

NACCHO

National Association of County & City Health Officials

The National Connection for Local Public Health

NACCHO HIA Mentorship Project
2013-2014
- Toolkit -

In order to help you begin your project, this toolkit will provide you with a basic primer on HIA and a number of resources on the topic. The primer is not meant to be comprehensive. The HIA training at the National HIA Meeting will provide you with more information on HIA and will give you an opportunity to discuss your individual project with the trainer – Steve White, Project Manager with the Oregon Public Health Institute - and your assigned mentor.

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I. What is HIA?

Health Impact Assessment (HIA) is defined by the [National Research Council](#) as “a systematic process that uses an array of data sources and analytic methods and considers input from stakeholders to determine the potential effects of a proposed policy, plan, program, or project on the health of a population and the distribution of those effects within the population. HIA provides recommendations on monitoring and managing those effects.”

HIA assists in determining the potential range of health impacts the public policy decision will have, as well as the distribution of those impacts across a population. Additionally, it provides recommendations geared towards mitigating potential negative impacts of the decision and boosting positive outcomes. HIA advances a health promotion and health protection approach towards public policy decision making practices, and is often seen as one component of a broader [“Health in All Policies”](#) strategy aimed at expanding health considerations in the decision-making process to achieve improved health outcomes and health equity.

HIA holds promise for incorporating aspects of health into decision-making because of its:

- Applicability to a broad array of policies, programs, plans, and projects;
- Consideration of adverse and beneficial health effects;
- Ability to consider and incorporate various types of evidence; and
- Engagement of communities and stakeholders in a deliberative process.

II. HIA topics and HIAs completed in the United States

In a review of twenty-seven HIAs in 2008, [Dannenberg, et al](#) found that HIA topics ranged widely. Since 2008, many more HIAs have been performed across the United States at the federal, state, and local levels. Currently, there are more than [270 reported HIAs](#) either completed or in progress as of August 2013 in the United States.

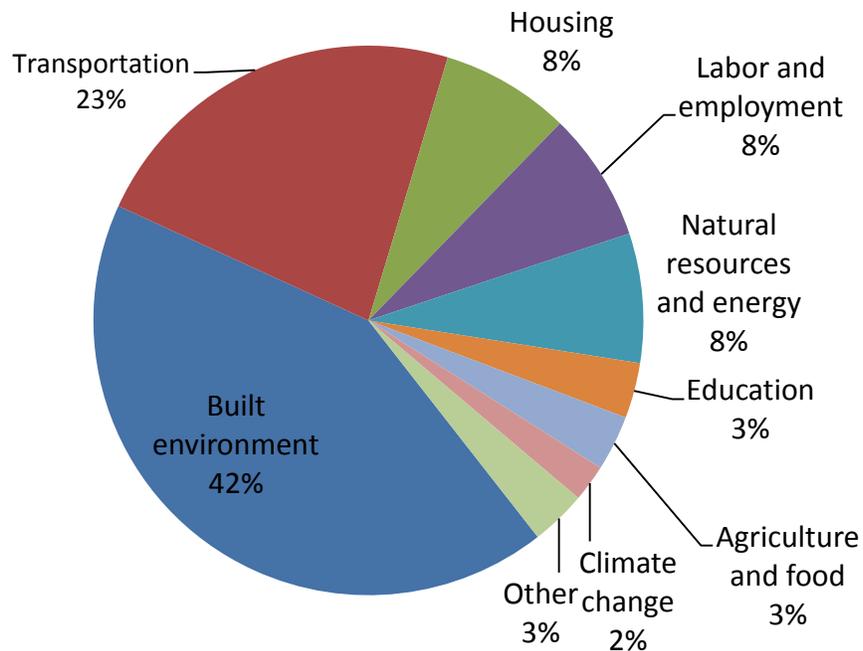
HIA topics found in the 2008 review paper:

- Housing redevelopment
- Transportation projects
- Farmers market revitalization
- Environmental regulation
- Local planning: area and general plans

- After school programs
- Living wage ordinances
- Low income energy subsidies
- National bills: Federal farm bill

In a cross-sectional analysis of 92 HIAs, most of the HIAs conducted fell in the categories of built environment, transportation, or housing, however, HIAs are also being conducted on other topics that range from education to climate change.

