduct surveys, interviews or focus groups</li> </ul>
<b>REPORTING</b>	<ul style="list-style-type: none"> <li>• Interpret and prioritize findings and recommendations</li> <li>• Develop and implement communication, media and advocacy plans</li> </ul>
<b>MONITORING AND EVALUATION</b>	<ul style="list-style-type: none"> <li>• Hold decision-makers accountable to agreed-upon decisions</li> </ul>

**STAKEHOLDERS AND HIA: THE ST. PAUL HEALTHY CORRIDOR FOR ALL**

Healthy Corridor for All—a project in East Side St. Paul, MN—was conducted to assess the health impacts of zoning and land use plans for a light rail route on low-income and vulnerable communities. Funded by a Health Impact Project demonstration grant,<sup>†</sup> the Healthy Corridor for All is led by ISAIAH, a 90-member coalition of religious organizations, and two partners—TakeAction Minnesota’s Hmong Organizing Program and PolicyLink, a national research and policy institute. The HIA was directed by a Community Steering Committee, including community members and leaders representing the diverse stakeholders in the Central Corridor and St. Paul’s East Side, that considered recommendations from community groups and agencies already working on regional zoning challenges. For example, the Minnesota Department of Public Health has documented existing access to grocery stores along the proposed light rail route; the Minnesota Center for Environmental Advocacy will examine the potential displacement of economically vulnerable residents along the corridor; community groups such as Save Our Homes are working to develop community-based proposals to mitigate other unintended yet potentially harmful project impacts; and others have explored how the development might affect local employment. Released in March 2011 to the St. Paul City Council, preliminary findings from this HIA indicated “serious potential threats to the 1,068 small businesses on the Corridor, as well as to health, housing, and job access for the large low-income and minority communities in the area.”<sup>14</sup>

<http://www.isaiah-mn.org/Issues/HIACommunityMeeting030511.htm>





### 3. Why use Health Impact Assessment?

Despite widespread recognition that non-health sector actions affect health and health disparities, few tools have successfully translated health effects research to inform policy discussions. Conducting an HIA can systematically inform the decision-making process about the health consequences of plans, projects and policies. The World Health Organization has articulated *four core values* that are fundamental to HIA and strengthen support for its use in diverse planning processes:<sup>15</sup>

- *Democracy.* HIAs should be participatory, engaging multiple stakeholders in the development, implementation and evaluation of policies and programs that affect them. Stakeholder engagement can build support for a project or policy, improve the quality and efficiency of the decision-making process, and build collaborations between health and other sectors.
- *Equity.* HIAs should look not only at the overall health impact of proposed policies/programs but also at how health impacts may differ across population subgroups, including those who are particularly vulnerable based on socioeconomic and other factors that reflect social disadvantage. This perspective highlights the reduction of social disparities in health as a central concern in policy making.
- *Sustainability.* HIAs should consider sustainability and identify both short-term and long-term health impacts of a policy.
- *Ethical use of evidence.* HIAs should be as rigorous as possible, employing both quantitative and qualitative evidence where appropriate and drawing on a range of “different scientific disciplines and methodologies to get as comprehensive assessment as possible of the expected impacts.”<sup>15</sup>

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#### OREGON'S VEHICLE MILES TRAVELED LEGISLATION

In 2009, a coalition including Upstream Public Health, Oregon Health and Science University, and Human Impact Partners conducted an HIA focused on the health impacts of different proposals—including increasing the cost of driving/parking, improving public transit, and changing the built environment to promote activity—to decrease vehicle miles traveled (VMT). The findings are expected to inform all future state and regional VMT policy proposals.

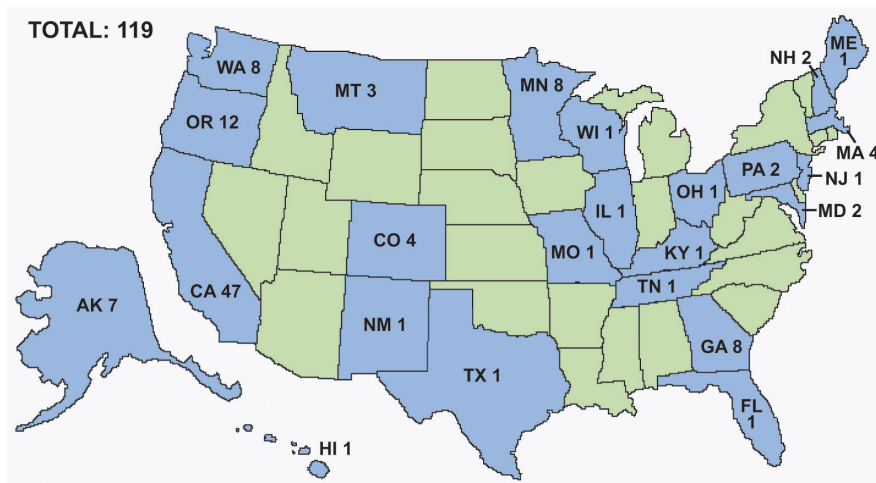
<http://www.humanimpact.org/past-projects>



