

# The Health-Impact Assessment (HIA): A Useful Tool

published as a supplement to  
**Healthy Communities:**  
A Resource Guide for Delaware Municipalities

**February 2011**

written by  
Eric Jacobson  
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Natalie Rosenberg



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**Institute for Public Administration  
School of Public Policy & Administration  
College of Arts & Sciences  
University of Delaware**

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**DELAWARE HEALTH AND SOCIAL SERVICES**  
Division of Public Health

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written by

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## **Preface**

As the director of the Institute for Public Administration (IPA) at the University of Delaware, I am pleased to provide *The Health-Impact Assessment (HIA): A Useful Tool* as a supplement to *Healthy Communities: A Resource Guide for Delaware Municipalities*. Preparation of this supplement and of the resource guide is part of a larger project, the University of Delaware's Healthy/Walkable Communities initiative, which is an ongoing collaboration between the University's Department of Health, Nutrition, and Exercise Sciences (DHNES) and IPA. Funding for this project was provided by the Delaware Division of Public Health.

Walkable communities result from careful planning and community design that provide active living opportunities. The original resource guide stresses that community leaders can catalyze change through communication of a vision and involvement of key stakeholders. This supplement offers information on health-impact assessments and provides examples of their effective use.

It is my hope that municipalities throughout Delaware can use this information to raise awareness of health impacts of proposed plans and projects in their community, and, in doing so, improve the quality of life of residents.

Jerome R. Lewis, Ph.D.  
Director, Institute for Public Administration

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## Introduction

The purpose of this quick guide is to introduce health-impact assessment—an exciting and relatively new analytic approach to planning healthier communities. “How are existing or planned land use, community design, and transportation policies, projects, or programs affecting or likely to affect public’s health?” (NACCHO). Recently endorsed by the nationwide health-promotion plan *Healthy People 2020*, health-impact assessment is one method local communities can use to begin to address this question.

In today’s society, media coverage of health topics such as smoking and obesity has become the norm. Issues that used to be thought of as individual problems have grown into public health concerns and are forcing society to rethink how choices made in various sectors affect health. Health-impact assessments (HIAs) are rapidly growing practices within the United States that can help decision-makers outside of the health sector evaluate the potential health effects of proposed projects and policies.

An HIA can be defined as “a combination of procedures, methods and tools by which a policy, program or project may be judged as to its potential effects on the health of a population, and the distribution of those effects within the population” (1999 Gothenburg consensus statement). It is becoming increasingly clear that many of the things that determine health, disease, or injury lie outside of the traditional health sector. Uncovering these determinants is imperative in restoring the nation’s health.

Both revolutionary and surprisingly intuitive, the HIA methodology simply seeks to evaluate public-policy decisions on their likely human outcomes. With the central and sole assumption that peoples’ health, vitality, and longevity ought to guide significant policy decisions, HIAs can be used as a planning tool to confront the social determinants of health amid the growing consensus that there are many social, environmental, and economic factors that affect health.

There are vast opportunities for the use of HIAs. They can be used to assess the health impacts of seemingly small plans to those of complex land-development efforts. For example, deciding where to place a playground may seem irrelevant, but the realization that children must cross a busy highway to get there could lead to plan revisions that make access more practical and lead to greater use and physical activity. Decisions made regarding community design, development and policy implementation have the potential to impact the health of surrounding populations. safely than when they have the perception of a “neighborhood expressway.”



## HIA and the Planning Process

### Where does an HIA fit into the planning process?

The extent of an HIA can vary greatly, from quick “back of the envelope” calculations to multiyear investigations that forecast and model behavior and interactions for many years to come. Regardless of their complexity, the promise of the HIA is compelling. It offers the possibility of refocusing public discussion away from the routine proxies for health and welfare, (economic development, pollution, congestion, diet, physical activity) and offers a more comprehensive decision-making model that would better balance all such concerns.

The diagram below shows that an HIA can take place after the decision has been reached that the assessment would indeed be valuable. After the HIA has been conducted and potential health impacts are identified, suggestions are made to revise the plan. Evaluation and monitoring must also be part of the process to be sure that revisions to the plan are followed by decision-makers.

