

Health Impact Assessment: Quick Guide



The purpose of the “Quick Guide” is to orient potential users of health impact assessment (HIA) who are working to create healthier living environments. Special attention is paid to topics that will help users understand the process and address some of the most commonly made misconceptions about HIA. This guide is meant to serve as an introduction.

Introduction

“How are existing or planned land use, community design, and transportation policies, projects, or programs affecting or likely to affect public’s health?”¹

Health impact assessment (HIA) is one method local communities can use to begin to address this question.

Compelling research suggests land use, community design, and transportation decisions, can have positive or negative impacts on the public’s health. Problems such as the growing obesity epidemic and increasing concerns about climate change underscore the need for local governmental entities, health departments, planning departments and community residents to take a proactive approach to assess, prevent, or mitigate health risks associated with proposed development projects or planning/zoning policies.

Throughout this guide are examples of how HIA can be used to improve communication between Local Health Departments (LHD) and community decision makers, enabling a more democratic and interdisciplinary approach to expanding the role of local public health in the planning process.

WHAT IS HEALTH IMPACT ASSESSMENT?²

Health impact assessment (HIA) is defined by the World Health Organization as “a combination of procedures, methods, and tools by which policy or project may be judged as to its potential effects on the health of the population, and the distribution of those effects within the population.”³

In the United States, HIA is used most often to address built environment projects. For example, HIAs can be used to weigh the effects of and uses of proposed and implemented policies, programs, and projects within an equitable, sustainable, and ethical framework. HIA is a beneficial tool for public health, planning community residents and policymakers to ensure that health remains a critical consideration when making decisions about the built environment.

Often, the result of an HIA is a set of evidence-based recommendations that seek to negate or minimize potential or actual negative impacts on health and bolster health promoting aspects of a proposal, program, or policy.⁴

HOW IS HIA USED?

In the U.S. HIA has been used by local health department staff, planning staff, academicians, community organization and policy makers as a Decisions Support Tool for determining or evaluating potential health impacts of a project, policy, or program. For example, an HIA was conducted in Polk County, Florida, as part of a review process for proposed developments to increase physical activity of the residents.⁵ While the true value of this HIA was not determined by whether the suggested recommendations were implemented, the HIA raised the awareness level of the health issues that affect this community daily. In Michigan, local planners have begun using rapid HIA.

HIA can be used in the following local and state processes: Proposed highways, public housing development, subdivision regulations, zoning decisions, transit projects, housing policies, agriculture policies, noise abatement strategies, airport expansions, safe routes to schools, environmental justice issues, and the location of landfills.

HOW IS AN HIA CONDUCTED?⁶

While there is no standard approach to HIA, five main steps of the assessment are generally undertaken:

- **Screening**—a process to help determine if an HIA is necessary. One may apply several screening procedures (e.g. checklists, logic models, even surveys of community concerns about potential impacts) to determine if an HIA should be conducted.
- **Scoping**—a process to identify the goals and objectives of the HIA, geographic and demographic information of the community will be used, and available resources and methods. This will be an ideal place to invite decision-makers to join the process.

SCOPING—This critical step will help determine what will be involved in planning and designing an HIA. Scoping consists of three main tasks:

1. Setting up a steering committee to ensure a collaborative approach to this assessment.
2. Determining whether a rapid, intermediate, or comprehensive HIA is best for your purpose. (Note: More information of types of HIA can be found on page 3)
3. Determining impacts to be assessed. For example: physical activity, noise, social equity, air quality, etc.
4. Designing a work plan.

- **Appraisal**—a process to determine how the population may be affected by the proposal, project, and policy.

APPRAISALS—Appraisals should incorporate both qualitative and quantitative methods used to collect information. Quantitative methods may include risk assessment, mathematical modeling, and cost-benefit analysis each method provides numerical estimates of impact. Qualitative methods incorporate public perception through focus groups, surveys, word of mouth, etc. to understand impacts.

- **Recommendations**—the development of a final report with recommendations

RECOMMENDATIONS—Decision-making is where the final recommendations, including mitigation strategies, are written in a final report and sent out in response to a potential project, program, or policy.

- **Evaluation**— determine the success of the HIA on the decision-making process and assess changes in health status.