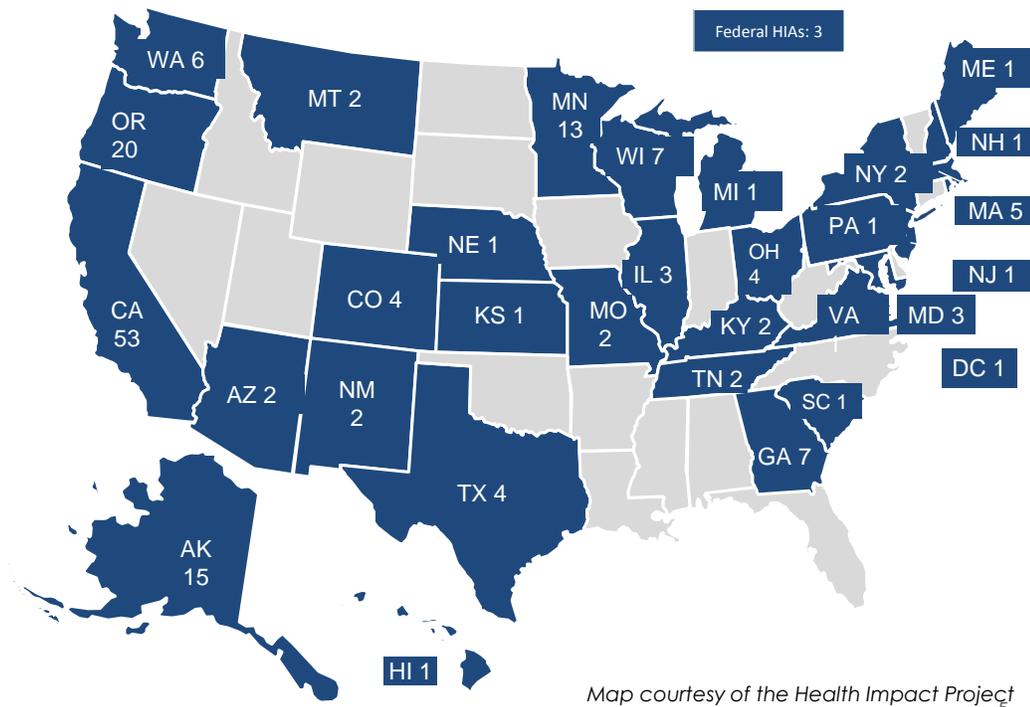
Figure 1: HIAs by Sector



Data from Health Impact Project

As of 2012, the break down in the number and locations of HIAs performed in the United States is shown in Figure 2. Almost half of all reported HIAs have been completed or are in progress in the western most portion of the country. With the assistance, resources, and opportunities provided by a number of funders and other entities, the practice of HIA is quickly growing in use in many other locations around the country.

Figure 2: Completed HIAs or In Progress (2012)



III. Support for HIA

The practice of HIA has experienced a great deal of support, both within the United States and internationally.

- The prestigious [National Research Council](#) came out with a report on HIA in 2011, entitled “Improving Health in the United States: The Role of Health Impact Assessment,” which discussed the role HIA has in potentially improving the health of the country. The report also outlined best practices in the field.
- The Centers of Disease Control and Prevention (CDC), through its [Designing and Building Healthy Places Program](#), funds HIA projects across the country, providing trainings and technical assistance to awardees. The [CDC Recommendations for Improving Health through Transportation](#) states that HIA may be a useful tool for identifying the impact of a new policy, program, or major transportation project on community and individual health.
- The U.S. Department of Health and Human Services recommends HIA as a planning resource for implementing [Healthy People 2020](#). HIA also supports two key directions of the Office of the Surgeon General’s [National Prevention Strategy](#).

- Internationally, the [World Health Organization](#) and the [European Union](#) have elevated HIA as a practice that may be able to inform decision makers about significant health consequences of public policy decisions.

