Section 3: Types of HIAs

HIA practitioners refer to different types of HIAs primarily to indicate various levels of effort, particularly related to new community-level data collection, and the overall time needed to complete a document. There is currently no consistent terminology used to distinguish one type of HIA from another. For this toolkit, the key descriptive terms for the types of HIA are:

- Desktop
- Rapid appraisal
- Comprehensive

Each type requires a different approach to baseline data collection and stakeholder engagement, and requires different amounts of time.

Desktop HIA

The desktop HIA is a qualitative assessment and is most appropriate for projects with few anticipated health impacts. The desktop HIA ideally requires 2 to 4 weeks but may require longer if baseline data is difficult to obtain. The HIA team often does not pursue extensive stakeholder engagement although some involvement is usually required. The level of external stakeholder input should be documented.

The desktop HIA is often useful for determining whether a more detailed review is needed. Many desktop HIAs are performed by project proponents as an internal “exercise” and are not released for public review or comment. From a State of Alaska perspective, a desktop HIA doubles as a screening exercise and it can reveal the need for further work. Usually, the desktop HIA confirms that a more detailed HIA is not warranted. The HIA team should make efforts to obtain any internal desktop HIA work completed by proponents before beginning their own work. As performed by the State, the desktop HIA is a screening tool that could become part of the overall project file. In addition to documenting stakeholder engagement, the HIA team should document why a more detailed HIA was not performed.

In a desktop analysis, the following elements should be covered:

- Project background
- Scope of the HIA
- Brief project description including (i) location, (ii) site access (are new transport features needed?) and (iii) timing/schedule
- Potentially impacted areas (geography)
- Potentially affected communities (if any)
- Community and/or external stakeholder concerns or comments
- Brief baseline analysis
- Risk analysis based on the standard health effects categories
Mitigation analysis (if any required or if none, why not)
Monitoring and evaluation analysis (if any required or if none, why not)

Rapid Appraisal HIA

For this toolkit, a rapid appraisal HIA is considered to be a site-specific HIA that uses health information that is already available or potentially accessible without conducting new field survey work.

Data sources for a rapid appraisal may include peer-reviewed scientific literature, health department databases and tribal health service data sources. The HIA team mines these sources for relevant information. For non-governmental consultants, there are often significant barriers to data access due to the sensitivity of human health information. Once the information is obtained, the HIA team will analyze and report the data. If performed by the State, these HIAs will be public documents subject to the same rules and disclosures as other similar environmental and social technical reports.

Comprehensive HIA

The hallmark of the comprehensive HIA is new field study data. Field studies address data-gaps identified during the scoping process. A comprehensive HIA may be appropriate for large, complex projects that involve

- Resettlement of existing communities
- Significant population influx
- Major disruption of subsistence practices
- Significant impact to key social determinants of health
- Information gaps related to a well-known aspect of a project

There are three general types of HIA: desktop, rapid appraisal and comprehensive.

The need for new field study data is a key characteristic of comprehensive HIAs.
Table 3: Levels and Characteristics of HIAs

<table>
<thead>
<tr>
<th>Level of HIA</th>
<th>Characteristics</th>
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<tbody>
<tr>
<td>Desktop HIA</td>
<td>• Broad overview of possible health impacts&lt;br&gt;• Analysis of existing and accessible data&lt;br&gt;• No new data collection&lt;br&gt;• Usually takes an experienced assessor 2-3 weeks to perform the appropriate literature searches, analysis, and write-up</td>
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<tr>
<td>Rapid Appraisal HIA</td>
<td>• Provides more detailed information of possible health impacts&lt;br&gt;• Analysis of existing data&lt;br&gt;• Stakeholder and key informant analysis&lt;br&gt;• No new data collection&lt;br&gt;• Typically takes a team of two experienced assessors 10-14 days in the field, followed by 4-8 weeks of analysis and document preparation, with literature (desktop) searches performed prior to the field work</td>
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<tr>
<td>Comprehensive HIA</td>
<td>• Provides a comprehensive assessment of potential health impacts&lt;br&gt;• Robust definition of impacts&lt;br&gt;• New data collection&lt;br&gt;• Participatory approaches involving stakeholders and key informants&lt;br&gt;• Requires approximately 2-4 weeks of field work. In Alaska, community surveys often require a minimum of 4-6 months of pre-work to coordinate field studies with local communities. Field work in Alaska is heavily dependent on seasonal subsistence patterns.</td>
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How to Determine the Type of HIA

The HIA team should document how they selected the level of HIA performed. While there is no formal algorithm used to select the level of HIA, Figure 2 (below) suggests key factors for consideration and a schematic for decision-making.

