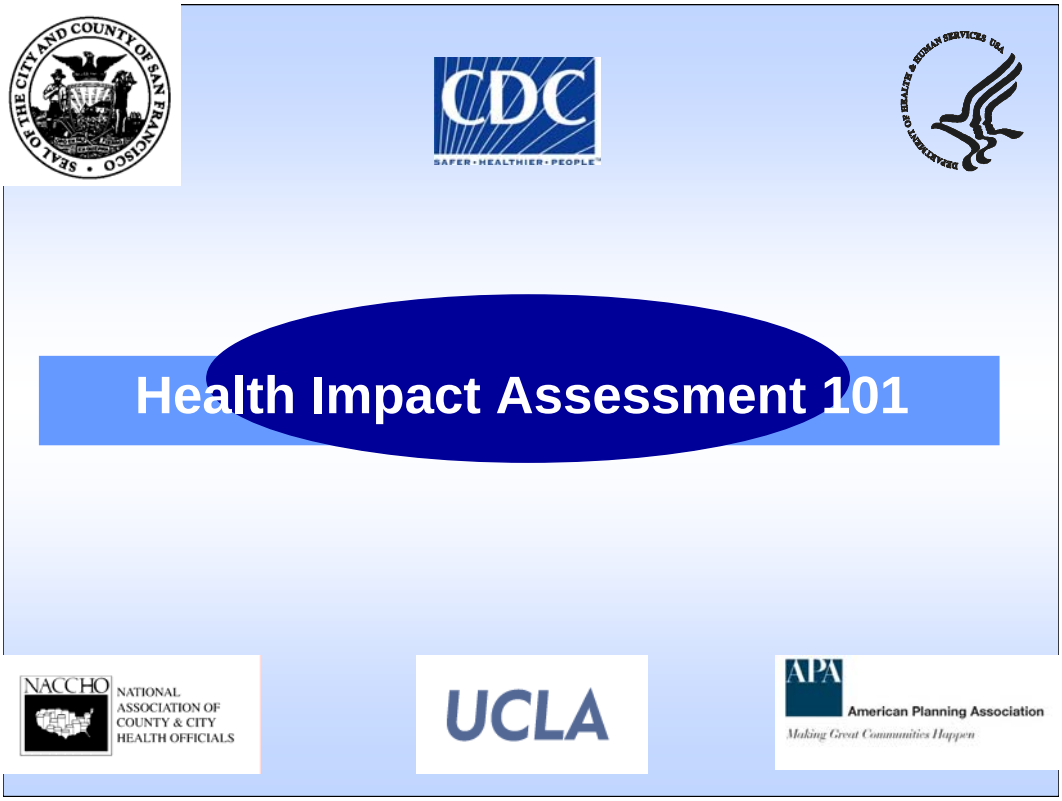
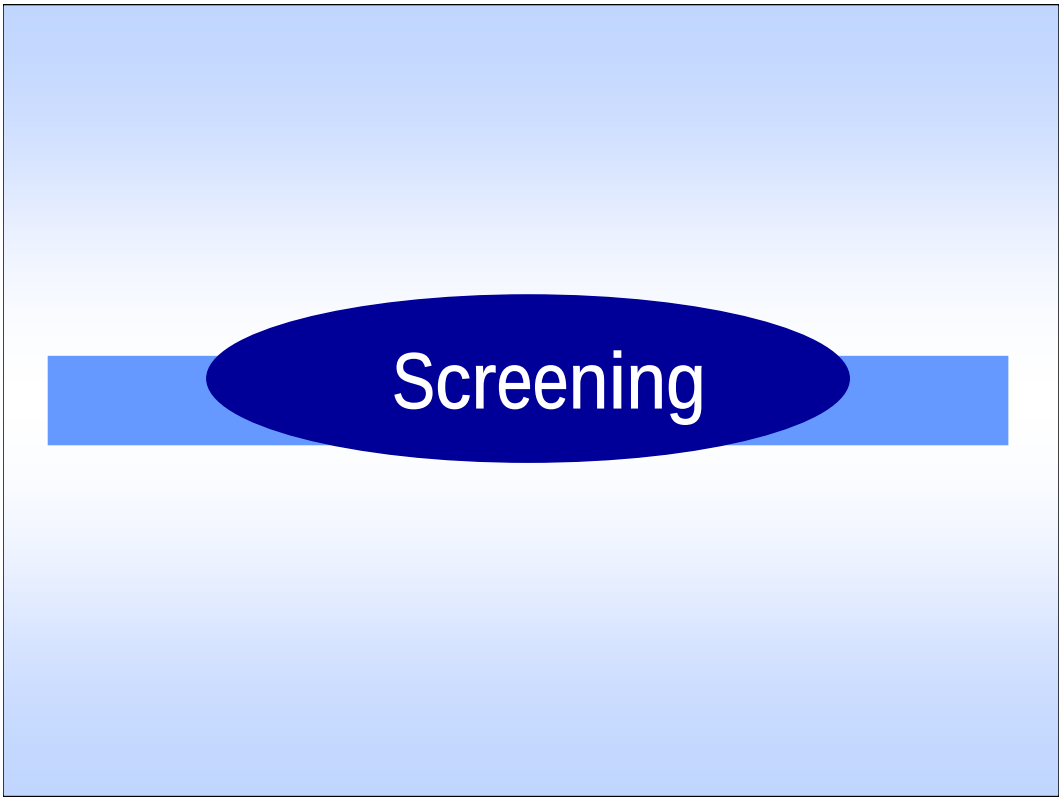

SEAL OF THE CITY AND COUNTY OF SAN FRANCISCO
CDC
SAFER · HEALTHIER · PEOPLE
DEPARTMENT OF HEALTH & HUMAN SERVICES USA
Health Impact Assessment 101
NACCHO
NATIONAL ASSOCIATION OF COUNTY & CITY HEALTH OFFICIALS
UCLA
APA
American Planning Association
Making Great Communities Happen

.




This module focuses on the first step in the HIA process, screening.

**Review the goal of this module.**

*The goal of screening is to determine if an in-depth impact assessment is necessary and if an HIA adds value to the decision-making process.*

Completing this step helps prevent conducting an HIA that is not needed or will not add useful information to the project.

**Summarize the module objectives**

•*Identify the steps included in the screening process*

•*Use screening tools to select or not select policies or projects for assessment*

•*Describe the role of the community in the assessment process*

•*Describe the challenges communities have encountered with the assessment process*

## Steps in the Screening Process

- Define the policy, program or project
- Determine whether you should conduct an HIA
- Determine what type of assessment to complete
- Make a preliminary assessment of whether to proceed
- Briefly assess the potential health impacts
- Review decision with stakeholders
- Start to identify modifications to the policy/projects which may increase positive health outcomes and minimize negative health outcomes

**Review the steps in the screening process.**

•*Define the policy, program or project* Large and unwieldy projects are hard if not impossible to contain. Start with a neighborhood or a troublesome intersection, don't try to start with an entire city plan.

•*Determine whether you should conduct an HIA*

•*Determine what type of assessment to complete*

•*Make a preliminary assessment of whether to proceed*

•*Briefly assess the potential health impacts*

•*Review decision with stakeholders*

•*Start to identify modifications to the policy/projects which may increase positive health outcomes and minimize negative health outcomes*

# HIA Stages are Fluid

**Remind participants** that the steps are fluid and it may be necessary to revisit previous steps in the process..

# Define the Project or Policy

An HIA is most useful when:

- Health issues are brought to the planning table
- The policy or project decisions do not traditionally consider health
- There are likely to be significant health impacts that are not already being considered
- The HIA can be completed before key decisions are made and stakeholders are likely to use information
- Sufficient data and resources are available

**Discuss how to define a project or policy.**

An HIA is most useful when:

- *Health issues are brought to the planning table*
- *The policy or project decisions do not traditionally consider health*
- *There are likely to be significant health impacts that are not already being considered*
- *The HIA can be completed before key decisions are made and stakeholders are likely to use information*
- *Sufficient data and resources are available*

One of the biggest challenges with an HIA is restricting the scope of the project so that it is possible. Sometimes cities or towns want an HIA to address the master plan for the entire area. Attempting an HIA on a project this size will be much more difficult especially for people who are new to conducting HIAs. Policy HIAs are also more complicated than projects since they tend to affect more people and are less concrete. Beginning with a doable HIA is a way to begin the process. Once you have developed partnerships and relationships, it is easier to conduct larger and more complex HIAs.

Remember, define the project and limit it to something that is feasible.

# When is an HIA Not Appropriate?

- Instances where information is vague, unreliable or not available
- Situations when there is little or no local support for an HIA
- Decisions where the stakeholders will not take health into consideration
- Situations when decisions have already been made and there is no turning around

**Transition to a discussion of when an HIA is not appropriate.**

- *Instances where information is vague, unreliable or not available*
- *Situations when there is little or no local support for an HIA*
- *Decisions where the stakeholders will not take health into consideration*
- *Situations when decisions have already been made and there is no turning around*

There will be times when information is not vague and the health outcomes are obvious and already being considered. At this point there is no need to move forward. There are also times when no significant health impacts are expected from a project or policy, thus it is not advisable to conduct an HIA.

**Example**

Sometimes there little or no support for an HIA. For instance, in a mid-sized city that has a wide range of income levels two supermarkets file for bankruptcy. There are still numerous supermarkets remaining in the high end areas but individuals living in the low income areas now have to travel twice as far to get to a supermarket. A new supermarket chain wants to open a store in one of the high income areas of the city. The supermarket has the final say in the matter but the city council can propose incentives.

**Ask**: Is it feasible to do an HIA in this situation? What incentives can a city offer?

## Selection Criteria

- Is the health impact significant enough to proceed with an HIA?
- Does the HIA add value to the decision-making process?
- Is there enough knowledge and data available to conduct the HIA?
- Are resources such as time money and personnel available to conduct an HIA?
- For your first HIA, choose a project that is manageable enough so that there is not a sense of being overwhelmed.

**Discuss the criteria for beginning an HIA.**

Once a project or policy is clearly defined, it is necessary to ask some questions before proceeding.

- *Is the health impact significant enough to proceed with an HIA?*
- *Does the HIA add value to the decision-making process?*
- *Is there enough knowledge and data available to conduct the HIA?*
- *Are resources such as time money and personnel available to conduct an HIA?*
- *For your first HIA, choose a project that is manageable enough so that there is not a sense of being overwhelmed (i.e. the number of health impacts, or the number of people affected)*

# Types of HIAs

- Rapid
- Intermediate
- Comprehensive

**Review the three types of HIA.**

- *Rapid*
- *Intermediate*
- *Comprehensive*

As we discussed earlier, there are different types of HIAs. During the screening process it's necessary to determine what type of HIA is best for a given project or policy.

Remember, HIAs are flexible and can be adapted to meet the requirements of the situation. An HIA can be something you complete in a day and write up a one page summary or it can be a year long project that includes volumes of data and reports.