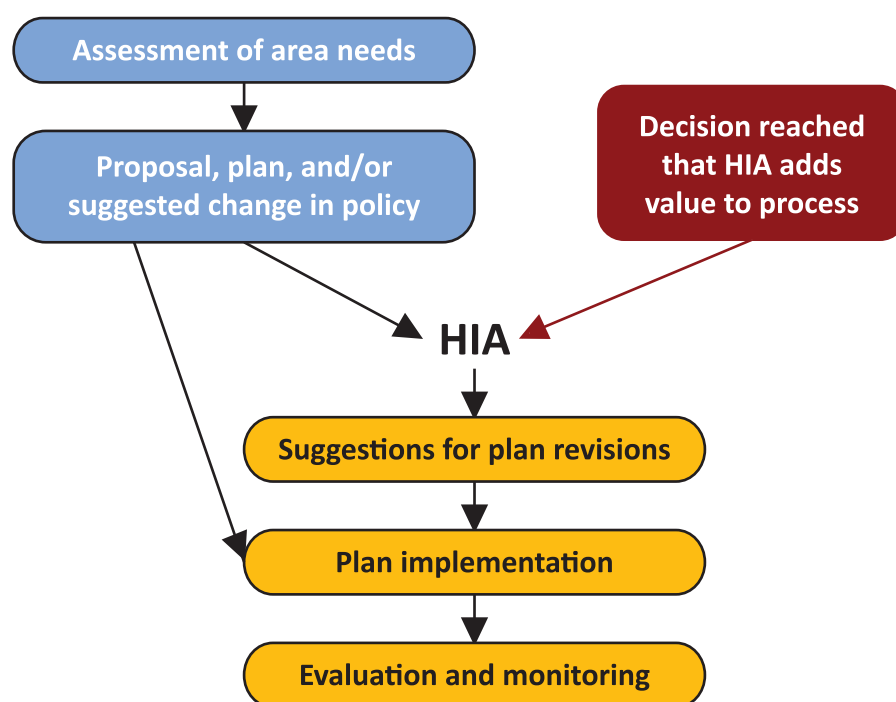


Figure 1. HIA and the planning process

An HIA can help to create a solid and level foundation upon which decisions can be based. The HIA is not a crystal ball, nor is it a one-size-fits-all tool; however, when a knowledgeable group applies the process to the right job, it can potentially have meaningful implications on the health of the population. The following figure was created based on an HIA that was performed for the

Derby-area Redevelopment in Historic Commerce City, Colo., and demonstrates how a project seemingly outside of the health sector has the potential to have lasting health impacts on a population.