IV. Why Health?

There are many reasons why health, among other competing factors, would be an important consideration for decision makers when assessing public policy decisions. For one, health is a shared human value. It is also a result of a range of determinants. Many of the most influential determinants are modifiable through policy interventions, thus making health a good indicator of the quality of our lives and a window into how we may be able to improve our social conditions. Health outcomes can provide key observations on the human consequences of a given set of decisions impacting an assortment of issues. Health is also a crosscutting issue, and is also measurable at multiple scales. Health metrics can be compared and communicated effectively.

V. What is the definition of health used in the practice of HIA?

The definition of health most often used in HIAs comes from the [World Health Organization](#). It is a broad definition of health that is concerned with not only the physicality of health, but is also focused on the well-being of the whole person, including mental and emotional wellness.

“Health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity.”

The highest standards of health should be within reach of all, without distinction of race, religion, political belief, economic, or social condition.

VI. Factors responsible for health

Research has shown us that health is not only a product of our individual behaviors, such as what we eat or whether we smoke, or individual factors, such as our gender or genetics. As shown in this model of health (Figure 3), our health is also a product of where we live, the availability of resources and the quality of those resources, the infrastructure around us, the environmental quality of our communities, the living and working conditions of our

neighborhoods and places of work, and also of the social, economic and political factors that govern our day-to-day lives.

Figure 3: Determinants responsible for Health



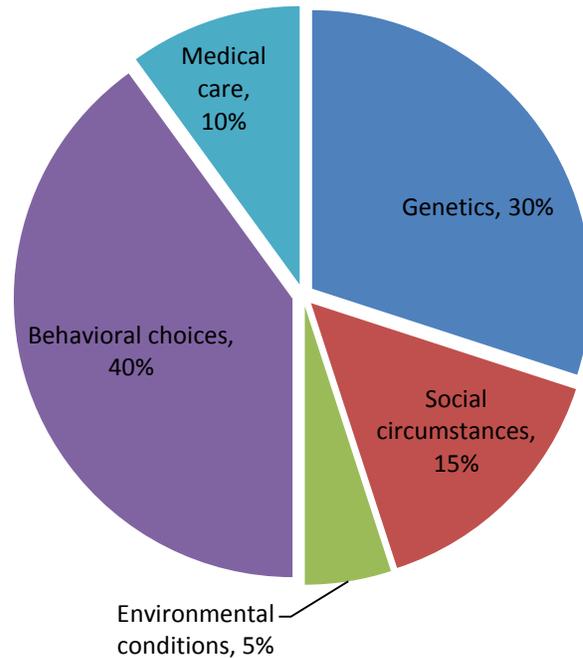
Image taken from Human Impact Partners

Public health practice has begun in recent years to understand and frame health with a more holistic understanding of factors that determine or influence our health outcomes. If what we desire is to improve health and maximize health outcomes to the greatest extent for all people, we will need policies and interventions that can influence all levels of these factors that are responsible for our health.

In a seminal paper by [McGinnis, et al \(2002\)](#), researchers investigated the contributions of different factors on early death in the United States. These researchers wanted to know whether and how to best invest limited resources to improve public health. They found that medical care accounts for 10% of early deaths in the U.S., social circumstances 15%, and environmental conditions made up 5%. Behavioral choices, individual health choices, made up about 40%, and genetics was about 30%. Taken together, behavioral, social, economic, and environmental factors account for 60% of the causes of early death. The researchers concluded that the health of populations is the product of the intersecting influences from these different domains, influences that are dynamic and that vary in their impact depending upon when they occur in life. This paper also demonstrated that some of the biggest drivers of health are modifiable through policy and programmatic preventative interventions that can optimize and maximize health benefits.

These findings argue for a broader public health conceptualization of the causes of mortality and an expansive policy and intervention approach that considers how social, economic, and environmental factors can be addressed to improve the health of populations.

Figure 4: Contributions of different factors on early death in the United States



Data from McGinnis, et al. 2002. Health Affairs. 21(2):78-93.