# A Rapid HIA…

- Provides a broad overview of possible health impacts
- Can be used at an early policy development stage or where limited time/resources are available
- Involves collecting and analyzing existing data and researching previous HIAs
- Is usually carried out in days to weeks with minimal resources

**Introduce the rapid HIA**

*A rapid HIA*

*•Provides a broad overview of possible health impacts*

*•Can be used at an early policy development stage or where limited time/resources are available*

*•Involves collecting and analyzing existing data and researching previous HIAs*

*•Is usually carried out in days to weeks with minimal resources.*

## An Intermediate HIA…

- Provides more detailed information of possible health impacts
- Most frequent HIA approach
- Allows more thorough investigation of health impacts
- Involves reviewing available evidence, any similar HIAs and collecting and analyzing new data
- Can take weeks to months to complete
- May involve community input

**Introduce the intermediate HIA**

An intermediate HIA

•*Provides more detailed information of possible health impacts*

•*Most frequent HIA approach*

•*Allows more thorough investigation of health impacts*

•*Involves reviewing available evidence, any similar HIAs and collecting and analyzing new data*

•*Can take weeks to a few months to complete.*

•*May involve community input.*

# A Comprehensive HIA

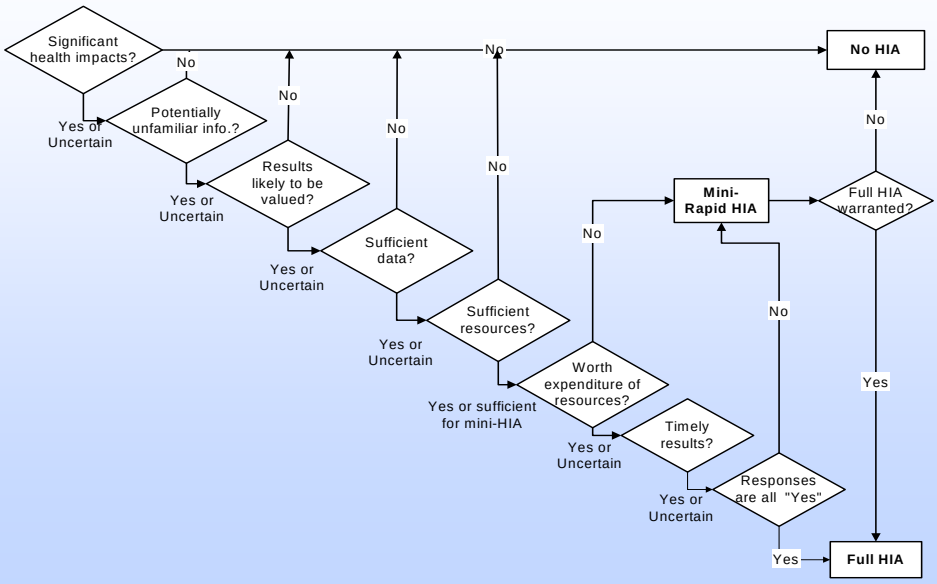
- Provides a thorough assessment of potential health impacts
- Contains most robust definitions of impacts, but least frequently used
- Involves a review of available evidence and any similar HIAs
- Involves collecting and assessing new data using multiple methods and sources (quantitative and qualitative data including stakeholders' opinions)
- Takes a long time to complete
- Involves community input

**Introduce the comprehensive HIA**

A comprehensive HIA

- *Provides a thorough assessment of potential health impacts*
- *Contains most robust definitions of impacts, but least frequently used.*
- *Involves a review of available evidence and any similar HIAs*
- *Involves collecting and assessing new data using multiple methods and sources (quantitative and qualitative data including stakeholders' opinions)*
- *Takes a long time to complete*
- *Involves community input*

# Screening Algorithm:




**Introduce the algorithm. (NOTE that there is a larger copy of the algorithm in Appendix A)**

There are many tools you can use to help with the screening process. This algorithm is one of those tools. Another is a checklist that you can find in the Appendix A of your manual.

Let's walk through the algorithm and then use the algorithm in some examples.

# What Type of HIA Would You Conduct When…

- A city plans to develop a run-down neighborhood. It will involve demolishing 3 blocks of dilapidated retail shops, an aging supermarket, and 200 low income housing units.
- At the request of a city council representative, the public health department will explore the possibility of conducting an HIA.
- The developer has agreed to allocate $5,000 to the health department to conduct the HIA if the city will expedite the approval process. This only gives the health department 2 weeks to complete the assessment.




**Use the algorithm for this example by asking the following questions.**

- Are significant health impacts likely?
- Is there potentially unfamiliar information?
- Will the results be valued?
- Are there sufficient data?
- Are there sufficient resources?
- Is it worth the expenditure of resources?
- Will the results be timely?

**Ask**: Is an HIA feasible in this situation? What type of HIA would you recommend?

# What Type of HIA Would You Conduct When…

- A large high end development on the waterfront in San Francisco would increase average daily traffic (ADT) by 20,000 cars in an ethnic neighborhood that currently has an ADT of 50,000 cars per day.
- This area already has a history of high rates of pedestrian injuries and deaths. A decision will be made by the end of the week about allowing the development to take place.

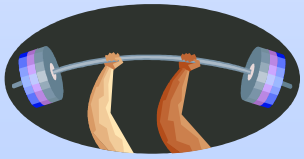

**Use the algorithm for this example by asking the following questions.**

- Are significant health impacts likely?
- Is there potentially unfamiliar information?
- Will the results be valued?
- Are there sufficient data?
- Are there sufficient resources?
- Is it worth the expenditure of resources?
- Will the results be timely?

**Ask**: Is an HIA feasible in this situation? What type of HIA would you recommend?

# How Community Can Help Determine if an HIA is Warranted?

- Understanding the decision and its alternatives
- Judging the breadth and magnitude of health effects
- Determining the strength of the evidence
- Identifying available and ongoing analysis
- Understanding competing stakeholder positions
- Identifying potential for improvements



**Describe community involvement in an HIA.**

In many HIAs the screening process does not involve the community. Typically the health and planning departments make a decision on whether to move forward.

In large HIAs communities can be involved in the screen. Including a community is not always easy and can even be troublesome. Still nothing makes or breaks a project or policy more that the involvement of community stakeholders.

In the screening process there are several roles that the stakeholders play to determine if an HIA is warranted.

•*Understand the decision and its alternatives*

•*Judge the breadth and magnitude of health effects*

•*Determine the strength of the evidence*

•*Identify available and ongoing analysis*

•*Understand competing stakeholder positions*

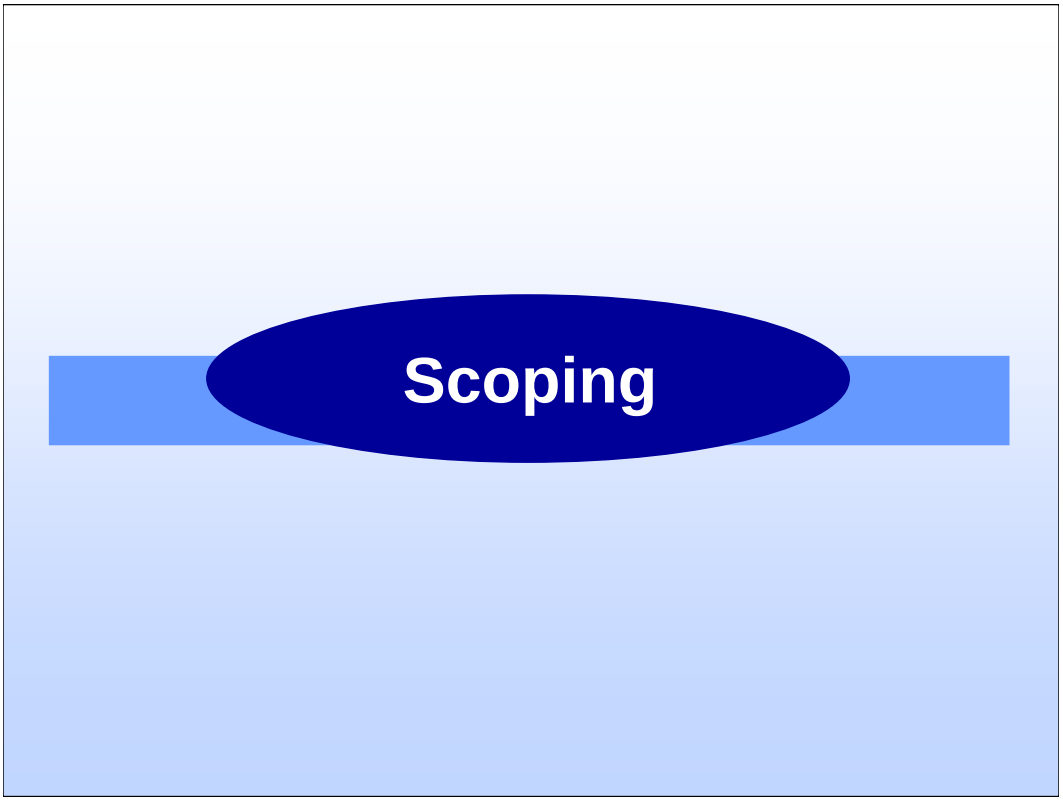
•*Identify potential for improvements*

**Ask -** If you were to involve the community, how might you do it? What would community participation add to one of the previous examples.

# Remember...

- Scale it down and start small.

**Remind** participants to begin with a manageable project the first time and then build on their experience as they take on larger projects.




This module focuses on the second step in the HIA process, scoping.

**Introduce the module by stating the goal.**

*The goal of scoping is to identify issues that should be addressed in the HIA and describe key aspects of the health status and demographics of the population that will serve as a baseline to assess possible health impacts.*

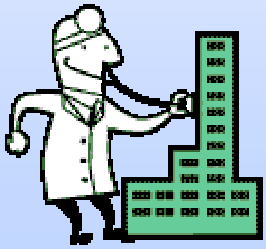
**Review the module objectives.**

- *Define scoping*
- *Identify and describe the scoping steps*
- *Identify the types of information to gather*
- *Determine indicators chosen for an HIA analysis*
- *Determine geographical, temporal, and population based parameters such as City Vision and Township Guidelines*
- *Assess which impacts are likely to be important and can be addressed*
- *Determine how community members can contribute*
- *Define the challenges*

# The Purpose of Scoping

- Establishes the foundation for conducting the health impact assessment
- Designs and plans the HIA
- Highlights key issues that will be considered
- Determines what impacts to assess





**Refer to the points on the slide.**

*Scoping establishes the foundation for conducting the health impact assessment, designs and plans the HIA, highlights key issues that will be considered, and determines what impacts to assess.*

The **purpose** of scoping is to outline the expected impacts, methodological approach, expected challenges, and resources needed to conduct the impact analysis.

**Describe the outcome of scoping**.

The scoping process should produce a **detailed roadmap for the analysis to follow**. This roadmap should be informed by the literature, local experts in relevant fields and the concerns of the community, policymakers and stakeholders.

The roadmap will include procedures for systematically gathering and evaluating evidence and determining whether impacts will be quantitative or qualitative.

# Questions to Ask When Scoping a Policy or Project

- Would you recommend conducting an HIA in this case? If so, what kind of HIA?
- What are the components of the suggested policy?
- What are the impacts of the policy? Who will be affected and how?
- What information do you need to gather?
- What are the possible health outcomes?