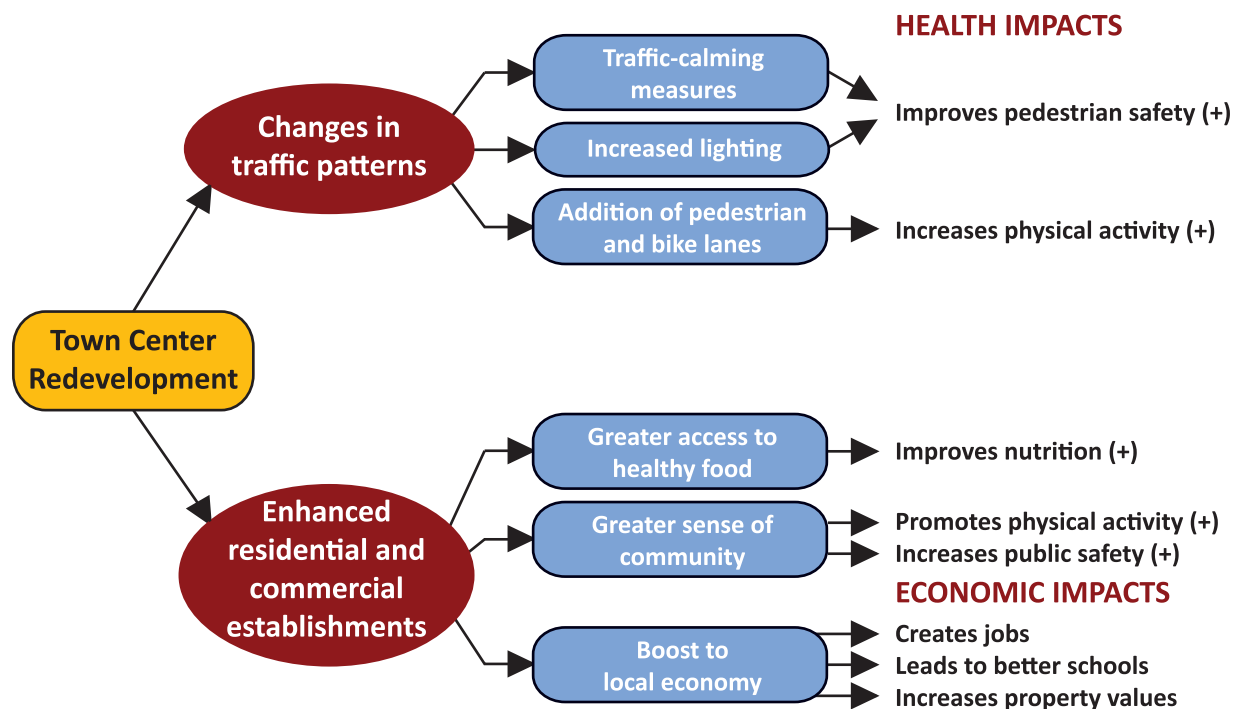


Figure 2. The potential health impacts of land redevelopment, an adaptation based on an HIA performed for a Derby-area redevelopment project in Colorado

Performing an HIA is a helpful way to see the effects a potential project or plan may have before the plan is approved. As demonstrated in the land-redevelopment diagram above, HIAs consider not only multiple aspects of health, but economic factors. This allows an HIA to not only impact community-health determinants, but quality of life at the individual level. HIAs are designed to integrate both promotion of health and protection of the community, making them beneficial and worthwhile to perform. HIAs are performed regularly, often as part of a mandated process, in many other areas of the world including Europe and Canada, and the practice is becoming increasingly popular in the U.S.

Although the concept of HIA is relatively new to the U.S., similar assessments take place routinely as part of planning processes. Environmental-impact assessments (EIA), social-impact assessments (SIA), and traffic-impact studies (TIS) are all methods to examine the effects of proposed projects. The National Environmental Policy Act (NEPA) is one existing regulatory measure, which was implemented in January of 1970 by the Environmental Protection Agency (EPA). NEPA requires federal agencies to prepare environmental-impact studies (EIS). The purpose of the EIS is to assess a project's potential impacts on the environment.

Now, with heavy priority placed on health and current aims to decrease healthcare costs, HIAs should become increasingly useful tools in the planning process. The Centers for Disease Control and Prevention (CDC) branch of the U.S. Department of Health and Human Services (DHHS) recognizes that factors outside of the health sector impact the health of populations. Dan Kass, Deputy Commissioner for Environmental Health in New York explains, “To have true control of your health is not just about what you can do as an individual, but what can be done at the community level” (“The Mayor wants you to Lose Some Weight.” *Wall Street Journal*. 4 January 2011). Examples of successful use of HIAs include raising awareness of health issues in Polk County, Fla.; confronting the loss of farmland and green space in Delaware County, Ohio; and addressing physical inactivity in Tri-County, Colo.

The new U.S. health-promotion and disease-prevention plan, *Healthy People 2020*, emphasizes a population-based perspective incorporating multiple determinants of health. Healthy People 2020 comprises the most recently released set of goals and objectives developed every 10 years by the U.S. DHHS. The goals and objectives reflect science-based evidence and are designed to guide national health efforts. With the growing national recognition that determinants of health lie outside of the traditional health sector, *Healthy People 2020* became the first set of objectives published that recognizes the importance of HIAs in the planning process. *Healthy People 2020* describes five defining characteristics of HIAs:

1. A focus on a specific policy, program, or project proposal
2. A comprehensive consideration of potential health impacts, positive and negative
3. A population-based perspective incorporating multiple determinants and dimensions of health.
4. A multidisciplinary systems-based approach
5. A transparent approach that is highly structured but sufficiently flexible to confront a wide range of proposals.