In another study conducted by [Galea, et al \(2011\)](#), researchers calculated the attributable number of adult deaths in the U.S. to social factors. The social factors investigated included individual-level factors - such as low education, poverty, and low social support – and area-level factors – such as area-level poverty, income inequality, and racial segregation. They found that the number of deaths from these social factors were comparable to those attributed to pathophysiological and behavioral causes. These findings again highlight the need to think more “upstream” in terms of intervention points among the social, environmental, and economic factors for improving public health outcomes.

In the practice of HIA, HIA is interested in understanding how the decision (the proposed project, plan, policy) affects the various determinants in Figure 3, and how those impacts lead to health outcomes as shown in Figure 5.

Figure 5: How HIA addresses determinants of health

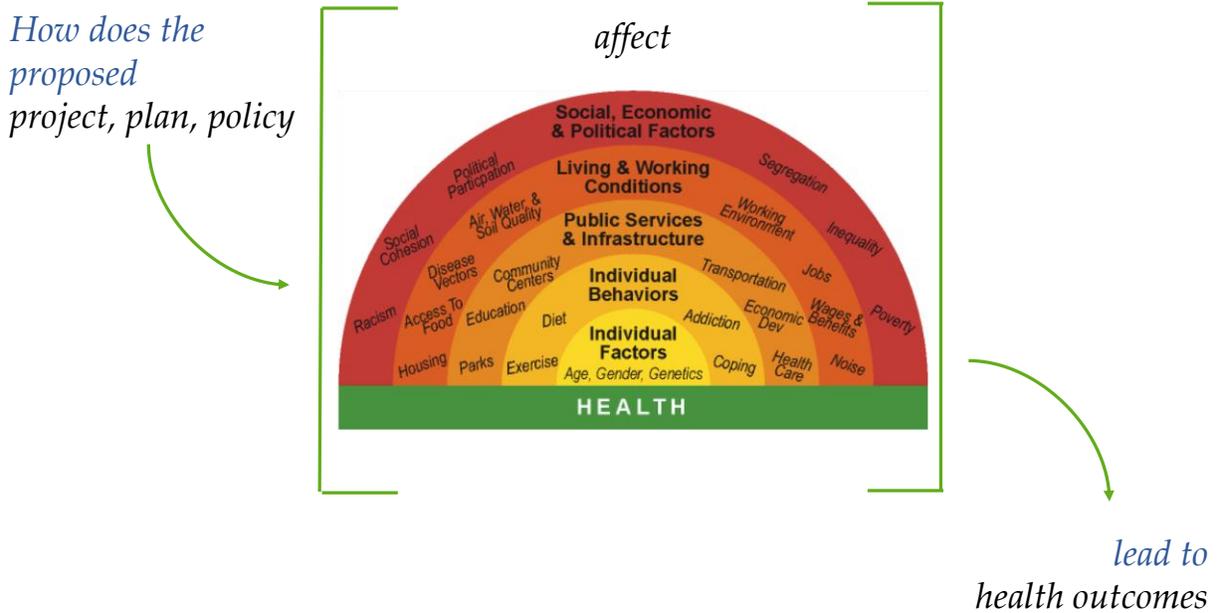


Image taken from Human Impact Partners

Table 1 below articulates a number of determinants of health that are responsive to policy and programmatic interventions.

Table 1: Determinants of Health Responsive to Policy Interventions

Health Behaviors	Physical Infrastructure	Environmental Conditions	Social and Economic Conditions
<ul style="list-style-type: none"> • Diet • Physical activity • Smoking • Alcohol and drug additions • Sexual practices 	<ul style="list-style-type: none"> • Education access • Housing facilities • Transportation • Health care services • Access to parks and natural spaces 	<ul style="list-style-type: none"> • Contamination of the environment • Community noise and light pollution • Presence of disease vectors • Proximity of hazards 	<ul style="list-style-type: none"> • Income • Wealth or access to resources • Social networks and support • Inclusive political participation

Taken from Bhatia and Seto. 2011. [Environmental Impact Assessment Review](#). 31(3):301-309.

VII. HIA core principles and values

The practice of HIA advances the values of democracy, equity, sustainable development, the ethical use of evidence, and a comprehensive approach to health. These guiding principles for HIA were outlined in [Quigley, et al's article](#) from 2006.