**Review these questions that will help participants define how to create their logic framework.**

*Would you recommend conducting an HIA in this case? If so, what kind of HIA?*

•*What are the components of the suggested policy?*

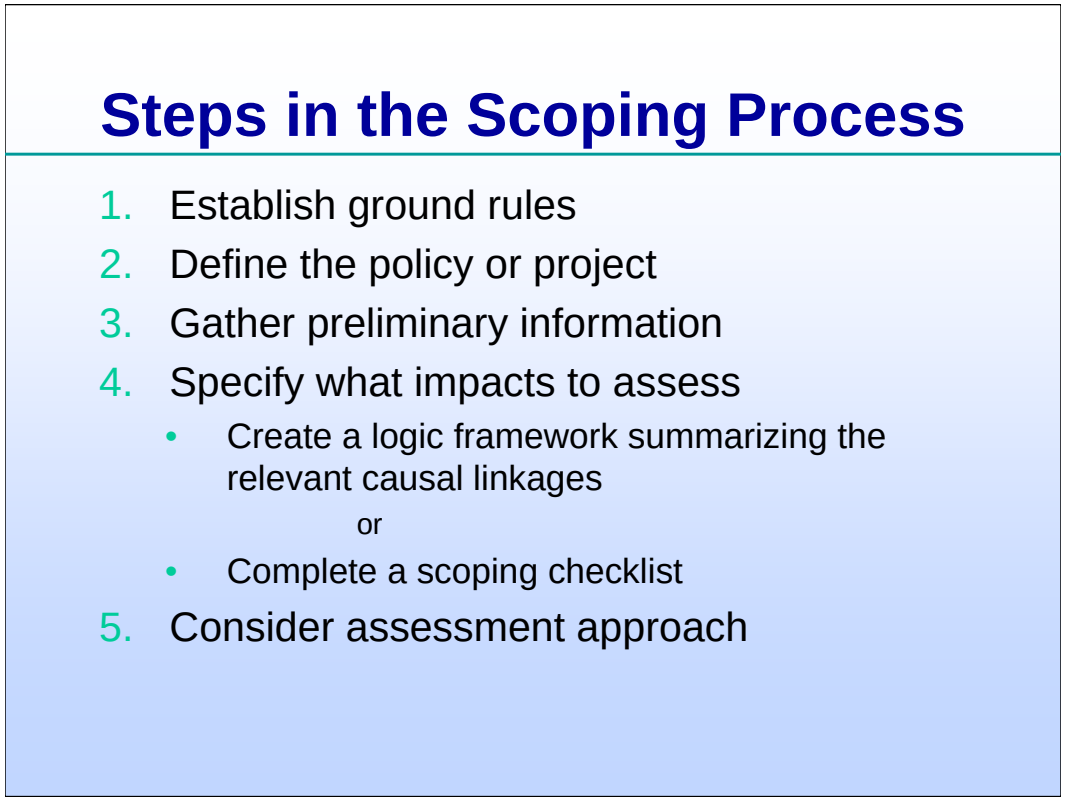
•*What are the impacts of the policy? Who will be affected and how?*

•*What information do you need to gather?*

•*What are the possible health outcomes?*

•*What are the causal linkages that need to be re-evaluated and refined.*

These questions will help you create a logic framework. Start by looking at other HIAs that can serve as a model.




**Review the steps in the scoping process.**

- *Establish ground rules*
- *Define the policy or project*
- *Gather preliminary information*
- *Specify what impacts to assess*
- *Create a logic framework summarizing the relevant causal linkages*
- *Consider assessment approach*

# 1. Establish Ground Rules

- Clarify roles of stakeholders and partners involved in scoping the HIA.
- Determine who has final authority to decide the scope of the HIA
- Set timelines
- Establish responsibility for convening meetings and other administrative tasks
- Determine who will pay for the HIA


**Describe why it is important to establish ground rules.**

Let's begin with the first step in scoping, establishing ground rules. Ground rules are essential to ensure that the process runs smoothly. If you clarify these rules at the beginning of the program, the process will be manageable.

- *Clarify roles of stakeholders and partners involved in scoping the HIA.*
- *Determine who has final authority to decide the scope of the HIA*
- *Set timelines*
- *Establish responsibility for convening meetings and other administrative tasks*
- *Determine who will pay for the HIA*

**Ask**:

How is this process different or similar to other processes that involve cooperation among different stakeholders and community members?

## 2. Define the Policy or Project

- Describe the policy or project and its likely impacts
- Establish boundaries for the HIA
- Identify needed resources
- Identify partners
- Describe the intended impacts
- Determine geographical, temporal, and population based parameters

**Describe how to define the policy and why this is important.**

**Review questions regarding resources.**

- Are there sufficient data to quantitatively estimate changes?
- Is the added information from quantitative analyses worth the additional time and resources?
- Is there money to hire specialists to conduct certain analyses?

**Describe people involved in the HIA process.**

It is important to identify and include partners in the process. No HIA will be successful without the participation and buy-in of all interested parties. Remember, informal partnerships are just as important as formal partnerships!

The internal team at a minimum consists of public health officials and planners. It is also critical to include community leaders. In many cases it might be feasible to have an advisory committee consisting of stakeholders and community members.

**Setting boundaries**

- What is to be included or excluded?
- What are the boundaries in terms of timing and location?
- When will the assessment be done?


**Review the contributions of community members involved in the HIA.**

Community stakeholders can provide much information in the scoping process including:

•*Identify potential health pathways and equity effects*

•*Develop research questions*

•*Identify available research methods and data sources*

•*Identify mitigation strategies*

•*Participate in a collaborative scoping exercise*

•*Determine the highest priority HIA questions and tasks*

•*Assist project staff to synthesize highest priority community issues*

**Provide an example.**

An example of community collaboration on a project happened when a town council was faced with the closing of their community hospital. The alternative would be to raise taxes to fund some of the basic hospital operations. The community task force helped the town council determine what basic hospital operations were most important to the community. The community task force then went back to the community and advocated for the tax increase. The new tax was then passed by a 2 to 1 vote by the community.

# 3. Gather Preliminary Information

- Describe the characteristics of the population
- Identify at-risk groups
- Describe the health status of the population
- Define environmental conditions of the target population


**Review to the third step in the scoping process, information gathering.**

As you begin to gather information, look for ways to:

*Describe the characteristics of the population*

Size, density, distribution, age, sex, birth rate, ethnicity, socio-economic status

*Identify at-risk groups*

Health risk behaviors

Locations where at-risk groups may be concentrated such as schools, specific streets, and nursing homes

Levels of employment/unemployment.

*Describe the health status of the population*

*Define environmental conditions of the target population*

Air and water quality

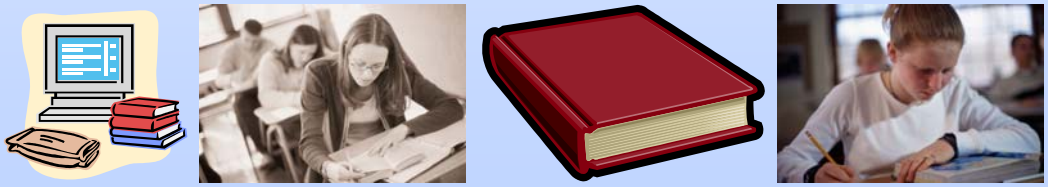
Transport issues, if relevant

*Identify quality and quantity of affordable housing*

The preliminary information gathering process should be spent establishing the evidence surrounding the topic of your impact assessment. Think of this as time for you to "get-to-know your case."

## Finding the Information

- Gray literature
- Peer reviewed literature
- Key informants or stakeholders who provide local information that may not be available in the public domain
- Experts in relevant fields who can identify the health related outcomes



**Describe the different sources of information.**

As you gather information, be sure to look to multiple sources. One place to start is with existing HIAs. Some of the work may have been done for you!

**Gray Literature**

Information available in the HIA process may be gray literature. One popular source of gray literature is search engines such as Google. Use this literature as long as you note its source and quality.

**Peer-reviewed literature**

While not always available, peer reviewed literature is known as the crème de la crème of scientific literature and can be found at PubMed or Medline. If your organization does not have access to these sorts of journals, use a student intern who has access to academic literature through their college/university to help with this.

**Key informants or stakeholders**

It is also important to seek out stakeholders and community leaders who can provide information that may not be in the public domain. These people may be on the advisory committee. They can also provide a historical background for the project or policy which may be useful in the analysis or when reporting results.

**Experts in relevant fields**

There are experts in various fields who can help you identify health related outcomes. Some are in the room today and can help you. Other times you may need to pay a consultant to assist you with your HIA. For the Sunnyvale highway case senior transportation engineers were hired to conduct the injury reduction analysis.

# 4. Specify What Impacts to Assess

- Identify how the policy or project will affect health
- Identify the health outcomes of interest


**Review the importance of determining what impacts to assess.**

•*Identify how the policy or project will affect health*

•*Identify the health outcomes of interest*

Bringing health to the table and keeping it on the table as decisions are made is critical to the success of an HIA.

To do this we must identify how the policy or project will affect health and what the health outcomes will be. Typically, a policy or project will impact many different health issues. But, in order to produce an HIA that will influence decision making, the health impacts assessed in the HIA should be of interest to the stake holders or viewed as the "most important" by the stakeholders.

# Tools to Help Specify Impacts to Assess

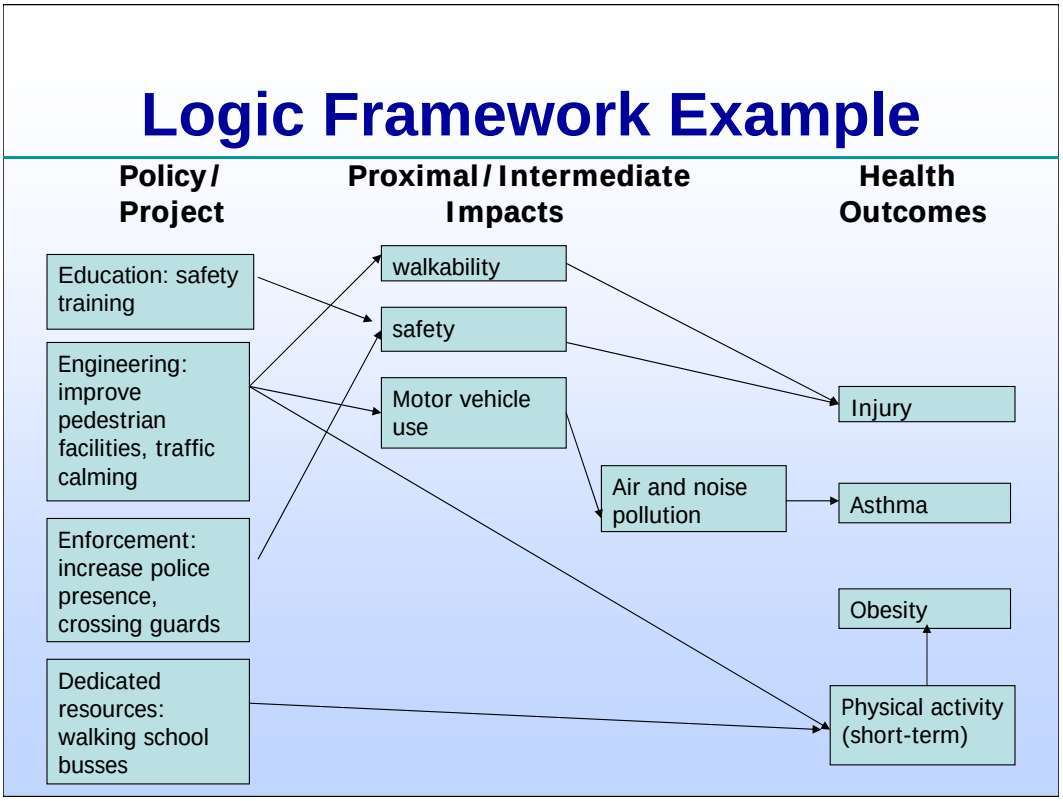
- A logic framework summarizing the relevant causal linkages

  *or*

- A scoping checklist

**Introduce the tools that help identify what health impacts to assess.**

There are many ways to determine what health impacts to access: a logic framework which summarizes the relevant causal links or a scoping checklist. Both tools accomplish the same thing, but accommodate different types of thinkers: those of us who think visually and those that think systematically. In the interest of time we will discuss the scoping checklist.