In addition to these five characteristics, the World Health Organization (WHO) emphasizes a democratic approach to conducting an HIA through the involvement of any and all citizens and stresses consideration of vulnerable populations within the community.



## Where and When are HIAs Necessary?

HIAs represent a valuable method that can apply the concept of health to a wide range of decisions. The idea of applying a framework to ensure that all policies, plans, and decisions will benefit human health is appealing. The logical question then is, when and where can this revolutionary approach be applied? Should it not be employed in every possible instance? After all, what could be more important than human health?

### Geography

Like any decision-making tool, an HIA is not constrained by geography. Where an HIA can or should be conducted is as simple as wherever policymakers, legislators, governments, or other entities are engaged in a decision-making process that has the potential to impact the surrounding population.

### Timing

An additional consideration, assuming an HIA is desirable, is at which point during the decision-making process the HIA should be initiated. According to Andrew Dannenberg, who is a part of the CDC Division of Emergency and Environmental Health Services and one of HIA's leading researchers, the intent of an HIA is to inform decision-makers on possible health-related outcomes of a proposal, suggesting a sooner-than-later approach. Simply put, there is often little reason to conduct an HIA after a decision has been reached, or so late in the process that any resultant conclusions cannot be fully debated, presented to the public, stakeholders, and decision-makers.

### Scale

In deciding whether or not to conduct an HIA, it is important to determine whether the project, plan, or policy in question is of the appropriate scale. Are there likely health-related outcomes? Are those outcomes already so obvious that an analysis would be redundant? Finally, and most importantly, is there even a decision to be made? Several resources, including *Healthy People 2020*, training guides developed by UCLA, and practicing consultants, all outline a comprehensive screening process that can be used to determine if an HIA is appropriate to a given situation. The screening process is further detailed later in this document.

HIAs will likely be much more useful and accurate if it is applied to a more specific proposal. For example, imagine a city council is debating whether to increase the availability of public

transit. When is the correct time within the proposal to begin the analysis? Certainly increased mobility could benefit the population's health by increasing access to resources such as healthy foods, parks, and trails. Perhaps the analysis should not be initiated until there is a specific proposal to enhance a particular transit route. With more known quantities, an analysis would be simplified. Just by drawing circles on a map, decision-makers could determine what segments of the population would be given increased access, and to what destinations. In this scenario, the council could not know if that specific proposal was potentially the most beneficial, until options were fully developed.

Each HIA is unique. In the situation presented, maybe the city council could use an intermediate approach (see Figure 4 on page 8); begin a public-involvement process early on, clearly stating the importance of health in the process, and begin to involve interested parties with the requisite interest and expertise. Perhaps the transit agency could present a range of alternatives or proposals for enhancing one of a handful of routes, and the HIA process could be used to identify and tweak the most beneficial project.

In any event, regardless of at what point a formal analysis begins, it is clear that having a consensus in place that values health outcomes will help community leaders create healthier communities. Beyond that, the HIA process is as much art as science and relies upon thoughtful and timely implementation.

## Major Steps of an HIA

There are five major steps in conducting an HIA. The process begins with screening to determine whether a proposal or plan should be assessed and proceeds through the major steps of scoping for key health issues, analyzing the proposal/plan for potential health impacts, reporting impacts to decision-makers, and monitoring actions taken. Each of the major steps is illustrated and further described below.