EVALUATION – While there have not been many robust evaluations done on HIAs, to further understand their impact on specific health outcomes, however, some documentation does exist. The Centers for Disease Control and Prevention developed case studies of 27 HIAs that have been conducted in the US. According to the study, documentable impacts were apparent for several of the HIAs studied.⁷

- Plan improvements to increase pedestrian safety
- Change in redevelopment plans to provide 1:1 housing replacement for affected families
- Noise mitigation measures required
- Living wage ordinance adopted
- Urban road corridor plans improved
- Most HIAs raised awareness of health issues for some audiences

THREE TYPES OF HEALTH IMPACT ASSESSMENT:⁸

HIAs are flexible and can be adapted to meet your needs. They can be done at your desk in a day or can be a year long process that results in a comprehensive report. The following are different types of HIAs:

RAPID HIA:

- Includes brief investigation of health impacts;
- Involves exchange of existing knowledge, expertise, and research from previous HIAs;
- Is usually carried out quickly and with minimal resources;

Tri-county, Colorado underwent a desktop HIA to aid them in understanding all the potential health impacts (noise, air, etc.) of a proposed motor speedway.

INTERMEDIATE HIA:

- Requires a more detailed investigation of potential health impacts.
- Reviews available evidence gained from similar HIAs or other community/environmental assessments.

A quantitative assessment of health impacts of a proposed 800 megawatt coal-fire plant in Florida found particulate matter pollution will decrease life expectancy by 2 days.

COMPREHENSIVE HIA:

- Is an intense investigation;
- Reviews available evidence, along with collection or analysis of new information; and
- Is a community-based collaborative process.

The eighteen month ENCHIA-HIA process was designed to analyze how development affects health in several San Francisco neighborhoods.

What are the key process decisions that are critical to the success of HIA?⁹

Scoping is the essential step that helps to determine the issues, objectives, partners, parameters, and overall determinants of the HIA. Each HIA project is unique and may involve specific community needs. Therefore, process decisions will be determined by how you define a successful HIA.



Example Questions that might be addressed through HIAs?

- Does the proposed project include safe routes to school with a minimum of street crossings and high visibility for children walking to school?
- Does the proposed plan include pedestrian signals and mid-street islands on busy streets, and presence of bicycle lanes and trails?
- Does the project include traffic quieting road designs in both subdivisions and shopping districts?
- Does the project provide adequate neighborhood access to public transportation?
- Does the project comply with ADA (section 504) requirements for design of curb ramps, cross slopes and detectible

WHAT IS THE VALUE OF HIA?¹⁰

1. Valuable evidence

Where possible, HIA attempts to quantify the potential impact of programs or projects. This type of assessment can provide valuable evidence about the health impact of a project and can add emphasis to any policy or funding opportunity presented to county councils, boards of health, or decision-makers. For example, a health official could have more persuasive power by showing a decision-maker that, if a new pathway around a park were not funded, then constituents will have a higher chance of being obese. Each HIA user analyze what can identify decision-makers interests and tailor the argument to their needs.

HIA ALSO highlights health consequences of projects and policies and can lead to:

- Better informed decision-makers and decisions
- Healthier land uses and community designs
- Increases community buy-in
- Equitable, community driven planning

In DeKalb, County statistics about the quality of life of county residents (e.g. physical activity, childrens health concerns, and parks, pollution, congestion etc.) helped sway decision-makers to include an overlay zoning district that promoted pedestrian access, higher density, and mixed-use.

2. Engagement across disciplines

The ultimate goal of each HIA project is to provide a healthier living environment for everyone in the community. One of the main benefits of conducting an HIA is an increased awareness and understanding of health consequences. HIAs are participatory by design bringing together a variety of stakeholders. Increased stakeholder participation can increase the understanding of the policy, project, or program development process.¹¹

This was the case in Delaware County, Ohio, when it developed a 20/20 committee to help respond to residents' concerns about loss of greenspace, development within their county, and loss of open farmland. This committee brings together local officials from the regional planning commission, health district, sanitary engineering department, and state planning commission to, identify existing need, and evaluate any potential projects or policies in this county.