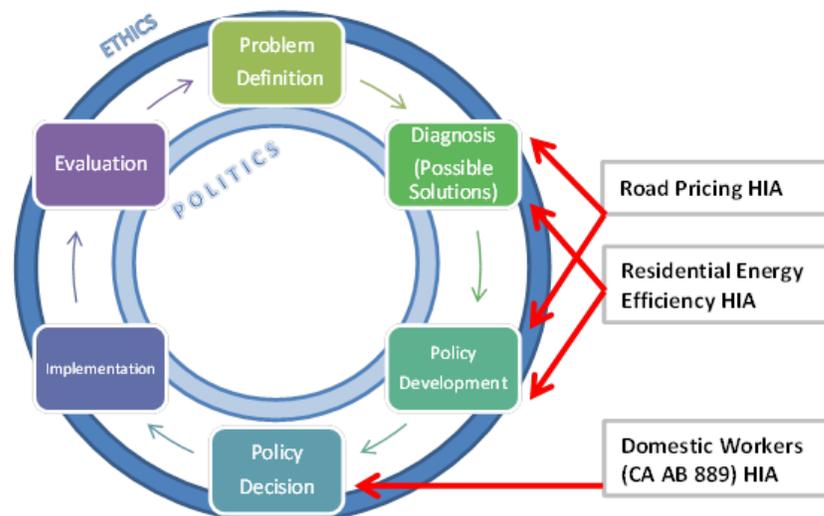
- **Democracy** - emphasizing the right of people to participate in the formulation and decisions of proposals that affect their life, both directly and through elected decision makers. In adhering to this value, the HIA method should involve and engage the public, and inform and influence decision makers. A distinction should be made between those who take risks voluntarily and those who are exposed to risks involuntarily.
- **Equity** – emphasizing the desire to reduce inequity that results from avoidable differences in the health determinants and/or health status within and between different population groups. In adhering to this value, HIA should consider the distribution of health impacts across the population, paying specific attention to vulnerable groups³ and recommend ways to improve the proposed development for affected groups.
- **Sustainable development** – emphasizing that development meets the needs of the present generation without compromising the ability of future generations to meet their own needs. In adhering to this value, the HIA method should judge short- and long-term impacts of a proposal and provide those judgments within a time frame to inform decision makers. Good health is the basis of resilience in the human communities that support development.
- **Ethical use of evidence** – emphasizing that transparent and rigorous processes are used to synthesize and interpret the evidence, that the best available evidence from different disciplines and methodologies is utilized, that all evidence is valued, and that recommendations are developed impartially. In adhering to this value, the HIA method should use evidence to judge impacts and inform recommendations; it should not set out to support or refute any proposal, and it should be rigorous and transparent.
- **Comprehensive approach to health** – emphasizing that physical, mental and social well-being is determined by a broad range of factors from all sectors of society (known as the wider determinants of health). In adhering to this value, the HIA method should be guided by the wider determinants of health.

VIII. HIA purpose

HIAs are often as much concerned about the process of conducting the assessment as the findings, the recommendations, and the outcomes on the decision. The primary purposes of an HIA are to uncover and evaluate the health effects of a public decision. HIA may also be able to highlight health disparities by drawing attention to the differential distribution of existing or potential health impacts. Ultimately, the HIA is meant to shape public decisions and the public discourse surrounding those decisions, and to make health impacts a much more explicit part of the dialogue.

HIA can be used in several phases of the policy decision-making process (see Figure 6). For example, both the [Road Pricing HIA](#) and Residential Energy Efficiency HIA develop public health and equity-centered solutions to inform multiple policy targets within their respective policy areas. The [Domestic Workers HIA](#) contributes compelling information on the health effects of the main policy decision, the proposed law, [California Assembly Bill 889](#) ([San Francisco Department of Public Health’s Program on Health, Equity and Sustainability](#)).