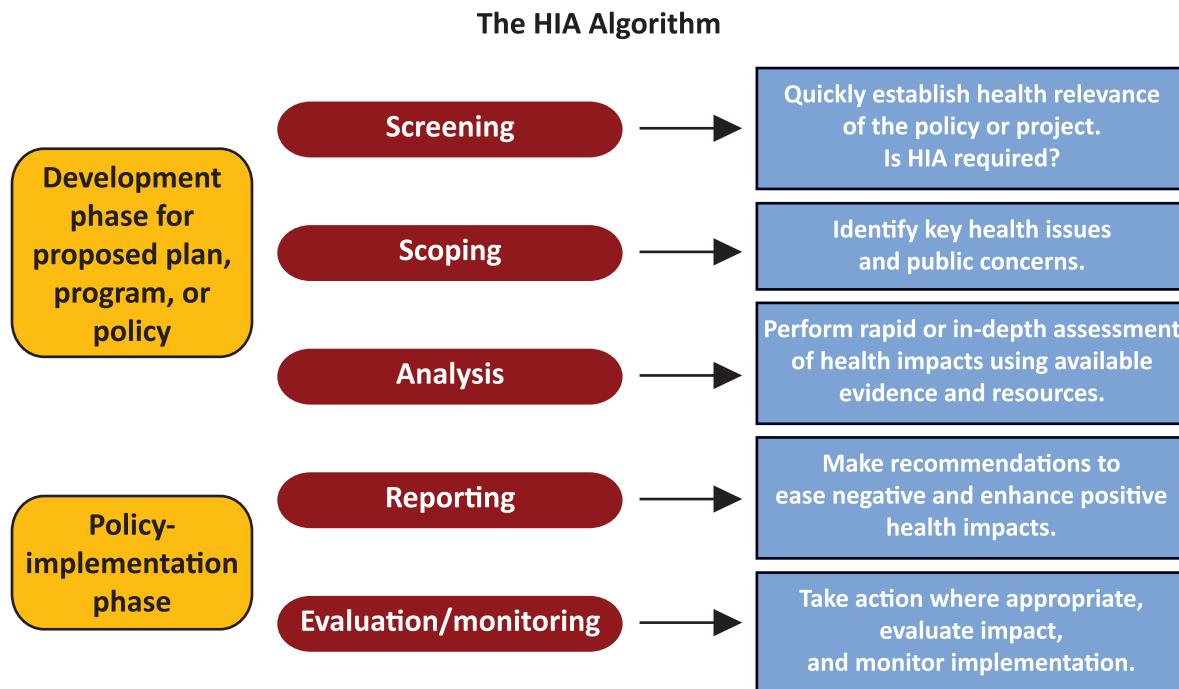


Figure 3. An overview of the five major steps that make up the HIA process

### Screening

The first of the five major steps in conducting an HIA is screening for a project. According to *Healthy People 2020*, one of the defining characteristics of an HIA is that it focuses on one specific proposed policy, program, or project. The application of screening procedures such as checklists and surveys of the community can help to determine if it is necessary to conduct an HIA. Questions to ask in determining if an HIA should be conducted can include the following:

- Could the policy affect any of the determinants of health in the community?
- Could the policy affect any of the vulnerable populations in the area?
- Is a similar assessment already being conducted?
- Are there any potential sources of funding for an HIA?

## Scoping

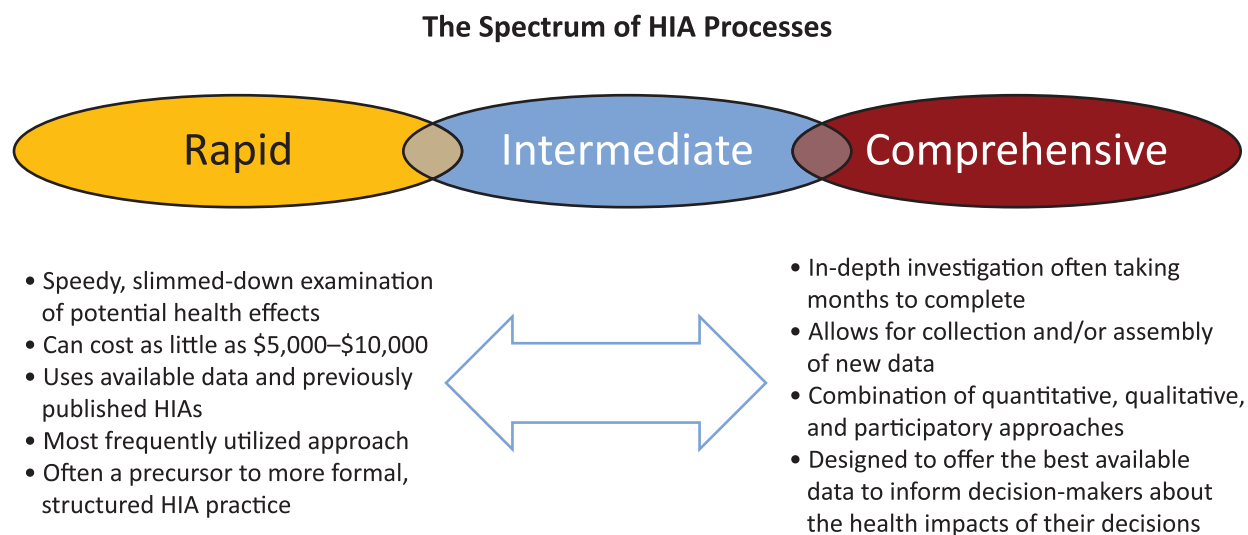
The purpose of scoping is to determine the goals, objectives, and resources available for use in the assessment. The scoping process aims to answer the question of who will complete the HIA and how it will be completed.