**Review Walk to School Logic Framework:**

Here's the logic framework for the walk to school program. Notice the components that the program focuses listed on the far left column. It includes both policy and project components: safety training, improved pedestrian facilities and traffic calming, and an increase in police presence and crossing guards. There are also dedicated resources for walking school buses. The next column lists the Proximal and/or Intermediate impacts. Proximal impacts are the effects that are most closely linked to the policy or project and intermediate outcomes are often mediary health impacts.

**Explore one component, improved pedestrian facilities**.

**Ask**: Are there any questions about how the components, impacts and outcomes relate to each other?

# A Scoping Checklist…

- Is another way to identify what health impacts to assess
- Is a systematic method for quickly identifying and assessing health impacts
- Have previously been developed by:
  - UCLA
  - Greater London Authority

**Review the checklist as another tool to determine what impacts to assess.**

**(Check list is located in Appendix A)**

- *Is another way to identify what health impacts to assess*
- *Is a systematic method for quickly identifying and assessing health impacts*
- *Have previously been developed by:*
  - *UCLA*
  - *Greater London Authority*

# 5. Consider Assessment Approach

- Most HIAs will use a combination of quantitative and qualitative data
- Quantitative HIAs should not be seen as superior to qualitative HIAs
- The most important point is that the HIA has an impact on the decision

**Introduce the concept of qualitative and quantitative assessment.**

Determining what type of assessment to conduct is the last step in scoping. Remember, there is no clear line differentiating where screening, scoping, an assessment begin and end.

As you begin to look at what impacts to assess consider the information you have in relation to qualitative and/or quantitative assessment.

•*Most HIAs will use a combination of quantitative and qualitative data*

•*Quantitative HIAs should not be seen as superior to qualitative HIAs*

•*The most important point is that the HIA has an impact on the decision*

## Challenges to Scoping

- Finding sufficient information to complete the HIA
- Having enough resources like personnel and time to gather needed information
- Choosing a project that is small enough so that there is not a sense of being overwhelmed
- Keeping the feedback channels open throughout the process

**Wrap up the module with the challenges that participants may encounter when they scope projects.**

There are challenges to this stage of the HIA. These include:

•*Finding sufficient information to complete the HIA*

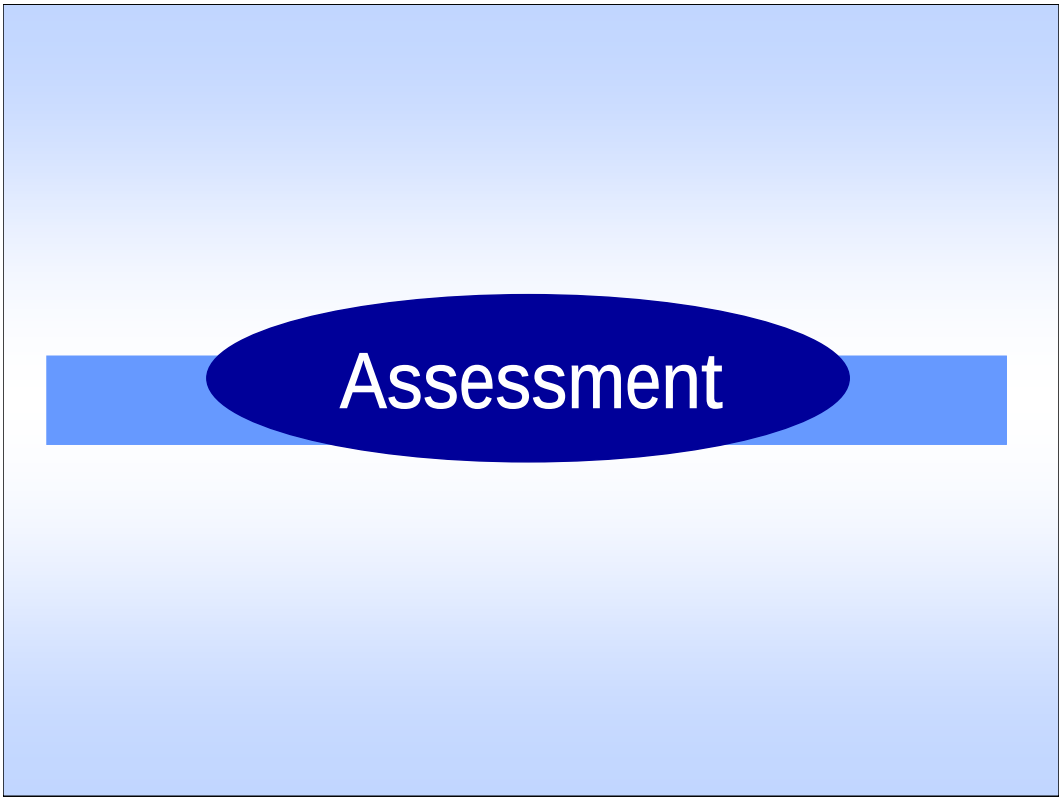
•*Having enough resources like personnel and time to gather needed information*

•*Choosing a project that is manageable enough so that there is not a sense of being overwhelmed*

•*Keeping the feedback channels open throughout the process*

**Ask:** Are there additional challenges that you can add to this list?

*Record responses on the flip chart.*




This module focuses on the third step in the HIA process, assessment.

This is the topic that strikes fear in many of us. Take a deep breath and we'll walk you through the assessment process. There are lots of people in the room who can help with this.

**Introduce the module by stating the goal.**

The goal of assessment is:

•*Determine which impacts will be assessed by qualitative and quantitative analysis*

•*Use data and research to determine the direction and magnitude of potential health impacts*

•*Determine if there will be differential impacts on subgroups (health equity)*

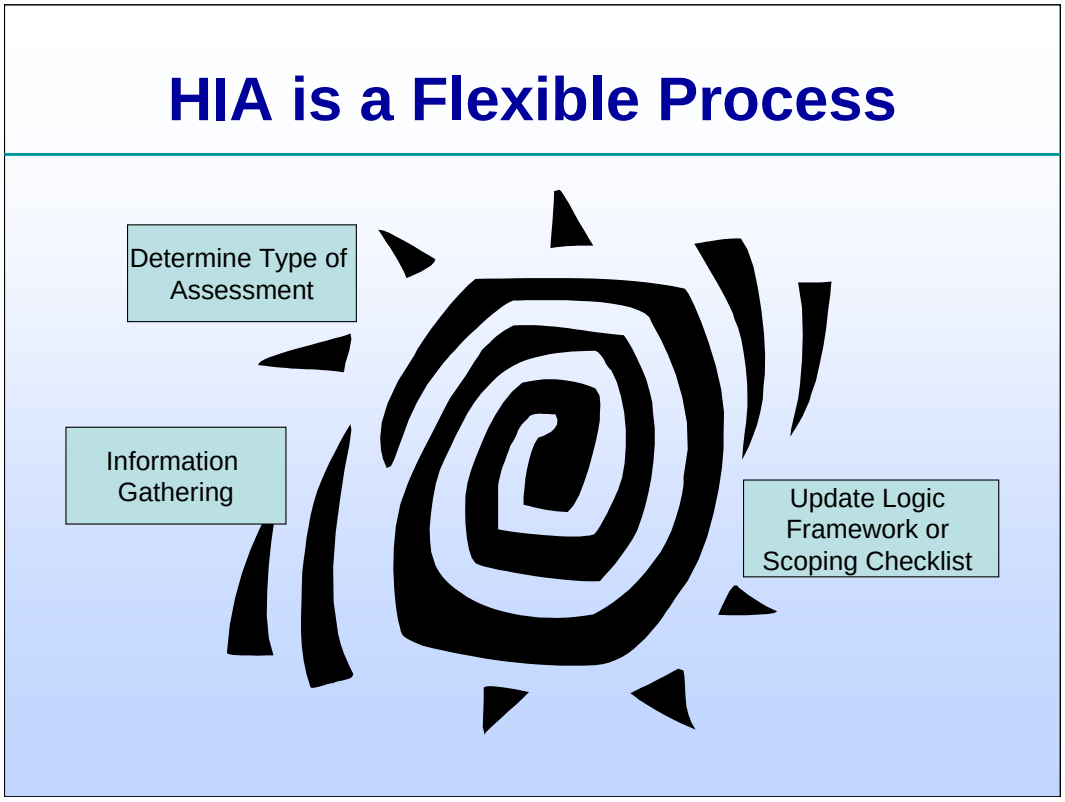
**Review the module objectives.**

The objectives for this assessment module include:

•*Describe ways to gather information.* Information gathering requires that you determine appropriate sources and combine and prioritize different levels of evidence.

•*Identify key informants or stakeholders who can provide local information that may not be available in the public domain.*

•*Describe the steps in assessment.*



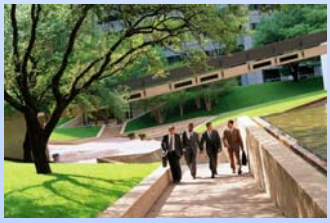

**Review the concept of HIA as a flexible or fluid process.**

As we look at the steps involved in assessment, it's good to remember that HIA is a flexible process. We started gathering information during scoping, now we are also gathering information during assessment. As you fine tune your HIA it becomes clear what questions you need to answer. You may even have to gather additional information or revise your logic framework/scoping checklist to reflect your more finely honed quest.

# Types of Assessment Qualitative and Quantitative

- Qualitative – describes the direction and certainty but not magnitude of predicted results.
- Quantitative – describes the direction and magnitude of predicted results.





**Differentiate between qualitative and quantitative assessment.**

As you begin your assessment, one of the first questions is what kind of analysis will you conduct?