Figure 6: HIA and Policy Cycle



Taken from San Francisco Department of Public Health’s Program on Health, Equity and Sustainability

Secondarily, HIAs also have the ability to better engage a diverse array of stakeholders, as well as empower certain communities to become involved in the decision-making process that have historically been excluded from these political conversations. HIA is often able to expand public participation in policy-making processes. HIA can also emphasize everyday experiences and help build consensus among different stakeholders. It also has the capacity to foster relationships

and collaborations between organizations or groups that have not typically worked together, such as planning agencies and public health departments.

IX. Steps of a HIA

HIA is typically thought to have 6 steps: screening, scoping, assessment, recommendations, reporting, and monitoring. This primer will not go into great detail about each step. More information will be provided during the HIA training. You may also review other guidance documents and toolkits ([Human Impact Partners' A Health Impact Assessment Toolkit](#) and [Rajiv Bhatia's Health Impact Assessment: A Guide for Practice](#) and [Minimum Elements and Practice Standards for Health Impact Assessment](#)) to learn more specifics about each step.

Screening

Screening establishes the need for and the value of an HIA in the decision context. This is the point at which it is decided whether or not an HIA will add value, help to inform the decision, and/or add new knowledge that would otherwise not be considered.

Screening is an important step in the HIA process. A more in-depth [white paper on HIA screening](#) is available here from Human Impact Partners. A [screening worksheet](#) may also help to elucidate the potential value an HIA process would bring to the decision target.

Scoping

The scoping phase identifies the affected population of interest in the analysis, the health effects or determinants to consider, and research questions. This step maps out the research plan, the methods and data sources that will be used in the assessment step, and who will be involved to help gather the data, perform the analyses, or interpret the results. As part of this process, scoping diagrams or causal models are developed that link the decision at hand to more downstream health impacts. These diagrams are the visual representation for how the decision is thought to impact health.

The practice of HIA is not monolithic. The scope and scale of HIA can vary, and approaches to HIA are very diverse with regards to the issues analyzed, the methods employed, role of stakeholders and decision-makers, public engagement, and the time and resources required to complete a HIA (Human Impact Partners' A Health Impact Assessment Toolkit). Table 2 provides an overview of the spectrum of practice along key dimensions.

