HAPI Health And Places Initiative

TOOL 1

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HEALTH ASSESSMENT TOOL 1
SCREENING SURVEY OF HEALTH IN PLACE (SSHIP)

Photo by Ann Forsyth

Version 1.3

The HEALTH AND PLACES INITIATIVE (HAPI) investigates how to create healthier cities in the future, with a specific emphasis on China. Bringing together experts from the Harvard Graduate School of Design (HGSD) and the Harvard School of Public Health (HSPH), it creates a forum for understanding the multiple issues that face cities in light of rapid urbanization and an aging population worldwide.

Health and Places Initiative
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CONTENTS

Introduction **4**
- Why Use this Tool
- How to Use this Tool
- Health Assessment vs. Health Impact Assessment

Part 1A: Basic Data for a PROPOSAL or PLAN **5**
Part 1B: Basic Data for an EXISTING PLACE **6**
Part 2: Do I have good reasons for considering a health assessment? **7**
Part 3A: Is the PROPOSAL or PLAN significant enough to assess? **9**
Part 3B: Is the EXISTING PLACE significant enough to assess? **10**
Part 4: Health effects of specific activities and types of places **11**
References **15**

INTRODUCTION

WHY USE THIS TOOL?

According to the classic Gothenburg Consensus Paper, Health Impact Assessments (HIA)s are 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" (European Centre for Health Policy, 1999). We use the broader term health assessment (HA) for this tool, to indicate that it can be used in a variety of situations including evaluating existing places, not only proposed policies, programs, or projects[1].

A screening tool helps you decide if it is worth conducting a more elaborate health assessment of a place or a proposal for a place.

While it may seem as if health is always an important concern, resources are typically limited so the screening aspect of the tool helps to determine whether the costs of doing a larger assessment are outweighed by its benefits.

This particular tool also has scoping components—identifying, in a preliminary way, which health issues are likely to be of concern. When you conduct the actual health assessment you will delve more deeply into the direction, likelihood, potential severity, and specific mechanisms of any effects.

Many health assessment tools are very general. They rely on the user having a substantial amount of knowledge in advance about potential health effects of a place or a proposal.

This tool is more specific to urban development and redevelopment at a site and neighborhood scale in core cities, suburban areas, and towns. It can be adapted to use for larger scale urban plans, programs, and policies, or for rural areas, but will need some modification. Similarly, it can be used for building-level assessments, again with modifications.

HOW TO USE THIS TOOL

A separate document contains instructions about how to use the tool as well as more detail about the logic behind the various questions. In general, however, the tool contains four parts and the user answers each part in sequence. Scores indicate if the user should progress to the next part—that is, if a health assessment looks as if it will be needed.

HEALTH ASSESSMENT VS. HEALTH IMPACT ASSESSMENT

This tool is based in the tradition of health impact assessment. However, that body of work tends to focus on proposals, while this tool can equally look at existing conditions.

1. For more information on Health Assessments or Health Impact Assessments, a detailed course is available at http://advance.captus.com/planning/hia2/toc.aspx.

PART 1: BASIC DATA

Part 1 of SSHIP helps you collect the necessary data to conduct health assessments. These basic data can be used in the later steps to decide whether a health assessment should be carried out, depending on potential health impact, interests, and the ability to conduct one. Please refer to the How To Guide for information on where to get this data.

PART 1A: BASIC DATA FOR A **PROPOSAL** OR **PLAN**

TOPIC	ANSWER	COMMENT *Add source, page number, or weblink details*	DON'T KNOW
1A.1 Title of Project			☐
1A.2 Type of Project urban plan, urban development, urban redevelopment, infrastructure, program, other			☐
1A.3 Physical Area of project in hectares, square miles, or square meters			☐
1A.4 Number of People directly affected (e.g. living/working in planning area, to live/ work in project)			☐
1A.5 Project Lead Organization + Contact Person			☐
1A.6 HIA Organizer (if different from project lead)			☐
Total Don't Know			

If you answered "Don't Know" to three or more questions, go back to gather data before proceeding.

PART 1: BASIC DATA

Part 1 of SSHIP helps you collect the necessary data to conduct health assessments. These basic data can be utilized in the later steps to decide whether a health assessment should be carried out, depending on potential health impact, interests, and the ability to conduct one. Please refer to the How To Guide for information on where to get this data.

PART 1B: BASIC DATA FOR AN **EXISTING PLACE**

TOPIC	ANSWER	COMMENT *Add source, page number, or weblink details*	DON'T KNOW
1B.1 Place name			☐
1B.2 Type of place mainly residential, mainly employment, mainly open/green space, mixed use, other			☐
1B.3 Physical area of place in hectares, square miles, or square meters			☐
1B.4 Number of people directly affected (e.g. living/working in area)			☐
1B.5 Demographics of people directly affected (e.g. living/working in area (e.g. by age, income, cultural background, gender)			☐
1B.6 Specific organizations that could implement changes (e.g. city government, community group)			☐
Total Don't Know			

If you answered "Don't Know" to three or more questions, go back to gather data before proceeding.