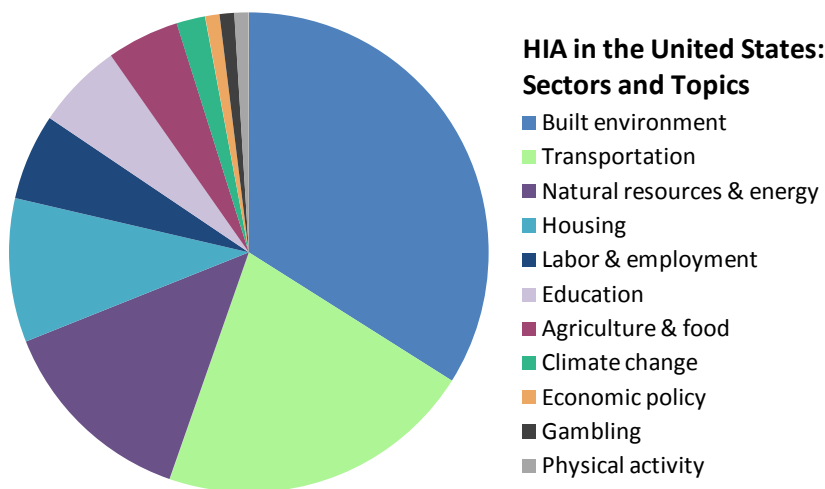


#### 4. How has HIA been used in the United States?

A 2007 study identified 27 HIAs conducted in the United States between 1999 and 2007 on topics ranging from land use and transportation projects to living wage legislation.<sup>16</sup> Since then, the use of HIAs has increased dramatically, with a total of 119 HIAs (79 completed and 40 in-progress) in the United States as of 2010, according to information collected by the Centers for Disease Control and Prevention, Johns Hopkins University and the Health Impact Project, a joint effort of the Robert Wood Johnson Foundation and the Pew Charitable Trust (see Figure 1). Completed HIAs have provided information on a broad range of topics; while most have focused on land use, some have explored the health-related impacts of diverse policies including public housing policies, after-school programming, gambling and water laws (see Figure 2). These assessments have varied dramatically in cost (with estimates ranging from \$10,000-\$200,000 per HIA) and duration (from six weeks to two years).<sup>4, 18, 19</sup> HIAs in this country have been funded by diverse sources, including private foundations; federal, state, tribal and local government granting agencies; and public health and planning departments.<sup>18</sup>



**Figure 1. HIAs completed or in progress in the United States, 1999-2010.** Adapted from map courtesy of Arthur Wendel, CDC, and developed in collaboration with Aaron Wernham, Health Impact Project, Washington, D.C. For an interactive map with up-to-date information on HIA in the United States and links to information about each HIA project, see <http://www.healthimpactproject.org/hia/us>.

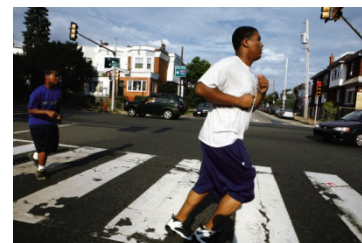


**Figure 2. The wide scope of recent HIAs in the United States.** Based on a review of 119 HIAs completed or in progress, 1999-2010. Health Impact Project, Washington, D.C.