### Who will complete the HIA?

HIAs are a shared process that can involve many individuals; ranging from key government stakeholders to local neighborhood residents. Where possible, HIAs can even involve population experts and statisticians. Setting up a steering committee as a first step in scoping can help ensure that a collaborative approach is taken to complete the assessment.

### How will the HIA be conducted?

The HIA process is flexible and can range from very simple to very complex. Rapid assessments can be completed in only a few weeks time, while complex assessments can include intensive data collection and require advanced methods to assess the data. The chart below demonstrates the idea that the actual HIA process can fall anywhere on a wide spectrum of methods; depending on time and resource availability.



**Figure 4. Examples of the varying means through which the HIA process can be conducted**

It is important to consider the following in determining how to complete the HIA process:

- What are the goals and objectives of completing the HIA?
- What personnel and tools are available?
- How soon do planners need HIA results so that changes are able to be implemented?

## **Analysis**

The third major step in the HIA process, the analysis, is where the majority of work occurs. The purpose of this step is to identify the health risks and benefits of the proposed project and compare them to key determinants of health for the community. It could be said that the analysis portion of the HIA actually identifies factors that impact the determinants of health.

Methods that can be used to collect data in the HIA can be both qualitative and quantitative and may include focus groups, interviews, and surveys. Data should be analyzed with the aim of determining the types and extents of health impacts, both positive and negative, associated with the project. One way to review results is in a facilitated workshop with a range of individuals. Settings such as this allow for collaboration and also the formation of strategic partnerships in the community.

## **Reporting**

The reporting step involves making recommendations regarding the proposed plan, based on findings of the HIA. These recommendations are typically compiled in a final report and should be delivered to key stakeholders and decision makers with enough time for any changes to be incorporated into the plan.

## **Evaluation and Monitoring**

The last part of conducting an HIA involves evaluating if there has been any impact on the decision making process. This step can also answer the question of whether the HIA was successful. It is also crucial to monitor the actual implementation of the plan to be sure that the changes are incorporated. Larger-scale HIAs may continue to monitor for actual health impacts on the population.



## What Should Be Done with the Results of an HIA?

### How can the results be put to use?

The options for the use of the results of an HIA are somewhat determined by when and how the HIA is conducted. Generally, there are three timetables: 1) prospective HIAs, conducted in advance of an anticipated project or policy, 2) concurrent HIAs, conducted with a project or policy's development, and 3) retrospective HIAs, used primarily to demonstrate the effects of past projects or policies. Although HIAs can be carried out concurrently with or after a project, prospective HIAs represent the truest form of assessment because of their potential to influence a project or policy.

There are several ways in which HIA results can be used:

- 1) To justify the acceptance, denial, or modification of the policy or project in question.
- 2) To steer the development of a given policy or project during its formative stages to more fully address health and health disparities (most common with concurrent HIAs).
- 3) To educate and lobby key stakeholders to more fully consider health impacts and disparities in a project/policy under consideration for the future.
- 4) To educate and raise awareness among citizens, academics, the media, and the public at large.
- 5) To potentially contribute to learning by decision-makers and policy researchers about whether particular kinds of projects are worthwhile.