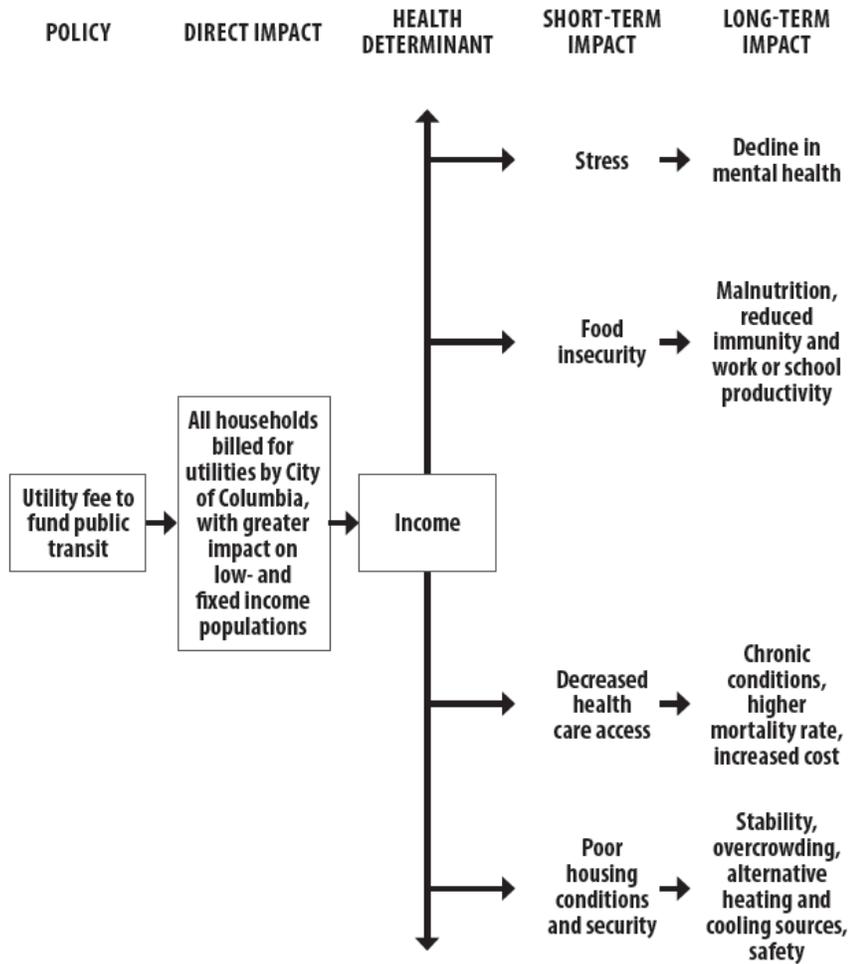
Table 2: The Spectrum of HIA Practice

Comprehensiveness		
Focused on one health determinant or health outcome (e.g., air quality / asthma)	↔	Considers all potential positive and negative effects on health determinants and outcomes
Formal Procedures		
Public health official responds to public or decision maker requesting analysis on specific impacts	↔	Structured and transparent process for screening, scoping, assessment, and reporting integrated into regulatory procedures for environmental assessment or policy analysis
Participation		
Analysis initiated, scoped, and conducted by public health experts	↔	Process includes involvement of community stakeholders
Timing		
Used at early policy development stage; carried out quickly with minimal resources	↔	Occurs after policy options are well developed but before decision-making
Methods		
Use of existing data and public research	↔	Collection and analysis of new data using quantitative and qualitative methods and expert and lay sources

Taken from HIP’s A Health Impact Assessment Toolkit

The causal model in Figure 6, depicts how a transportation utility fee to fund expansion of a bus service in Columbia, MO may be able to impact low- and fixed-income populations’ ability to secure food, access health care services, secure quality housing, and cope with stress.

Figure 7: Causal Model from the HIA on Assessing the Impact of a Transportation Utility Fee in Columbia, MO



Taken from [HIA on Assessing the Impact of a Transportation Utility Fee in Columbia, MO](#)

Assessment

The assessment step is where the health outcomes of the decision are evaluated. It typically starts from a baseline assessment, and determines how the decision will change baseline conditions to impact health and the distribution of health impacts or determinants. It can incorporate both quantitative and qualitative analysis methods, and the analysis will often assess the potential benefits as well as the potential harms of the decision. Typical data sources include:

- empirical literature,
- community experience,
- health measures,
- surveillance data,
- environmental monitoring data,
- surveys, standards, checklists, indicators,
- focus groups and interviews, and
- neighborhood assessment tools.

The assessment portions of most HIAs often utilize mixed-method approaches. HIAs are often distinguished from more conventional analysis of policy decisions, such as human health risk assessments and environmental impact statements, due to its greater willingness to incorporate qualitative data such as focus groups, structured and unstructured interviews, surveys, etc.

The practice of HIA provides an assessment of greater analytic scope that is malleable enough to incorporate a variety of methodologies and assessment approaches. The practice of HIA recognizes that an assessment of health impacts should be based on the synthesis of the best available evidence. Diverse forms of evidence, such as qualitative and quantitative data, can provide adequate sources of reasoned judgment of the likely health impacts of decision scenarios. Potentially significant health impacts may not easily lend themselves to quantification, but deserve consideration in the decision-making context nonetheless.

Potential data sources of health impacts or environment determinants:

- County Health Rankings & Roadmaps: <http://www.countyhealthrankings.org/>
- U.S. Environmental Protection Agency's Toxics Release Inventory Program: <http://www2.epa.gov/toxics-release-inventory-tri-program>
- Environmental Public Health Tracking: <http://ephtracking.cdc.gov/showHome.action>
- National Center for Health Statistics: <http://www.cdc.gov/nchs/>
- U.S. Environmental Protection Agency's MyEnvironment: <http://www.epa.gov/myenvironment/>
- Health assessment tools: <http://www.sfphe.org/resources/hia-tools>

- Other data sources and related resources:
<http://www.humanimpact.org/component/jdownloads/finish/14/40>

Recommendations

Recommendations are a key component of HIA. The recommendations identify actionable and specific strategies to boost the identified benefits of the decision and mitigate negative impacts. Recommendations can be devised to support the decision option that is likely to have the best outcomes for health and health equity and/or propose provisions that can be adopted to further maximize the benefits of the decision, prevent potential negative impacts, or improve its feasibility and compliance. The recommendations, in concert with the analysis, would provide support for the selection of the most equitable decision option and would also generate ways to improve the health outcomes of a public decision.