*Qualitative* assessment *predicts the direction and certainty but not the magnitude of predicted results.*

*Quantitative* assessment *describes the direction and magnitude of predicted results.*

**Example**:

For example in a qualitative assessment you will be able to say is. “If you build a sidewalk, people will walk more”. And in a quantitative analysis you would be able to say, “Build a sidewalk and 300 people who live within 200 yards of the location will walk an average of 15 extra minutes per day”.

# 5. Consider Assessment Approach

- Qualitative
  - Takes less time
  - Is less complicated
- Quantitative
  - Is more complicated
  - May require modeling skills
  - Needs high quality baseline and impact data
  - Results are often “viewed” as more credible

**Differentiate between qualitative and quantitative assessment.**

As you begin to look a what impacts to assess consider the information you have with relation to qualitative and quantitative assessment.

- *Qualitative*
  - *Takes less time*
  - *Is less complicated*
- *Quantitative*
  - *Is more complicated*
  - *May require modeling skills*
  - *Needs high quality baseline and impact data*
  - *Results are often “viewed” as more credible*

# What Impacts to Assess

- Most HIAs will use a combination of quantitative and qualitative data
- Quantitative HIAs should not be seen as superior to qualitative HIAs
- The most important point is that the HIA has an impact on the decision

**Review the impacts to assess.**

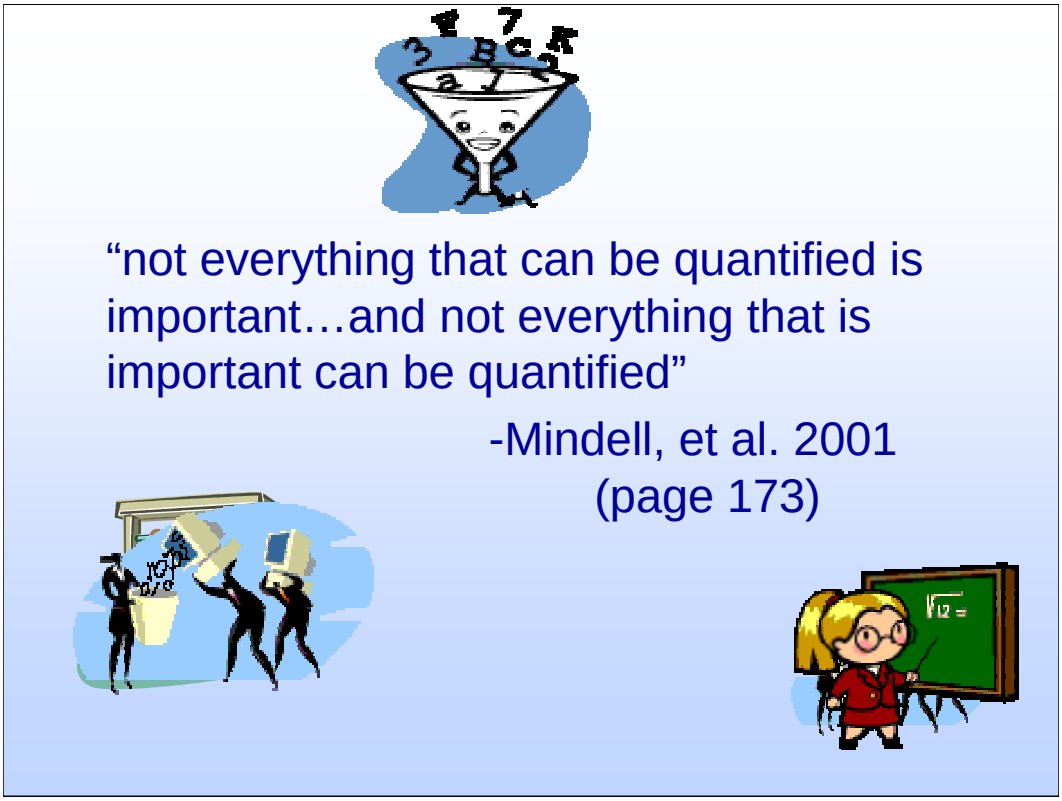
•*Most HIAs will use a combination of quantitative and qualitative data*

•*Quantitative HIAs should not be seen as superior to qualitative HIAs*

•*The most important point is that the HIA has an impact on the decision*

**Ask**:

Think about the type of data that you have available for your project. What type of analysis do you think you'll do? Why would you choose quantitative or qualitative analysis?




**Share quote with participants.**

This is an important point to keep in mind when choosing which type of analysis to conduct for your HIA. Quantitative and qualitative analyses are neither superior nor inferior to each other.

## Steps in the Assessment Process

- Determine what data are needed and what are available.
- Gather information using a variety of sources.
  - Previous HIAs on similar topics
  - Census data, BRFSS, NHANES
  - Grey literature and published literature
- Assess qualitative and quantitative evidence
- If possible, construct quantitative models and estimate potential health effects



**Review the steps in the assessment process.**

As we review the steps in assessment, you see that many of these steps repeat themselves.

•*Determine what data is needed and what are available.*

•*Gather information using a variety of sources.* Sources may include*:*

- *Previous HIAs on similar topics*
- *Census data, BRFSS, NHANES*
- *Grey literature and published literature*

•*Assess qualitative and quantitative evidence* pertaining to each of the links in the causal chains of the logic model that link the policy with health outcomes

•*If possible, construct quantitative models and estimate potential health effects*

Remember, you may have to revisit the literature as new evidence and sources come to light. Critical to this process is asking the right questions. Once you ask the questions you have to see if the data is available to answer the questions.

One question you will answer is whether the assessment is going to be qualitative or quantitative. If you choose quantitative models, use evidence from the literature to construct your models.

# Information Gathering

- Characterize the population in terms of size, density, distribution, age, sex, employment rates, SES and other demographic information
- Determine the health status of the population in terms of mortality, disability and morbidity data
- Identify health risk behaviors and locations where at-risk groups may be concentrated
- Determine the environmental conditions of the population



**Review types of information you can gather for an HIA.**

Information gathering can:

•*Characterize the population in terms of size, density, distribution, age, sex, employment rates, socio-economic status (SES) and other demographic information*

•*Determine the health status of the population in terms of mortality, disability and morbidity data*

•*Identify health risk behaviors and locations where at-risk groups may be concentrated.*

•*Determine the environmental conditions of the population*

As we discussed earlier, in some cases the HIA may be part of an EIA. In this instance some of this data may be collected by the EIA but not all of it. EIAs typically do not collect data related to chronic disease prevention and other health outcomes such as mental health.

Now that you understand what to look for when gathering information and where to find the information, let's look at a logic framework for a Kids Walk HIA. The logic framework should serve as a guide for your analysis. Remember, you may have to revise the model as you find more information or ask more detailed questions.

# Qualitative Methods to Determine Health Impacts

- Assess evidence pertaining to each of the links in the causal chains leading the policy to the health outcomes
- If possible, use evidence from the literature to determine direction (positive, negative, neutral, or can't estimate effect) and certainty (speculative, probable, definite)


**Describe what to do when there are not enough data links.**

•*Assess evidence pertaining to each of the links in the causal chains leading the policy to the health outcomes*

•*If possible, use evidence from the literature to determine direction (positive, negative, neutral, or can't estimate effect) and certainty (speculative, probable, definite)*

In many cases the data is not sufficient to conduct quantitative assessment, thus you would use qualitative assessment. In qualitative assessment you only determine direction and certainty, not magnitude.

Level of certainty refers to how confident you are about your estimates. Depending on the data that is available your estimate of direction and certainty will come from the literature and expert opinion. Neither your direction estimate or certainty estimate will have numbers behind them.

REMEMBER, this is not inferior to quantitative assessment!

# Quantitative Methods to Determine Health Impacts

- Construct quantitative models and estimate potential health effects
- Perform sensitivity analysis (a.k.a. confidence intervals)
- List the assumptions and limitations
- Quantitative assessment may not be feasible due to data, time, or resource constraints

**Describe what to do when you do have sufficient data links.**

Listed here are the methods for quantitative analysis. We will take a look at each of these steps and walk through a couple of examples as we continue through this module.

•*Construct quantitative models and estimate potential health effects*

•*Perform sensitivity analysis ( a.k.a. confidence intervals).* These are quite similar to the certainty estimates of qualitative analysis.

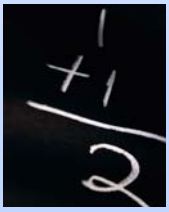
•*List the assumptions and limitations.* This is a important step of quantitative analysis. Listing ALL of your assumptions and any limitations of your analysis will help your stakeholders grasp the meaning and assess the credibility of your work.

•*This may not be feasible due to data, time, or resource constraints.*

# Considerations

- When does the HIA need to be completed?
- How much staff time do you have and what are their qualifications?
- Will adding numbers have a greater impact on the decision that is made?



**Describe the considerations for conducting the assessment.**

As you decide what type of analysis to conduct, be sure to weigh considerations such as:

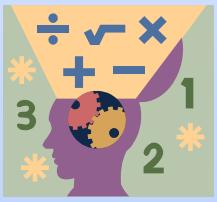
•*When does the HIA need to be completed?*

•*How much staff time do you have and what are their qualifications?*

•*Will adding numbers have a greater impact on the decision that is made?*

# More Considerations

- What is the availability and quality of the data for each health outcome?
- Will you need to make too many assumptions for quantitative analysis?
- Are baseline data available?
- Are there data linking the policy or project to the health outcomes?




**Describe additional considerations for conducting the assessment.**

•*What is the availability and quality of the data for each health outcome?*

•*Will you need to make too many assumptions for quantitative analysis?*

•*Are baseline data available?*

•*Are there data linking the policy or project to the health outcomes?*

•*How many assumptions do you need to make for a quantitative analysis?*

Remember:

•Shorter causal chains are better

•Often, you have to assume a causal link from cross-sectional data

•Be sure to specify all assumptions

•KISS (not the rock band) (Keep It Simple Stupid)

**Ask:** What are some of the considerations that you've made as you've started to define the HIA process in your communities?

# Walk to School HIA

Comprehensive walk-to-school program includes:

- Encouragement
- Promotion
- Education
- Eliminating safety hazards
- Reducing traffic congestion


**Introduce the 'Walk-to-School' HIA as an example.**

In the "Walk to School" program we discussed in the previous module, there were several health outcomes that were included in the scoping checklist.

# Walk to School HIA

Some of the Health Impacts Assessed:

- Injury
- Air Pollution

**Continue with the walk to school example.**

Let’s examine two health outcomes, injury and air pollution and determine the best way to assess these outcomes.