PART 2: DO I HAVE GOOD REASONS FOR CONSIDERING A HEALTH ASSESSMENT?

Part 2 identifies whether there are sufficient reasons for conducting a health assessment. Having available funding, e.g. via a grant program, is not a good enough reason. These are broad questions and only begin to identify potential concerns and benefits without assessing how large or important they might be. Please refer to the How To Guide for information on where to get this data.

ISSUES AND CONCERNS		YES	NO	DON'T KNOW
2.1	Concerns There are professional or community questions about **negative** health effects inside and outside the project/place, including concerns from the team doing the work.	☐ 2	☐ 0	☐ 1
2.2	Benefits There are professional or community **interests** in the potential health benefits of the proposal or place. Assessing these could help reinforce these benefits.	☐ 2	☐ 0	☐ 1
2.3	Affected groups There is some evidence that the project or place has health effects on **vulnerable groups** such as children, older people, those with low incomes, or those with disabilities.	☐ 2	☐ 0	☐ 1
CAPACITY AND READINESS				
2.4	Institutional capacity to make changes There is interest and/or capacity of local government, nonprofit, and private organizations to address any potential problems—that is, **something will get done following the assessment.** For example, there is a potential champion of the process AND there is an opportunity to change the plan or the place.	☐ 2	☐ 0	☐ 1
2.5	Institutional capacity to conduct the health assessment There is internal expertise or a capacity to bring in outside experts to complete a health assessment.	☐ 2	☐ 0	☐ 1
2.6	Timeliness The health assessment can be completed within a time frame that is useful for influencing decision-making.	☐ 2	☐ 0	☐ 1

PART 2: DO I HAVE GOOD REASONS FOR CONSIDERING A HEALTH ASSESSMENT?

ISSUES AND CONCERNS	YES	NO	DON'T KNOW
WIDER BENEFITS			
2.7 Beneficial linkages Doing a health assessment would strengthen ties between planners, public health professionals, project stakeholders, and developers.	☐ 2	☐ 0	☐ 1
2.8 Awareness raising By conducting a health assessment, health will be more visible as an issue in public and professional discussions.	☐ 2	☐ 0	☐ 1
Total			

If the score of Part 2 is 8 or more, proceed to Part 3.

PART 3: IS IT SIGNIFICANT ENOUGH TO ASSESS?

These questions make sure that conducting a health assessment is a good use of resources and that the scale of the project is appropriate for the HAPI toolkit. Remember, not every item needs to be a "yes" in order for you to move forward. For example a project smaller than a city block (question 3A.1) could still be significant enough to assess if it scores highly on other questions. These are rough attempts to quantify importance. Please refer to the How To Guide for information on where to get this data.

PART 3A: IS THE **PROPOSAL** OR **PLAN** SIGNIFICANT ENOUGH TO ASSESS?

ISSUES AND CONCERNS		YES	NO	DON'T KNOW
3A.1	Geographical extent Does it apply to a geographic area of a full city block or larger? That is, is it a fairly large project?	☐ 2	☐ 0	☐ 1
3A.2	Reversibility Will the changes be difficult or expensive to reverse once put in place? That is, might a health assessment head off costly problems?	☐ 2	☐ 0	☐ 1
3A.3	Cumulative impact Is it a place where specific local health problems have been identified already (e.g. traffic safety, air quality, lack of healthy foods, contaminated brownfields)?	☐ 2	☐ 0	☐ 1
3A.4	Population size Will it affect a significant number of people? Does it substantially increase (or displace) the population?	☐ 2	☐ 0	☐ 1
3A.5	Population distribution Does it affect a population group (e.g. children, seniors, people with low incomes, or people with disabilities)? Are the impacts on the population disproportionate?	☐ 2	☐ 0	☐ 1
3A.6	Land use Does it substantially change the predominant land use (e.g. from residential to commercial)?	☐ 2	☐ 0	☐ 1
3A.7	Environmental impact Will it significantly alter the natural environment even if it does not change land use patterns (e.g. does it increase or reduce water runoff, air quality or noise)?	☐ 2	☐ 0	☐ 1
Total				

If the score of Part 3A is 6 or more, it is likely worth doing a health assessment. Proceed to Part 4.

PART 3: IS IT SIGNIFICANT ENOUGH TO ASSESS?