Mandated by federal law since 1969, *environmental impact assessments* (EIA) are required to include consideration of health effects. Despite this requirement, EIAs themselves rarely have focused on health effects,<sup>20, 21</sup> although efforts to integrate HIA with EIA have helped include health considerations in decision-making about policies outside the health sector.<sup>22</sup> These efforts have been limited, however, reflecting factors including lack of participation by health experts in the EIA process, the often limited health expertise available in non-health sectors, and concerns about making the EIA process more lengthy, litigious and costly.<sup>12, 22</sup>



There are no other federal mandates for HIA, although at least six states and the U.S. Senate have introduced legislation that would require or support these efforts<sup>23</sup> and several federal, state and local projects have required HIA during planning phases.<sup>24</sup> Most HIAs in the United States have been voluntary efforts, triggered and undertaken by community stakeholders, non-profit groups, public health and/or non-health sector public agencies, often in collaboration with organizations devoted entirely to HIA. Along with related concerns about expertise and bias, the lack of agreed-upon standards for who should regulate, conduct or fund HIAs<sup>4</sup> may limit their influence.<sup>12, 25-27\*</sup>

**FIRST FEDERAL INTEGRATED EIA/HIA: OIL AND GAS LEASING IN ALASKA’S NORTHEAST NATIONAL PETROLEUM RESERVE**

The first federal integrated HIA/EIA process was conducted in Alaska on the National Petroleum Reserve (NPR) by the Alaska Inter-Tribal Council and the North Slope Borough, after convincing the Bureau of Land Management that health impact should be considered in an environmental impact statement for proposed oil and gas leasing in the region. The integrated HIA-EIA led to an unprecedented agreement to consult with local agencies and address health impacts in future Bureau of Land Management and Minerals Management Service proposals. The efforts also contributed to improved monitoring for food and environmental contamination, increased monitoring of health and harvest indicators, and training of relevant personnel to reduce the adverse social impacts of the proposed oil and gas leasing on surrounding communities.<sup>21, 28</sup>

**5. Health Impact Assessment outside the United States**

HIA has been used more widely outside of the United States. A 2007 report from the European Observatory on Health Systems and Policy documented 470 European HIAs since the early 1990s, and indicated that the actual number was likely even higher.<sup>29</sup> The prominence of HIA abroad has been attributed in part to greater awareness and governmental commitment to multi-sector action in the European Community, England, Australia, New Zealand, Canada and Thailand.<sup>30-33</sup> The international development community also has begun to use HIA. The World Bank now recommends including HIAs in many development projects, and its private-sector counterpart organization—the International Finance Corporation—has adopted standards for HIA as part of an integrated process of environmental, health and social assessment.<sup>34</sup> Some multinational corporations, including Chevron Oil, are also adopting internal standards for HIA.<sup>35</sup>

\* An upcoming report from the National Academy of Sciences, expected to be released in June 2011, will provide additional guidance and standards for conducting HIAs in this country.  
<http://www8.nationalacademies.org/cp/projectview.aspx?key=49158>





## 6. Evaluating the effectiveness of HIA

Several strategies have been used to assess the effectiveness of HIA in guiding planning and policy-making.<sup>12, 36, 37</sup> *Process evaluations* may examine HIA costs, barriers to developing or implementing the assessment, and extent of stakeholder involvement; *impact evaluations* study the effects of HIA on decision-making, stakeholder capacity-building and informing the public; and *health outcome evaluations* focus on the accuracy of HIA predictions and public health impact. Examples of evaluations that have assessed some combination of process, impact or health outcomes include:

- Preliminary results from a recent review of 76 HIAs in the United States indicate successful incorporation of health issues into many different planning processes that traditionally have not considered health perspectives. The HIA practitioners described challenges related to lack of regulatory requirements for HIA, difficulty convincing non-health sectors that health concerns are both relevant and important, and institutional obstacles to activities extending across sectors.<sup>19</sup>
- A 2006 analysis of 16 HIAs in England found that the completed projects had positive influences on relevant decision-making processes and concluded that their benefits outweighed their costs.<sup>38</sup>
- A 2004-2007 European Observatory on Health Systems and Policy/WHO-sponsored study, conducted by 21 research teams in 19 European countries, evaluated the effectiveness of HIA and identified crucial elements for successful implementation. Most case studies indicated positive HIA impacts, both by directly contributing to specific policy changes and by increasing awareness of potential health impacts among decision-makers in multiple sectors.<sup>39</sup>

Several inherent features of HIAs present challenges for evaluating effectiveness. A major challenge, for example, is that the health consequences of many policies may not manifest for a long time—even decades or generations—making it difficult to determine whether predicted health effects are “correct.”<sup>36, 37, 40</sup> In addition, given the complex array of factors that influence political processes, it generally is difficult to conclude that an HIA contributed to changes in policy or decision-making.