# Injury & Walking to School

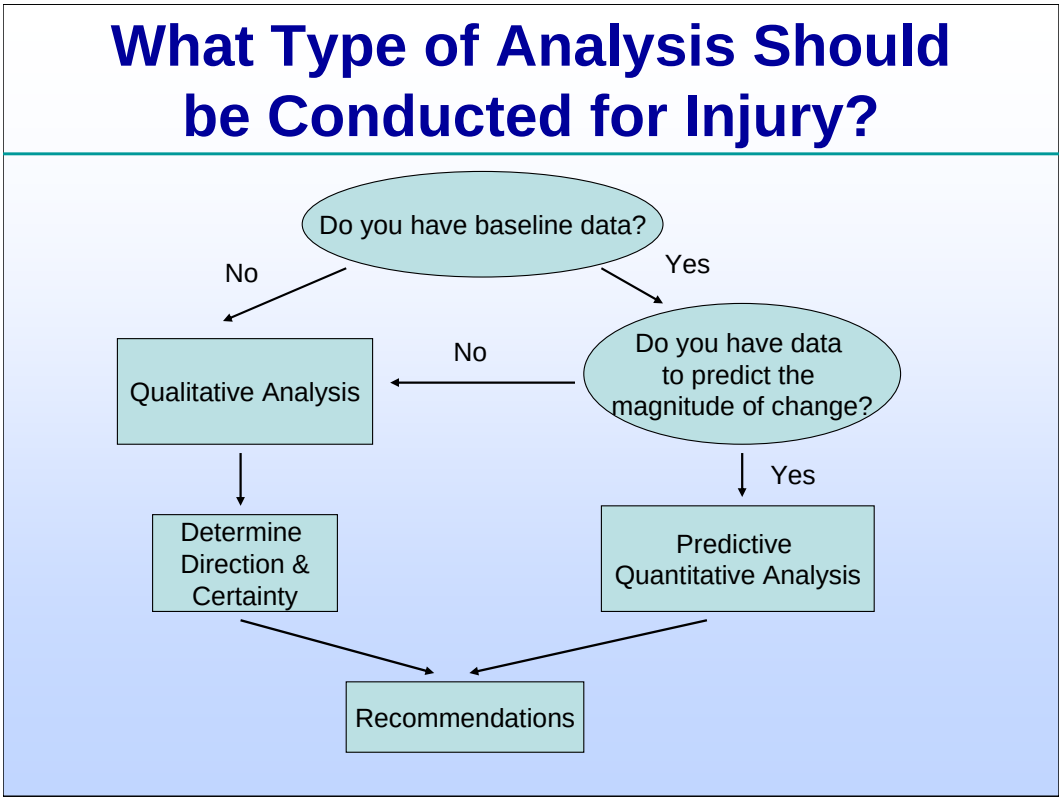
- No student has been stuck by an automobile while walking or biking to school in the school district being examined
- No injuries were reported in first two years of the Marin County program
- Orange County program reported a decrease in injury rates

**Review the background information on injury and walking to school.**

*•No student has been stuck by an automobile while walking or biking to school in the school district being examined*

*•No injuries were reported in first two years of the Marin County program*

*•Orange County program reported a decrease in injury rates*




**Determine whether you are going to conduct a qualitative or quantitative analysis for injury.**

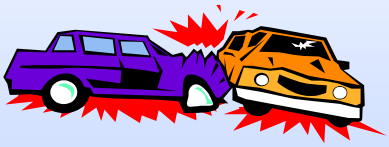
**Ask**: Are there baseline data to substantiate quantitative analysis?

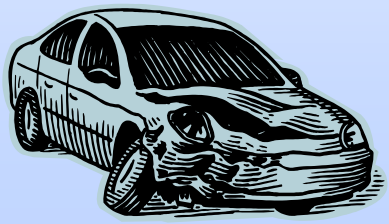
**Ask**: Are there impact estimates that are good enough to predict changes in baseline levels?

**Encourage discussion** about this case study and the decision to conduct a qualitative or quantitative analysis.

# Traffic-Related Injury

- Quantitative estimation was not feasible due to small number issues
- Direction: Decrease risk for each student
- Certainty: Probable





**Review the information on traffic-related injury.**

•*Quantitative estimation was not feasible due to small number issues*

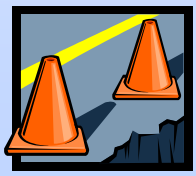
•*Direction: Decrease risk for each student*

•*Certainty: Probable*

Qualitative assessment was performed for injury. While there were baseline data (0 injuries) and there are data on injury reduction, it was not possible to perform quantitative assessment since the baseline level was zero. In other words, the event is so infrequent it makes modeling a waste of time. Having more children walking to school may increase the total number of accidents but there would be a large decrease in each child's risk of injury. The literature in this area shows that pedestrians are much safer walking in areas where there are a lot of other pedestrians.

# Injury Recommendations

- Ensure continued police enforcement of speeding laws around schools
- Continue education and promotion for current and future students
- Have alternate parent available for walking school buses
- Monitor and identify any future barriers on walk to school routes (construction, etc.)





**Ask**: What additional recommendations would you make to stakeholders in this situation?

•*Ensure continued police enforcement of speeding laws around schools*

•*Continue education and promotion for current and future students*

•*Have alternate parent available for walking school buses*

•*Monitor and identify any future barriers on walk to school routes such as construction.*

# Air Pollution & Walking to School

- The county has the 7th worst ozone pollution and the 8th worst short-term particulate pollution in the country
- Exposure to several pollutants are 50 to 400 times higher inside diesel school buses than outside



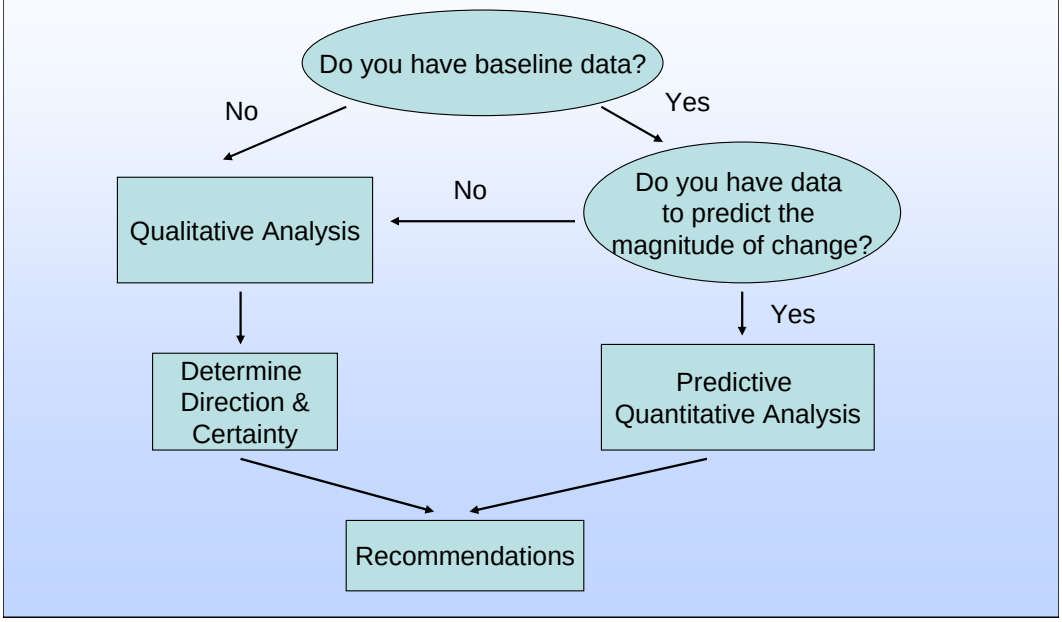
**Describe the relation of air pollution and walking to school for the county.**

Here is the data that was provided by local sources and peer reviewed literature.

•*The county has the 7th worst ozone pollution and the 8th worst short-term particulate pollution in the country*

•*Exposure to several pollutants are 50 to 400 times higher inside diesel school buses than outside*

# What Type of Analysis Should be Conducted for Air Pollution?




**Determine whether to conduct a qualitative or quantitative assessment for air pollution.**

**Ask**: Are there baseline data to substantiate quantitative assessment?

Are there impact estimates that are good enough to predict changes in baseline levels?

**Encourage discussion** about this case study and the decision to conduct a qualitative or quantitative assessment.

## Air Pollution: Expected Impacts

- Uncertainties
  - Diesel or gas buses
  - Inhalation rates
  - Duration of trip
  - Traffic density along walking routes
  - Time and season
- Direction: uncertain
- Certainty: speculative


**Discuss the expected impacts of air pollution.**

- *Uncertainties*
  - *Diesel or gas buses*
  - *Inhalation rates*
  - *Duration of trip*
  - *Traffic density along walking routes*
  - *Time and season*
- *Direction: uncertain*
- *Certainty: speculative*

While there are good baseline level data on air pollution there are too many uncertainties with respect to the effect estimate. For instance, no data were available on the number of diesel versus gasoline buses, how children's inhalation rates would affect exposure, the length of time children spend in cars or in buses, the amount of traffic along children's walking routes, and it would be difficult to control for time of day and season in the analysis. Thus, too many assumptions would need to be made so the data were examined qualitatively. Since the time children spend walking to school represents such a small part of the day and the total air they breathe the program was not expected to have a large impact (magnitude) on their exposure. Due to lack of available data it wasn't possible to determine a direction and since the team wasn't confident about the data it was given a certainty rating of speculative.

# Air Pollution Recommendations

- Have children walk on routes with less traffic
- Do not have children walk to school on high air pollution days
- Replace diesel buses
- Have children wait outside the school away from the pick up/drop off zone before school
- Do not allow cars or buses to idle


**Ask**: What additional recommendations would you make to stakeholders in this situation?

•*Have children walk on routes with less traffic*

•*Do not have children walk to school on high air pollution days*

•*Replace diesel buses*

•*Have children wait outside the school away from the pick up/drop off zone before school*

•*Do not allow cars or buses to idle*

## Challenges to Assessment

- Finding baseline data and an effect estimate
- Finding information for subpopulations
- Having personnel with the time and ability to conduct the analysis
- Dealing with uncertainties (data, models, policy)
- Working within a specific time frame
- Ensuring relevance to stakeholders and decision makers

**Wrap up the module with the challenges that participants may encounter when conduct assessment.**

There are challenges to conducting an analysis, including:

•*Finding baseline data and an effect estimate*
•*Finding information for subpopulations*
•*Having personnel with the time and ability to conduct the analysis*
•*Dealing with uncertainties such as data, models, and policy.*
•*Working within a specific time frame*
•*Ensuring relevance to stakeholders and decision makers*


This module focuses on the fourth step in the HIA process, reporting.

**Introduce the module by stating the goal.**

The goal of this step is to determine the best way to report HIA findings.
Remember:
•*To report on the HIA in a format that is appropriate for the audience*
•*To include findings from the analysis for various target audiences*
•*To use the reporting process as a tool for relationship building*

**Review the module objectives.**

The objectives for this reporting module include:

•*Formulate recommendations* including alternatives and or additional plans of action
•*Describe effective and appropriate ways to present results that address the perspectives and concerns of policy makers, stakeholders and the general public*
•*Identify persons and organizations that will receive a report or presentation*

## Components of Good Reports

- Deliver clear recommendations
- Address the needs of the audience
- Include only what is necessary
- Provide findings that will support decision making
- Use a format that addresses the audience
- Involve the community

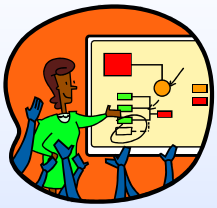
**Introduce reporting by describing the components of a good report.**

**Good reports:**

- *Deliver clear recommendations*
- *Address the needs of the audience*
- *Include only what is necessary*
- *Provide findings that will support decision making*
- *Use a format that addresses the audience*
- *Involve the community*

# How to Formulate Recommendations

- Explore what has been done elsewhere
- Use common sense
- Determine what is feasible but also consider what is possible
- Provide several options reflecting different cost and impact levels
- Look to the community and stakeholders for creative solutions
- Provide incentives such as tax breaks ora quick approval process



**Discuss ways to formulate recommendations.**

As you gather what you've learned during the assessment process, explore what recommendations you will make. Take your time to reflect with your team and stakeholders about what recommendations you want to make.