Reporting

The reporting of an HIA provides clear documentation of the HIA process taken, the methods and data used, the findings, and the recommendations to the decision-makers and other stakeholders. Communications about the HIA can take various forms such as factsheets, presentations, newsletters, executive summary, public testimony, comment letter, press conferences, or a full technical report. The reporting structures should strive to communicate to the target audience (be that the decision makers, the public at large, businesses, community members, etc.) how the decision of interest is linked to the health outcomes of concerns. Communications about the HIA should also be readily accessible for public review and comment. It should also communicate, where possible the direction and extent of the impact (direction, magnitude, and severity), its likelihood, distribution, and quality of evidence.

Additional guidance on reporting:

<http://www.humanimpact.org/component/jdownloads/finish/11/241>

Monitoring

The monitoring step tracks the impacts of the HIA on the decision-making process, the implementation of the decision, and the impacts of the decision on health determinants or outcomes.

The purposes of monitoring are to (HIP's A Health Impact Assessment Toolkit):

- Ensure the project, plan, or policy is implemented as designed
- Establish accountability by tracking how recommendations were received and acted upon
- Track and support compliance with implementation agreements, rules, and standards
- Build a better understanding of the value of HIA and demonstrate how HIA influenced decision-making
- Provide early warning of unexpected consequences and create a structure for addressing them
- Test the validity and precision of health impact predictions

Process evaluation, impact evaluation, and outcome evaluation are three primary ways to monitor an HIA. Process evaluation assesses whether the HIA was carried as planned or intended. Impact evaluation asks how the HIA impacted the outcomes of the decision. Did the HIA have any influence? In ways did the HIA elevate the discussion on health? Which recommendations were implemented or adopted, if any? Outcome evaluation inquires about how the decision impacted health outcomes, health determinants, or the distribution of outcomes. Outcome evaluation may, in most cases, be a longer-term analysis.

X. Additional HIA Resources

There are many resources available regarding HIA and/or healthy community planning. Below are just a few. More resources may be provided to you at the HIA training and by your mentor.

- Health Impact Project: <http://www.healthimpactproject.org>
- NACCHO's Health Impact Assessment: Quick Guide: <http://ow.ly/oyZc1>
- Description of the HIA Process and Steps: <http://www.healthimpactproject.org/hia/process>
- HIA Map: Examples of HIAs on a Wide-Range of Topics: <http://www.healthimpactproject.org/hia/us>
- APA Planning and Community Health Research Center: <http://www.planning.org/nationalcenters/health/index.htm>
- CDC Resources on Health Impact Assessment: <http://www.cdc.gov/healthyplaces/hia.htm>
- Health Impact Assessment Blog: <http://healthimpactassessment.blogspot.com>
- Human Impact Partners: Tools and Resources: <http://www.humanimpact.org/hia>
- NACCHO Resources on Land Use Planning: <http://www.naccho.org/topics/environmental/landuseplanning/index.cfm>
- NACCHO's Policy Statement on Healthy Community Design: <http://www.naccho.org/advocacy/positions/upload/03-02-Healthy-Community-Design.pdf>

- NACCHO’s Policy Statement on Creating Healthier Communities Through Health Impact Assessment: <http://www.naccho.org/advocacy/positions/upload/06-01-Health-impact-assessment.pdf>
- San Francisco Health Impact Assessment Collaborative: <http://www.sfphes.org/about/partners/san-francisco-bay-area-health-impact-assessment-collaborative>
- Smart Growth and Health: <http://www.smartgrowth.org/library/byissue.asp?iss=5>
- UCLA Health Impact Assessment Clearinghouse: <http://www.hiaguide.org>