These questions make sure that conducting a health assessment is a good use of resources and that the scale of the project is appropriate for the HAPI toolkit. Remember, not every item needs to be a "yes" in order for you to move forward. For example a project smaller than a city block (question 3B.1) could still be significant enough to assess if it scores highly on other questions. These are rough attempts to quantify importance.

PART 3B: IS THE **EXISTING PLACE** SIGNIFICANT ENOUGH TO ASSESS?

ISSUES AND CONCERNS		YES	NO	DON'T KNOW
3B.1	Geographical extent Does it apply to a geographic area of a full city block or larger? That is, is it a fairly large project?	☐ 2	☐ 0	☐ 1
3B.2	Cumulative impact Is it occurring in a place where specific local health problems have been identified already (e.g. traffic safety, air quality, lack of healthy foods, contaminated brownfield)?	☐ 2	☐ 0	☐ 1
3B.3	Population size Does it include a substantial residential population or workforce?	☐ 2	☐ 0	☐ 1
3B.4	Population distribution Does it affect a significant number of people from a vulnerable group (e.g. children, seniors, people with low incomes, or people with disabilities)? Are the impacts on the population disproportionate?	☐ 2	☐ 0	☐ 1
3B.5	Existing knowledge Is there enough evidence, data, or experience regarding this policy, program or place to support a health assessment?	☐ 2	☐ 0	☐ 1
3B.6	Environmental impact Will it significantly alter the natural environment even if it does not change land use patterns (e.g. does it increase or reduce water runoff, air quality or noise)?	☐ 2	☐ 0	☐ 1
Total				

If the score of Part 3B is 5 or more, it is likely worth doing a health assessment. Proceed to Part 4.

PART 4: HEALTH EFFECTS OF SPECIFIC ACTIVITIES AND TYPES OF PLACES

This checklist of questions helps identify or scope the kinds of issues that are likely to be raised in a full health assessment. It lists types of environments, activities, or situations by the associated health related topics. If your proposal or place contains these features, note that. These features are rooted in evidence from the HAPI Research Briefs (http://research.gsd.harvard.edu/hapi/research/researchbriefs/). Questions that are checked "Yes" or "Don't Know" should be investigated further using other tools in the health assessment suite: either the HOC or the HAPI Health Assessment Workshop (http://research.gsd.harvard.edu/hapi/research/tools/health-impact-assessment-tools/).

ISSUES AND CONCERNS	YES	NO	DON'T KNOW
BUILT ENVIRONMENTAL ISSUES			

4.1 Air quality
• Residences are close to one or more of the following (<500 meters):
  • Highways
  • Dusty roads
  • Industry
• OR Households use biomass fuels for heating/cooking without proper ventilation
	☐	☐	☐

4.2 Disasters
• Formal or informal development is in proximity to one or more of the following:
  • Coastlines
  • Waterways
  • Geological hazards
  • Hazardous industries
  • Conflict zones
• OR There are areas with concentrated population, economic and political activity, and/or poverty, or medically underserved communities (e.g. rural, low-income)
	☐	☐	☐

4.3 Noise
• Schools, residences, or workplaces are exposed to noise levels at or above 55–60 dB(A) from sources including either:
  • Heavy traffic
  • Airplane flyovers
	☐	☐	☐

4.4 Toxics
• Residences or workplaces are in close proximity to one or more of the following:
  • Hazardous waste sites, landfills, incinerators (<2–3k)
  • Heavy industrial sites: e.g. coke works, copper smelters, refineries, nuclear power plants (<5k)
  • Heavily trafficked roads (<500m)
  • Water polluted with agricultural runoff, oil, or mining wastes
• OR Housing utilizes biomass fuels for heating/cooking without proper ventilation
	☐	☐	☐

PART 4: HEALTH EFFECTS OF SPECIFIC ACTIVITIES AND TYPES OF PLACES

ISSUES AND CONCERNS	YES	NO	DON'T KNOW

4.5 Water quality
• Area has one or more of the following issues:
  • Does not have centralized drinking water treatment (piped drinking water) or waste sanitation (e.g. sewers, septic tanks)
  • Protected wells and latrines are located more than 1000m from residential area
  • Sources of drinking water are not buffered from:
  • Waste sites
  • Agriculture
  • Mining
  • Industry
  • Areas are prone to water shortages
	☐	☐	☐

4.6 Climate change
• Areas are vulnerable to urban heat island effect in one or more of the following ways:
  • High ratios of impermeable versus permeable surfaces
  • Sprawling patterns of urban development with little vegetation
  • Inadequate housing (e.g. ventilation, structural, or energy efficiency problems)
  • A lack of air conditioning
  • High proportions of lower-income people, older adults, or children
	☐	☐	☐