The literature available (Healthy People 2020, Dannenberg, Lock, et al.) focuses largely on prospective HIAs and, to a lesser extent, on concurrent and retrospective evaluations. Results of prospective analyses have the potential to have an immediate impact on a given policy or project because they are completed in time to be of value to decision-makers before a given project or policy is undertaken or accepted. For example, a prospective HIA may determine that a proposal to locate a chemical plant in proximity to a school is unacceptable and lead to its rejection.

Concurrent HIAs typically also will offer decision-makers useful information during the decision-making process, but generally will focus on adjusting or modifying a proposal or policy already “on the table” for consideration. To continue the above example, a concurrent HIA may lead decision-makers to press the plant's developers to find a better location or install additional safety monitors.

The results of retrospective HIAs, often presented in a case-study approach, are more applicable to policy-level deliberations, or when assessing the decision-making framework in use. As they

are completed after-the-fact, their results are useful for program evaluation or as policy background for similar future deliberations. A retrospective HIA would have had no impact on the plant's location or operation. It would serve to illustrate the likely health risks now facing the community and call into question the decision-making of the agencies charged with oversight. It could also be useful as evidence for future decisions about the location of industrial uses in proximity to schools.

## How can it be ensured that results are heeded?

In the U.S. at present, HIAs are generally not a regulatory requirement. Simply put, there are few rules or laws that would force a decision-making body to consider, or act upon, the recommendations of an HIA in the same way it is compelled to comply with more traditional assessments like an environmental-impact study.

How then can one maximize the likelihood that a HIA is fully considered by decision-makers and that its results are put to effective use? In short, how can decision-makers come to see the value of the HIA process and the analyses' recommendations?

In its 2008 *Health Impact Assessment: Quick Guide*, The National Association of County and City Health Officials (NACCHO) makes several key suggestions—valuable evidence, engagement across disciplines, and spill-over into arenas outside of health and planning.

**Valuable evidence** – The report suggests that the evidence presented must not only be valid and defensible, but that the recommendations and findings must be relevant to the decision-making body. For example, an analysis presented to a town council favoring parks and trails would likely be better received if it were able to highlight health and lifestyle benefits likely to accrue to the town. An HIA noting possible ramifications to the national healthcare system would be less applicable.

**Cross-disciplinary engagement** – The strength and, frankly, the challenge of the HIA process is its inclusiveness and comprehensive scale. It necessitates input and cooperation from a broad range of stakeholders. To continue the above example, a town council may choose to disregard a recommendation for a new park and trails from its public works committee. However, that same council would be far less likely to disregard a recommendation studied and made jointly by public works, parks and recreation, planning, public health, and a homeowner's association.

**Spill-over into arenas outside of health and planning** – Though the primary function of an HIA is to determine potential health outcomes, it need not be limited to them. Rarely are decisions made in a vacuum. In the park/trails example, the town council may like the idea but be weighing the property's potential use for a municipal building or water-treatment plant as well. An inclusive analysis that also details economic benefits, perhaps one that illustrates

higher property values (and thus higher property tax revenues) in proximity to parks and trails, would be easily as persuasive as the health benefits. The inclusion of various subgroups that could be affected by a proposal, in this case developers and homebuilders, is highly recommended. Residents, advocacy groups, civic organizations, and like-minded legislators are an excellent starting point.

Andrew Dannenberg's analysis of 27 HIAs highlights the importance of inclusivity and timely availability of results (Use of Health Impact Assessment in the U.S.: 27 Case Studies, 1999-2007, Dannenberg et al.).

Timeliness, as already discussed, is clearly paramount. An analysis performed after a decision has been reached, or after a project or policy has already cleared other regulatory or statutory hurdles is, in all likelihood, less likely to be as carefully considered. Legislators, city councils, government agencies, and private entities all work on their own unique, often regimented, schedules. An analysis that does not fit into the timetable of the process risks being excluded from it.