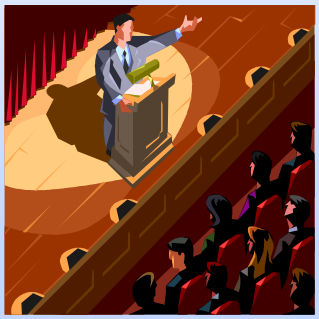
•*Explore what has been done elsewhere*
•*Use common sense*
•*Determine what is feasible but also consider what is possible*
•*Provide several options reflecting different cost and impact levels*
•*Look to the community and stakeholders for creative solutions*
•*Provide incentives such as tax breaks ora quick approval process*

In many cases the stakeholders will take the cheaper solutions and ignore those that have higher costs attached to them. Be sure to frame your report so that everyone knows the benefits and liabilities of each recommendation.

As you write your report be sure that these recommendations are prioritized.

# How to Produce Effective HIA Documents

- Who is the audience?
- What are the barriers for that audience?
- What is the bias of that audience?



**Discuss the importance of knowing the audience.**

The first step in producing effective HIA documents is to understand the audience. And remember, there may be more than one audience. Stakeholders can include politicians, developers, or community leaders. And, each of these groups may have a different and sometimes conflicting perspective on a given issue.

Explore the perspectives of each audience and define what success or failure will look like. This might involve meeting with the different groups, walking the neighborhood, reading the local papers, and attending civic association meetings. All of this will enrich your knowledge of the audience beyond the basic demographics.

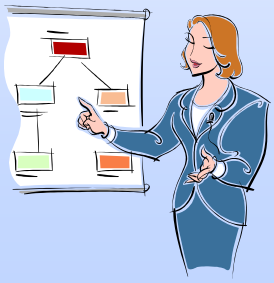
**Example:** A metro area is very interested in getting mass transit. As the plans are laid for transit around the inner city, organizations are planning to create parks, develop high density housing and office spaces along the transit line. One developer was ready to build two 30 story high rise buildings near an existing park. The neighborhood adjoining the area protested loudly as they saw their homes being 'in the shadow' of the high rise development. An HIA in this situation needs to address the different audiences and make as unbiased a case as possible.

**Ask:**

Who are the audiences in this scenario? Can you list some barriers for each audience? What biases do these audiences have?

# Reports for Different Audiences

- A technical manual for other HIA specialists
- A manuscript for academics (sometimes)
- A brief summary for the public, stakeholders and the media



**Describe how different groups will respond better to different types of reports.**

It is important to recognize that most stakeholders are not neutral and few believe they have a need for more objective information. You can identify the needs and positions of the audience and anticipate how the audience might react to the information that is supportive or antagonistic to their stated position. It's best to know your enemies, and your friends, so you can respond appropriately. Some of the different types of reports include:

•*A technical manual for other HIA specialists*

•*A manuscript for academics (sometimes)*

•*A brief summary for the public, stakeholders and the media*

**Ask**: What types of reports do you envision using in your HIA? Who is the audience and what kind of report will they respond to?

# What to Include

- HIA questions
- Potential impacts
- Research methods
- Mitigation strategies
- Recommendations that have been prioritized
- Existing conditions
- Applicable federal, state, local goals, objectives, standards and regulations

**Describe the issues to include in your HIA report.**

It is important to ensure that the audience knows what **questions the HIA addressed**. By being clear about the scope, you can avoid unreasonable expectations.

The HIA report will define **potential impacts** of the policy or project. For example, if you build a sidewalk you will have expect a positive impact on the physical activity levels of the kids walking to school. Equally important is to address the impact on the kids' physical activity level if you do not build a sidewalk.

A description of the **research** is another critical part of the report. The research gives credibility to the content. Remember that an academic audience will want more details about the research methods. Stakeholders may only need to know that the content is valid.

And finally, you need to present the **recommendations** in a way that lessens the negative impact on the audience. For instance, if the cost of redesigning a congested highway is more expense than the audience will bear, you may want to present the redesign in stages, so that the financial burden is not overwhelming. Providing options at different cost levels can help.

As you review your report be sure to include:

•*HIA questions*

•*Potential impacts*

•*Research methods*

•*Mitigation strategies*

•*Recommendations that have been prioritized*

•*Existing conditions*

•*Applicable federal, state, local goals, objectives, standards and regulations*

# Involving the Community

- Present findings to community residents and stakeholders
- Have community stakeholders jointly interpret and prioritize findings and recommendations
- Have community stakeholders jointly present results to public officials

**Describe ways to involve the community.**

When you prepare your report for the community remember to create a variety of reports including a structured report as well as letters, or comments for the regulatory process.

Allow the community to help present these reports when appropriate. When presenting to a legislator it may be helpful to have a powerful constituent present the results of the HIA.

•*Present findings to community residents and stakeholders*

•*Have community stakeholders jointly interpret and prioritize findings and recommendations*

•*Have community stakeholders jointly present results to public officials*

## Other Forms of Reporting

- Comment letter on a plan or project
- Testimony at a public hearing
- Presentations to stakeholders
- Posting reports on a website for wide distribution
- HIAs can be integrated into EIA findings



**Describe the different methods and media you can use for your report.**

Reports can come in different types and sizes depending on the audience. They may include:

•*Comment letter on a plan or project*

•*Testimony at a public hearing*

•*Presentations to stakeholders*

•*Posting reports on a website for wide distribution*

•*HIAs can be integrated into EIA findings*

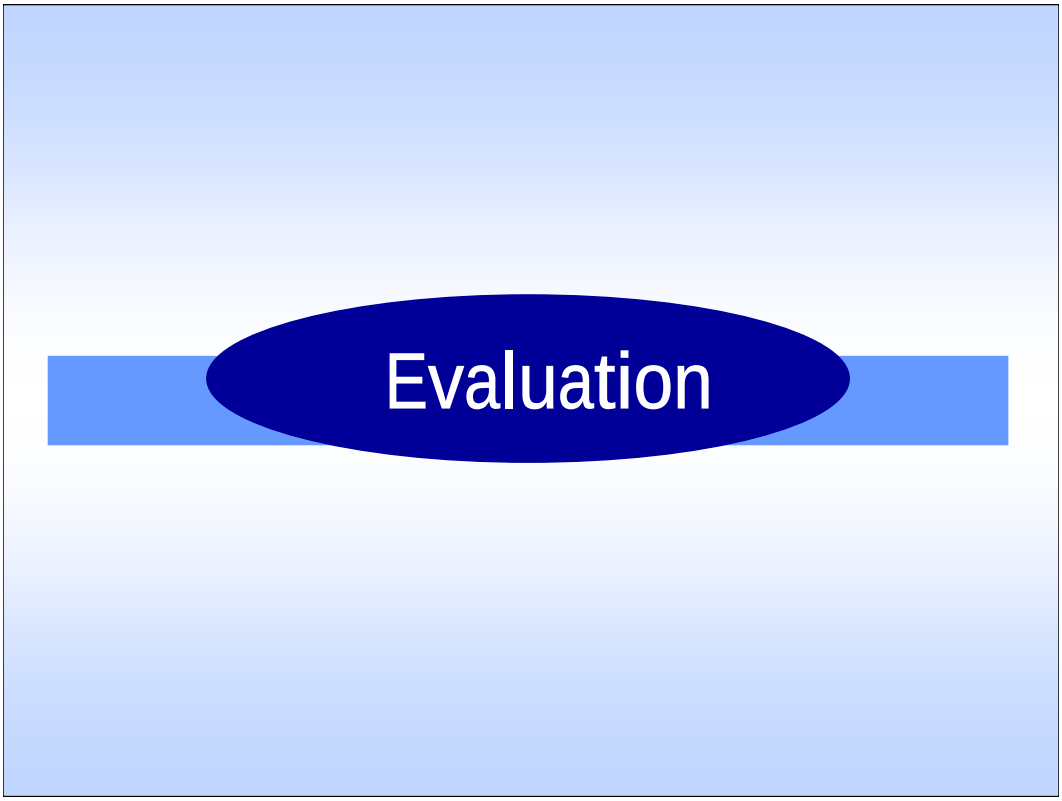
**Examples**

The San Francisco Health Department (SFHD) has sent letters to stakeholders informing them of the health impacts of a building project they are considering.

The SFHD has recently integrated results from HIA of land use plans on air quality noise and pedestrian collisions into the city's EIA for rezoning in four neighborhoods, leading to additional mitigations for known environmental exposure hazards.

Some of these examples can be found in Appendix A and B.

In many instances you may have to prepare PowerPoint presentations. Use the presentations that are included on your CD as starting points.




This module focuses on the last step in the HIA process, evaluation. Evaluation is often ignored or forgotten as the project draws to an end. However, without evaluation we cannot learn how to conduct HIAs better in the future nor can you determine the success of your HIA.