4.7 Housing
• Buildings have one or more of the following:
  • Structural problems
  • Likely contaminants (chemicals, mold, pests)
  • Sanitation issues
  • Crowded units (e.g. overcrowding, multifamily housing, high-rise housing)
• OR residential areas are in proximity to either:
  • Highways
  • Undesirable facilities (e.g. industrial, power plants, waste management)
• OR residential areas have either:
  • High crime
  • Unaffordable rents and mortgages
	☐	☐	☐

CONNECTEDNESS			

4.8 Geographical access to community resources
• Residential areas have challenging distances to community resources (e.g. healthcare, recreational facilities, shopping, food, greenspace):
  • Walking >300–600m to resources
  • Cycling >10k to resources
  • Transit is not frequent or within 500m of residences
	☐	☐	☐

PART 4: HEALTH EFFECTS OF SPECIFIC ACTIVITIES AND TYPES OF PLACES

ISSUES AND CONCERNS	YES	NO	DON'T KNOW

4.9 Geographical access to health care: for urban and suburban areas
• In urban and suburban areas either:
  • Healthcare facilities are more than 30 minutes by any mode of transportation
  • Dental health facilities are more than 40 minutes away by any mode of transportation
• In more rural areas, travel times are more than:
  • 1 hour for emergency services
  • 2 hours for acute inpatient hospital services
  • 4 hours for core specialty services
• There should be special consideration for those unwilling or unable to drive
	☐	☐	☐

4.10 Social Capital
• Areas lack one or more of the following:
  • Opportunities for civic and community involvement
  • High-quality, affordable, or accessible community resources
  • Different types of housing or activities
  • Walkable streets that are well-lit, safe from traffic, or well-maintained
  • Affordable rentals or home-ownership (to promote length of residency)
	☐	☐	☐

4.11 Mobility and universal design • Mobility impaired residents and workers cannot get around except by private car and/or without extensive assistance of others	☐	☐	☐
HEALTH-RELATED BEHAVIORS AND OUTCOMES			

4.12 Physical activity
• For transportation physical activity, there are areas with one or more of the following:
  • Single land use
  • Low-density development
  • Poor street connectivity
  • OR without sidewalks, or bike lanes on major roads
• For recreational physical activity, areas either:
  • Are more than 500m to a park or trail
  • Have major roads that lack sidewalks and safe crossings, particularly in locations with children and older people
	☐	☐	☐

4.13 Mental health
• Areas lack one or more of the following:
  • Street trees
  • Off-road trails
  • Park networks
  • Natural or green spaces that are appropriate for the location and culture
	☐	☐	☐

PART 4: HEALTH EFFECTS OF SPECIFIC ACTIVITIES AND TYPES OF PLACES

ISSUES AND CONCERNS	YES	NO	DON'T KNOW
4.14 Healthy food options • Sources of fruits and vegetables are more than 20 minutes away by available transportation • OR The community food system is not considered in the plans or policies for the area	☐	☐	☐

4.15 Safety (accidents, crime)
• Areas have one or more of the following:
  • High numbers of pedestrian, cyclist, or traffic accidents
  • Roadways are high-speed and high-volume, no pedestrian or cyclist infrastructure
  • High rates of violent crime
  • Low street lighting
	☐	☐	☐

If any of these are checked in the "Yes" or "Don't Know" column, then they should be investigated further.

One good way to start a more thorough HA is with the HAPI Health Opportunity Checklist (Tool 2). Another option is the HAPI Health Assessment Workshop (Tool 3). Both are accessible at http://research.gsd.harvard.edu/hapi/research/tools/health-impact-assessment-tools/.

REFERENCES

Design for Health. 2007. *Preliminary Checklist*. Version 4.0. Minneapolis, MN: University of Minnesota. http://designforhealth.net/hia/hia-preliminary-checklist/.

European Centre for Health Policy. 1999. *Health Impact Assessment: Main Concepts and Suggested Approach. Gothenburg Consensus Paper*. Brussels: European Centre for Health Policy and WHO Regional Office for Europe. http://www.apho.org.uk/resource/item.aspx?RID=44163.

Harris, P., Harris-Roxas, B., Harris, E., and Kemp, L. 2007. *Health Impact Assessment: A Practical Guide*. Sydney: Centre for Health Equity Training, Research and Evaluation (CHETRE), UNSW. http://hiaconnect.edu.au/wp-content/uploads/2012/05/Health_Impact_Assessment_A_Practical_Guide.pdf.

Health and Places Initiative (HAPI). 2014. Health and Places Initiative Research Brief Series. Cambridge, MA: Harvard Graduate School of Design. Online resource. http://research.gsd.harvard.edu/hapi/research/research-briefs/.

Minnesota Department of Health. 2000. H*IA Generic Screening Tool*. St. Paul, MN: Minnesota Department of Health. http://www.apho.org.uk/resource/item.aspx?RID=44898.