3. Spill over into outside the health and planning arenas

The HIA process is organic; it is a tool to appraise negative and positive impacts, on different subgroups of people that may be affected by the proposed project. In many cases it requires knowing your community and recruiting a multidisciplinary group of interested individuals and those who are directly affected. Depending on the focus of the HIA, this group may include developers, schools, and neighborhood council representatives.¹²

The possible uses of HIAs are endless: They can be used to evaluate anything from a new neighborhood development to where to build a new parks. For example, a health department and a transportation department official might conduct an HIA on a potential roadway in the neighborhood. The project examine asthma rates, noise levels, and traffic levels in the area. As part of the recommendations, the group could offer pedestrian and bicycle-friendly access lanes or potential transit opportunities. Design, development, and policy decisions can influence a wide variety of community factors.

What are some of the "must-have" data for an HIA?^x

No real recipe exists for HIA. Public health professionals and planners must be able to respond with the information that is available to them. Such as, baseline demographics, such as morbidity, age, sex distribution, family size, Behavioral Risk Factor Surveillance System (BRFSS) information, and census information are helpful. However, this can really depend on what your community has identified as the most important issues.

For example, in the recent redevelopment project in Tri-County, Colorado, residents were asked on what they would like to see in their 'new' city. Most respondents saw their population becoming increasingly physical inactive and un-healthy and decided that needed to change. The Tri-County health department gathered data on pedestrian, and bicycle accidents, sidewalk conditions, bus and bike routes, available community activities, lighting in parks, and streets, location of grocery stores, and general demographic characteristics to help address the issue of physical activity in their community¹³

NOT EVERYTHING IS ROSY: CHALLENGES OF HIA

One of the biggest challenges of HIA is **time**. Most individuals believe they do not have enough time to dedicate solely to HIA.

The second biggest challenge is lack of **resources**, which can mean anything from human resources to dollars. For example, there has been a severe shortage of allocated dollars directed toward local government projects.

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Regardless of an agency's time or resource constraints, the flexibility of HIAs make them conducive HIAs can be combined within existing activities such as development review, comprehensive planning, or other planning processes.

The HIA process can increase the health of the population; this contribution to the general well-being of residents will be a great example for decision-makers to fund HIAs on future projects.

What can you do to raise awareness of HIA?

Share this document with public health, planning, policy makers, etc. to educate them on HIAs potential to mitigate or prevent environmental and public health issues that may arise from built environment decisions.

WHERE CAN I GET SUPPORT?

Residents, community organizations, and local advocacy groups (e.g. biking and walking groups) can be some the strongest supporters for conducting an HIA. Community input is a valuable resource, and can provide the necessary pressure on decision makers to conduct an HIA or implement resulting recommendations. **The key to community sponsorship is to ensure public input.** For example, a group in Seattle-King County, Washington, has been gathering community input through community conversations and a questionnaire. By listening to the community, the LHD could compare the community's answers against epidemiological data within the county. By listening to the community, organizers can identify important health concerns and advocate for solutions.¹⁴

How do I determine which population would most significantly be impacted?

Logically, determination of the population depends on the specifics of the HIA (e.g., why you are doing it and the scope of the impact). For example, redevelopment of a rural road would have impact on a limited population, whereas an HIA on a proposed coal fire power plant would have direct local health impacts for a larger population.

HIA VERSUS OTHER ASSESSMENTS¹⁷

There are variety of assessments that may help communities identify and address concerns about the impact of land use projects/ community design projects on the public's health. NACCHO has developed several community health assessment and strategic planning tools such as the *Protocol for Assessing Community Excellence in Environmental Health (PACE EH)*, Mobilizing for Action through Planning and Partnerships (MAPP), the Health Equity Index, and development review checklist that may help communities gather information about community resources, assets, concerns, and conditions.

These complimentary community assessments in conjunction with an HIA or during the Screening phase to gain information about what projects or concerns are relevant to the surrounding community. Such tools can provide a baseline of information and help determine whether a comprehensive or rapid HIA will be beneficial.

Environmental Impact Assessments (EIAs) focus on the impacts of developmental projects on the natural environment. The NEPA process ensures that the decision-maker is fully informed of the environmental aspects and consequences prior to making the final decision

HIA goes beyond the environment to assess and prevent potential health concerns that could be associated with environmental projects or policies.