The inclusivity of the HIA process is also pertinent. In Dannenberg's case studies, he describes a broad range of approaches. These ranged from mandated and codified assessments that were purposefully built into regulatory requirements to those conducted by outside consultants or interest groups. Some were subject to intense public vetting and engagement, while others resembled academic exercises, conducted in insular environments. In either instance, a pivotal factor (also noted prominently in the NACCHO report) was a multi-disciplinary approach and participation from potentially affected groups.

Perhaps predictably, Dannenberg's research showed that the impact of an HIA's conclusions roughly correlated to the number of stakeholders (a.k.a. constituents) that were involved in the process—from having a direct bearing on the issue at hand to being largely ignored, or similarly, “taken under review” by the deciding body. He also recommends broad dissemination and/or publication of the analysis to ensure decision-makers can be held publically accountable.

## Learn More About HIAs

The following resources are available for more information about HIAs and for further reading. Many of these resources were used in the writing and planning of this document.

1. *Healthy People 2020* is the set of goals and objectives set forth by the United States Department of Health and Human Services. [www.healthypeople.gov/2020](http://www.healthypeople.gov/2020)
2. The National Association of Country and City Health Officials (NACCHO) is the national organization that represents local health departments. NACCHO supports efforts by health departments to make healthier environments as well as developing resources and materials for their use. The NACCHO website is a useful place to find examples of what can be done with the results of an HIA, as well as providing a quick guide to the five major steps involved in the HIA process. [www.naccho.org](http://www.naccho.org)
3. UCLA conducted a training series between June 2006 and April 2007 concerning HIA practices. All training materials and more information concerning the HIA process in general are available at [www.ph.ucla.edu/hs/health-impact/training.htm](http://www.ph.ucla.edu/hs/health-impact/training.htm). Training manuals and additional information are available concerning each separate phase of the HIA.
4. The Minimum Elements and Practice Standards for Health Impact Assessment, a document from the North American HIA Practice Standards Working Group, provides general practice standards for the HIA process as well as standards for each of the five major steps within the process. The suggested standards are not meant to serve as rigid criteria for conducting an HIA, but can help to answer the question of how best to conduct an HIA. [www.dhs.wisconsin.gov/hia/survey/Minimum\\_Practice\\_Standards.pdf](http://www.dhs.wisconsin.gov/hia/survey/Minimum_Practice_Standards.pdf)
5. Human Impact Partners is the only organization in the United States that focuses on building others' capacity to conduct HIAs. The purpose in doing so is to help create a world in which health impacts can be considered in all decision-making processes. The Human Impact Partners Assessment Tool is available online (Human Impact Partners. *A Health Impact Assessment Toolkit: A Handbook to Conducting HIA, 2nd Edition*. Oakland, CA: Human Impact Partners. April 2010). [www.humanimpact.org/component/jdownloads/finish/11/81](http://www.humanimpact.org/component/jdownloads/finish/11/81)
6. The International Association for Impact Assessment (IAIA) is a forum connecting those who wish to advance the practice of impact assessment. IAIA provides materials for a complete learning workshop including bulletins and a full report of the workshop. [www.iaia.org/training/hia-learning-workshop.aspx](http://www.iaia.org/training/hia-learning-workshop.aspx)

7. The Atlanta Beltline Health Impact Assessment was conducted to examine the potential impacts of turning nearly 22 miles of abandoned freight line into residential and commercial trails, parks, and transits. This document provides one of the most complex HIAs to have been conducted in the U.S.

[www.cqgrd.gatech.edu/projects/beltline\\_hia/pdfs/beltline\\_hia\\_final\\_report.pdf](http://www.cqgrd.gatech.edu/projects/beltline_hia/pdfs/beltline_hia_final_report.pdf)

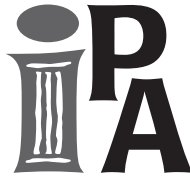
8. Human Impact Partners has developed an HIA-screening checklist, which includes questions to be considered before making the decision to conduct an HIA.

[www.ipa.udel.edu/healthyDEtoolkit/docs/HIA\\_Screening\\_Checklist.pdf](http://www.ipa.udel.edu/healthyDEtoolkit/docs/HIA_Screening_Checklist.pdf)



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