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### CITY OF BILLING'S GROWTH POLICY, MT

RiverStone Health conducted an HIA to inform the 2008 Growth Policy for Yellowstone County and the City of Billings, MT. Pathways explored included emergency preparedness, nutrition, pedestrian safety and traffic, physical activity, social capital, safety and crime, affordable housing and living wage jobs. Health effects studied included injury, depression, lung cancer, diabetes, obesity, hypertension, and fitness. The HIA recommended specific steps to expand access to healthy food, encourage physical activity and ensure public safety. Ultimately, RiverStone Health's findings and recommendations were included in the City's policy update in a specific section of the 2008 Growth Policy that incorporated 40 growth strategies focused on improving the health of the community.

<http://www.healthimpactproject.org/hia/us/yellowstone-county-growth-policy>

[http://www.healthimpactproject.org/resources/document/Harris\\_HIA-in-Billings-Montana\\_Jan2011.pdf](http://www.healthimpactproject.org/resources/document/Harris_HIA-in-Billings-Montana_Jan2011.pdf)



## 7. How does HIA fit into a broader strategy to achieve “health in all policies”?

*“Because programs far beyond the reach of the health sector can have powerful health effects, decision-makers in every sector must consider the health effects of all policies and programs, not only those with obvious direct links with health. Health effects have been linked with child care, education, housing, community planning, nutrition and agriculture, transportation, and policies affecting taxation, wages, and employment benefits, for example. Wherever there is significant public—and civic-minded private—investment in actions with potentially significant health consequences, the effects on health should be measured systematically. If policy decisions and public and private investments are to promote health and if decision-makers are to be held accountable for the health consequences of their decisions, better information must be developed.”<sup>41</sup>*  
(Robert Wood Johnson Foundation Commission to Build a Healthier America, 2009)

As awareness has grown about the social, economic and environmental determinants of health, calls to promote “health in all policies” have come from the U.S. Department of Health and Human Services (HP 2020) and the Institutes of Medicine (The Future of Public Health), echoed by the formation of the federal inter-agency National Prevention and Health Promotion and Public Health Council.<sup>42</sup> HIA has been viewed as an essential tool for achieving health in all policies,<sup>30, 43, 44</sup> along with other strategies such as governance structures, finance agreements, and regulatory and legal frameworks that facilitate collaboration across sectors.<sup>45-47</sup> In many cases, HIA findings may help launch and reinforce these other efforts. For non-health agencies, participating in an HIA process may be a key first step toward considering how their actions affect health and may lead to further collaborations.







At the same time, the success of HIA may depend on the extent of the existing commitment to collaboration across sectors.<sup>48</sup> Attempts to institutionalize HIA have been hindered by lack of acceptance across different sectors of their shared responsibility for promoting and protecting health.<sup>49</sup> Introducing HIA before a willingness to collaborate or share responsibility exists may undermine HIA efforts.<sup>12</sup> In other words, the first essential step may be bringing sectors together to make the case for joint action, to discuss their respective needs and constraints, and to create a shared language for decision-making. For example, California’s Health in All Policies Task Force has initiated its efforts by convening high-level officials from across the state to share best practices, develop shared priorities and assess the feasibility of joint action for healthy public policy proposals—without first having conducted an HIA.

Whether it develops as a result of collaboration across sectors or introduces and promotes such efforts, a growing body of evidence supports HIA as a crucial tool for moving toward healthy public policies. With adequate resources and broad stakeholder involvement, HIAs can provide key information to guide health-promoting and equitable decision-making in all sectors.

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**HEALTH IMPACT ASSESSMENT OF CITY POLICY PROPOSAL: SAN FRANCISCO’S LIVING WAGE POLICY**

In 1999, the City of San Francisco proposed a living wage ordinance establishing an \$11 minimum hourly wage for employees of companies that provided services to the local government. An HIA requested by the Board of Supervisors and conducted by the Department of Health predicted that adoption of the increased wage would result in an estimated five-percent decrease in the risk of premature death among adult workers in low-income households, along with a projected increase in the number of years of completed education and decrease in the risk of childbirth outside of marriage.<sup>50</sup> The HIA received significant media attention and was influential in policy-maker’s decisions to pass the living wage legislation.





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#### **ABOUT THE COMMISSION TO BUILD A HEALTHIER AMERICA**

The Robert Wood Johnson Foundation Commission to Build a Healthier America was a national, independent, non-partisan group of leaders that released 10 recommendations to dramatically improve the health for all Americans. [www.commissiononhealth.org](http://www.commissiononhealth.org)

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