- HIA components could logically fit within an EIA process



How can I connect to individuals that are working on a specific topic within HIA? Has anyone else done something similar?¹⁹

Several resources exist to help you connect with HIA peers:

- NACCHO Toolbox (case studies and spotlight communities) at www.naccho.org/toolbox/
- NACCHO Online Course (interactive feature)
- NACCHO Peer Assistance Providers (LHD staff who have completed and HIA)
- USA HIA List Service at hia-usa@lists.onenw.org
- CDC's Healthy Places Web Site at www.cdc.gov/healthyplaces
- UCLA Health Impact Assessment www.ph.ucla.edu/hs/health-impact

CONCLUSION

Residents need to be more engaged in planning their neighborhoods as the design of places will have lifelong affects on the public's health. HIA has the potential to have an enduring effect in the United States by supporting environmental, health and economic goals and responding to community needs. HIA seeks to bring forward both the positive and negative health consequences of projects or policies so that land use / community design policy, project or proposals will lead to better informed decision-makers.

FREQUENTLY ASKED QUESTIONS

1. How can HIAs be implemented in a rural area?

Land use has traditionally been misunderstood as an issue only affecting urban/suburban areas, where there is more value to make the most efficient use of the land. HIA, by design, is an assessment tool that helps to guide the development and construction of healthy communities. One example of how HIA can be used in a rural area is in Michigan, where rural residents are experiencing a loss of acreage. Each year the ratio of number of acres of land to homes is diminishing. While these are subtle changes, in the next 15 to 20 years people will be facing a consistent loss of green area to the urban environment. HIA cannot stop the growth of urbanization, but it can help people determine their goals. It is important to raise awareness and educate planning commissions now, before it becomes too late.¹⁸

2. How do I make HIA compelling to my policymaker or decision-maker?

HIAs can provide concrete evidence to help the decision maker explore the connection between the built environment and health, which encompasses social, economic, cultural, and mental health of the population. HIA can be thought of as a structured research activity that identifies health impacts of a project, program, or policy, both prospectively and retrospectively.

HIAs can highlight the epidemiological /evidence that may be respected by decision makers

3. Can health data help ease these political pressures and make it easier for local officials to make politically difficult decisions (i.e. smart growth policies)?

Yes it can. Statistics on physical activity, kids and parks, pollution, congestion, quality of life information etc. can help. It did help in DeKalb County when they were trying to get an overlay zoning district passed that promoted pedestrian access, higher density and mixed-use.

4. What are the NEXT steps for HIA in the United States?

Public health, planning, and transportation professionals at both the local and regional levels gathered to develop the following priority recommendations for healthy land use and transportation planning policies:

- Seek opportunities to fund local HIAs as part of major planning or capital improvement projects,
- Use HIA in a proactive manner in communities with housing and health disparities, and
- Ensure funding for state and local health departments to conduct HIAs.

CASE STUDY: LOWRY CORRIDOR - HENNEPIN COUNTY, MINNESOTA¹⁵

The Lowry Avenue Corridor is a five-mile thoroughfare located in north Minneapolis. This formerly vibrant community corridor had been steadily declining for years and had become an area of concentrated poverty, unemployment, crime, and drug use. Hennepin County, along with the City of Minneapolis and the neighborhoods along Lowry Avenue, decided to address these issues in part, by conducting an HIA. All parties carried out an extensive planning process and approved a course of action. Phase 1 construction began on May 1, 2006, and was completed in mid-2007. Phase 2, for which an HIA was completed, includes a 16-block segment of Lowry Avenue that includes the Cleveland, Folwell, and Jordan neighborhoods.

This HIA was the first one conducted in Hennepin County and the roadway design was nearly complete when the HIA began, county staff completed the entire HIA without community input, though that input had been gathered earlier during roadway planning and design.

The HIA was used as a learning opportunity, and elements were incorporated from HIA templates around the world. HIA recommendations were shared with public works and public health leadership, and staff used the HIA to apply successfully for funding through the “Non-Motorized Transportation Pilot Program” under the federal transportation bill Safe, Accountable, Flexible, Efficient Transportation, Equity Act (SAFETEA-LU). These funds (\$108,000) will be used to purchase countdown timers at key intersections, bike racks at public buildings, and pavement to encourage pedestrian traffic.

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