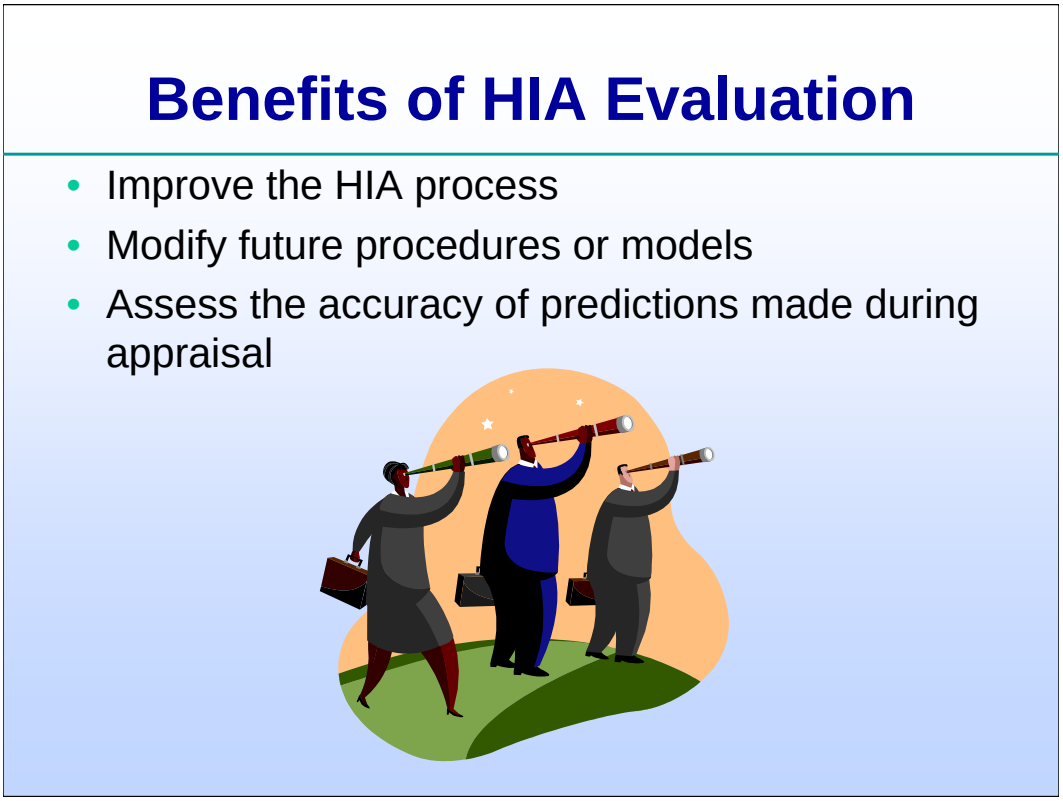
**Introduce the module by stating the goal.**

*To understand the value of conducting three different types of evaluations*

**Review the module objectives.**

The objectives for this evaluation module include:

•Define the three types of HIA evaluations
•Describe the benefits of each of each type evaluation (process, impact and outcome)
•Describe the problems associated with conducting these evaluations



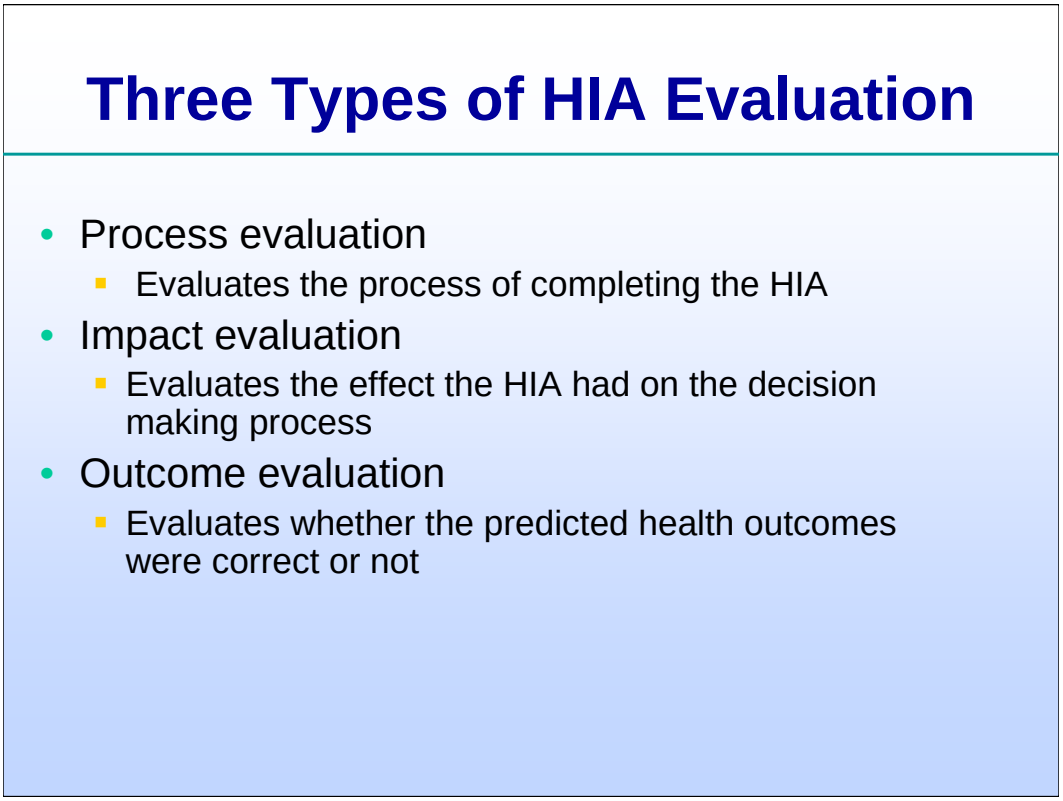

**Discuss the benefits of HIA evaluation.**

Evaluation can improve the HIA process by showing what changes can be made in future HIAs and how to modify current HIAs. In addition, the evaluation can provide feedback on successes and challenges and support practitioners in assessing whether the HIA met the standards the team set.

HIA evaluations can also support healthier public policy decisions and build better understanding of the value and worth of HIA. It can demonstrate how more health conscious decisions can be made as well as generate institutional commitment to additional HIAs.

Some of the things that we have learned from conducting HIAs include:

1) It's best to be in close geographic proximity to the project being examined
2) Outreach to all interested stakeholders and identifying the key decision makers are crucial to the success of the HIA
3) Quantitative models can quickly become outdated as new information is available especially in rapidly growing fields
4) HIA is a political process and there will likely be institutional constraints that will need to be identified and dealt with
5) While the gold standard, outcome evaluation is often only possible when the data is already being collected for the identified health outcomes
6) Timing of HIA recommendations is key in implementation




**Introduce the three types of HIA evaluation**

Evaluation is an important part of HIA as it helps refine the methods, approaches and techniques being used. Evaluation will provide information of value for both your HIA as well as provide helpful information to the wider HIA community. Evaluation provides information about improving practice and identifying how future HIAs could be fine-tuned and modified to increase their impact.

There are three types of HIA evaluations. These include:

*Process evaluation*

- *Evaluates the process of completing the HIA*

*Impact evaluation*

- *Evaluates the effect the HIA had on the decision making process*

*Outcome evaluation*

- *Evaluates whether the predicted health outcomes were correct or not*

## Process Evaluation Questions

- How was the HIA undertaken with regard to time, place and population?
- What resources were used and what was the cost?
- How were recommendations formulated and prioritized?
- How and when were the recommendations delivered to decision makers?
- What did those involved in the HIA think of the process?

**Review process evaluation questions.**

Process evaluation assesses how the HIA process was carried out, who was involved, and how smoothly the assessment proceeded.

Some questions a process evaluation will answer include:

- *How was the HIA undertaken with regard to time, place and population?*
- *What resources were used and what was the cost?*
- *How were recommendations formulated and prioritized?*
- *How and when were the recommendations delivered to decision makers?*
- *What did those involved in the HIA think of the process?*

# Impact Evaluation Questions

- Did the HIA provide useful information to the policy-making process?
- Was the HIA able to support inclusive public engagement?
- Did the HIA lead to changes to the design of the project or policy?

**Introduce impact evaluation and some of the questions it can address.**

Impact evaluation tracks whether the recommendations made in the HIA were implemented by the decision makers. It also asks the question, if the recommendations were not implemented, why not?

Here are some questions that the impact evaluation might ask:

•*Did the HIA provide useful information to the policy-making process?*

•*Was the HIA able to support inclusive public engagement?*

•*Did the HIA lead to changes to the design of the project or policy?*

*(continued on next slide)*

# Impact Evaluation Questions

- Did the HIA lead to unexpected changes on the policy or project?
- Has the HIA led to new partnerships, coalitions, or efforts to analyze or influence public policy on the basis of health?
- Has the HIA impacted changes in the way institutions frame and address health issues?



*(continued from previous slide)*

•*Did the HIA lead to unexpected changes on the policy or project?*

•*Has the HIA led to new partnerships, coalitions, or efforts to analyze or influence public policy on the basis of health?*

•*Has the HIA impacted changes in the way institutions frame and address health issues?*

**Ask:** Have any of you conducted or participated in an impact evaluation? Describe the benefits of that type of evaluation.

**Direct participants to the 'Impact Evaluation Questions for HIA' sheet in their Appendix A for more detailed questions.**

# Outcome Evaluation Questions

- Did the health impacts change in the direction predicted by the HIA?
- Did other health impacts materialize that the HIA did not consider?
- Were the predicted health impacts based on a different scenario than what actually happened? If so, how did this affect the predicted versus actual health impacts that were examined?

**Review the benefits and challenges of outcome evaluation.**

Outcome evaluation specifics the long term health impacts of a project or policy and thus takes a long time to complete.

It is similar to a pre and post evaluation/research design where you would determine if your projected health outcomes were correct.

This type of evaluation assesses whether the predicted health outcomes were correct or not. This type of evaluation is very expensive and takes a long time to complete because you have to collect baseline data, wait for the policy/program to be implemented or built and then collect outcome data. In addition, the final policy/project may be different than what was recommended in the HIA, therefore the estimates may no longer be valid. There are few HIA outcome evaluations available to us at this time.

One of the best outcome evaluations to date is the London Congestion Charging Policy. The London scheme requires drivers to pay 8 pounds per day if they wish to continue driving in central London during the scheme‘s hours of operation. This  has lead to a 26% reduction in congestion. They were able to do a thorough evaluation since the project was able to raise 122 million pounds that goes directly into improving the transit system and for evaluation.

http://www.tfl.gov.uk/assets/downloads/Fourth-Annual-Report-Overview.pdf

## Challenges of HIA Evaluation

- Providing the leadership to ensure that evaluation takes place
- Defining the beginning and end of the HIA
- Managing stakeholders who may reflect a variety of objectives and interests
- Allocating time and resources for the evaluation

**Describe the challenges of HIA evaluation.**

There are challenges to good HIA evaluation that you should be aware of as you conduct your HIA:

*Providing the leadership to ensure that evaluation takes place.*

*Defining the beginning and end of the HIA.* Setting limits for the evaluation also makes it more likely that it is completed in a timely manner.

*Managing stakeholders who may reflect a variety of objectives and interests.* Different stakeholders may reflect a variety of objectives and interests. Stakeholders may exert pressure to demonstrate particular benefits and achievements that ultimately set unrealistic objectives.

*Allocating time and resources for the evaluation.* Evaluation activities should be planned within the resources available.

# Next Steps for HIA

- Next steps – moving from research to practice
  - Methods to sort through bills/initiatives to find those for which HIA is most suitable
  - Standardizing and streamlining impact estimation
  - Training
  - Determine feasibility of different types of tools in various settings
- Adapting HIA to the unique policy-making environment of the U.S.

**Review the next steps for HIA**

*Next steps – moving from research to practice*

- *Methods to sort through bills/initiatives to find those for which HIA is most suitable*
- *Standardizing and streamlining impact estimation*
- *Training*
- *Determine feasibility of different types of tools in various settings*

*Adapting HIA to the unique policy-making environment of the U.S.*

# Summary

- HIA is a new and evolving science providing a promising new approach to quantify health impacts of a wide variety of policies and projects
- HIA provides an outlet for health to be appropriately factored into complex decisions

**Summarize**

- *HIA is a new and evolving science providing a promising new approach to quantify health impacts of a wide variety of policies and projects*
- *HIA provides an outlet for health to be appropriately factored into complex decisions*


CDC
SAFER · HEALTHIER · PEOPLE
Thank You
NACCHO
NATIONAL
ASSOCIATION OF
COUNTY & CITY
HEALTH OFFICIALS
UCLA
APA
American Planning Association
Making Great Communities Happen

.