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Perform the type of HIA needed to best understand, document and mitigate potential project impacts.
The potential health impacts axis considers health issues in the proposed project location, such as:

- Hazardous materials exposure – considers facility operation, and potential exposures to physical (including noise and illumination), biological, and chemical hazards, particularly potential impacts on subsistence resources through emissions or avoidance of an area due to noise or other physical hazards
- Resettlement, relocation, influx – considers whether or not the project will require the need for changes in the existing community configuration and social structures
- Endemic disease profile – considers the likelihood of sexually transmitted infections including HIV/AIDS, communicable respiratory diseases including tuberculosis, etc.
- Health systems and infrastructure – considers status of existing public health infrastructure and potential effects to direct clinical care services and resources
- Stakeholder concerns – considers critical community issues, such as impacts on subsistence harvest, water quality, crime rates, increased road traffic and accidents, noise, dust, etc.
- Social sensitivity – considers whether or not the project will significantly alter existing cultural, community, and household social relationships.

The **social sensitivity axis** gives special focus to some of the social determinants of health such as gender, ethnicity, cultural cohesion, physical or mental distress due to cultural change, education levels, poverty or economic disadvantage, and dependence on unique natural resources. These topics are usually addressed in the social impact analysis, so it is extremely important that the HIA Team understand the SIA approach to social analysis.

The **project footprint axis** applies to:

- Physical area, and number of communities affected by construction, operation, and decommissioning. The health-specific project footprint may extend beyond the immediate physical footprint. It may be a useful technique to organize potentially impacted communities into geographic “zones of impact” (e.g., Zone 1 representing those most impacted proximate communities, Zone 2 those potentially impacted but geographically distant, Zone 3 areas with low likelihood for potential impact)
- Inconveniences to the population’s quality of life such as dust, noise, transportation congestion, re-routing of roads, re-routing or damming of rivers, and positioning of construction camps
- Impacts on natural resources used by the communities for subsistence, such as hunting and fishing, foraging, and water supplies for drinking
- Physical displacement (i.e., resettlement or relocation of individuals or communities increases the project footprint)
- Impact on community road access, resulting in potential changes in access to alcohol and drugs (negative) as well as goods and services (positive)
- Potential of the project to cause local violence or other significant disruptions of community cohesion
- Native peoples’ cultural health practices and access to health infrastructure and services
- Distortion of local prices, especially of food, property and energy

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*The specific HIA type is less important than the need to reasonably address key issues that are raised by relevant stakeholders.*

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**Coordinating the HIA with the environmental and social impact assessment process**

The HIA team should attempt to integrate with the environmental and social impact assessment process whenever possible. In some situations (particularly involving large
projects) the concerns of the environmental and social analysis may not match the health analysis:

- Geographic extent will often differ between the EIA, SIA, and the HIA because the HIA involves the health effects involved with the movement of people.
- Potentially affected communities will often differ between the EIA, SIA, and HIA because the various groups review different impact types.
- Health equity is a unique consideration of the HIA. While it may correlate with certain questions in the SIA, it is generally not considered in the EIA.
- The epidemiology of disease transmission will not be considered during the SIA and may be considered in the EIA only related to wildlife and habitat issues.
- Workforce issues will be considered differently by the HIA, SIA, and EIA. The HIA will acknowledge many social dynamics created by the influx or egress of a working population, especially as it influences human health. The SIA will primarily review how influx and egress affect social and economic dynamics in the community, but may not ask health questions. The EIA will primarily review how changes in the workforce will affect the project footprint and subsequently, the physical environment.

The SIA, EIA, and HIA ask different questions. It is vital for these teams to coordinate and communicate effectively.

Related Health Impact Assessments

*Health Risk Assessments* (HRAs) classically address “inside the fence” issues that focus on the workforce. These assessments include the quantitative calculation of incremental individual exposure risk to hazardous materials in the environment or the assessment of exposure risks encountered while working at the project facility, such as chemical exposures, cold and heat exposures, or safety hazards. In Alaska, quantitative risk assessment may be useful, particularly related to impact on local communities and subsistence resources. Again, the workforce HRA is usually an “inside the fence” concern and not routinely part of the HIA. There are, however, cross-over considerations when workers act as transmission agents for potentially hazardous materials from site to home (e.g., lead or infectious diseases). These situations are typically evaluated as part of an industrial hygiene/safety review by the proponent and should be carefully considered by the HIA team.

*Health Need Assessments* (HNAs) generally describe the health needs and health assets of different groups in the local population without reference to a specific project. HNA’s primary function is to inform decisions about health strategies, health service priorities, program commissioning, and local health delivery plans. If all of these assessments are completed, these different documents will overlap and the HIA team will find useful information through exchanging and sharing data.