

Unique to HIA: Assess & Judge Potential Health Impacts

Assessment findings used to:

- judge magnitude of health impacts or potential risk of health outcomes
- forecasting impacts
- often uses a mix of analytic methods
- often involves stakeholder engagement
- drafts recommendations to minimize negative outcomes and maximize positive outcomes

Unique to HIA: Characterizing Effects (How Affected?)

Characterizing Effects Categories (see page 62)

- Health Outcome or Health Determinant
- Likelihood
- Magnitude
- Distribution – Degree/Breadth
- Quality of Evidence
- Equity impacts

Weighting Evidence: Link strength of evidence

Emerging	Supported by case studies, public health principles, and theory	Citable expert opinions, case studies, grey literature, or conference proceedings
Moderate	Some observational studies or few experimental studies, mostly consistent results, or modest effect sizes	5 or more peer-reviewed studies with consistent findings
Strong	Many observational studies or some experimental studies, consistent results, or large effect sizes	Multiple (5+) empirical studies or literature reviews
Very Strong	Many observational or experimental studies, consistent results, large effect sizes	Multiple (10+) empirical studies or literature reviews of high-integrity experimental design

Note: in cases of weak, lacking, or contradictory evidence, we would not include a link in the pathway. Therefore, the lowest level of strength assumes an association.

“Drug Court Saved My Life” – HIA Led to Increased \$ For Treatment Alternatives and Diversion (TAD)

\$75 MILLION FOR WISCONSIN TAD PROGRAMS

Impact	TAD Program Effect	Projected Outcome
REDUCE COST	Decrease prison admissions	3,100 (nearly 40%) of the 8,000 prison admissions each year will be eligible for TAD programs
	Decrease jail admissions	21,000 (nearly 10%) of the 227,000 jail admissions each year will be eligible for TAD programs
	Decrease re-incarceration	Recidivism would be 12% - 16% lower for non-violent offenders in TAD programs
REDUCE CRIME	Decrease recidivism	20% fewer crimes would be committed by participants in TAD programs (1,100 fewer crimes over 5 years)
INCREASE RECOVERY	Improve access to treatment	All eligible offenders would have access to drug court treatment programs
	Improve efficacy of treatment	Drug court participants would have double the rate of recovery than those in minimal treatment
STRENGTHEN FAMILIES	Increase number of families that remain intact	Between 1,150 – 1,619 parents could stay out of prison and receive treatment
IMPROVE ECONOMIC OPPORTUNITY	Increase likelihood of employment	13% more non-violent offenders with substance abuse issues would be employed

Healthier Lives, Stronger Families, Safer Communities: How Increasing Funding for Alternatives to Prison Will Save Lives and Money in Wisconsin, 2012

Characterizing Health Effects – Example

Table 12: Summary Assessment of Expected Effects of Sleep Protections on Health

Health Outcome	Likelihood	Intensity / Severity	Who Impacted			Magnitude	Uncertainties related to limited evidence
			DW	CR	GP		
Mortality	▲▲▲	High	+			Small	Studies on health effects of sleep not specific to domestic work population
Chronic Disease & Obesity	▲▲	Mod	+			Small to Moderate	
Stress & Mental Health	▲▲	Mod	+	?		Small to Moderate	Limited information on current sleep patterns in affected population
Cognitive & Motor Performance	▲▲▲	Mod	+	+		Moderate	
Work Errors & Injuries	▲▲▲	High	+	+		Moderate	Baseline health status in affected domestic work population Data on utilization of protections
Traffic Accidents	▲▲▲	High	+	+	+	Uncertain	

Explanations:

- Likelihood refers to strength of research/evidence showing causal relationship between sleep and the health outcome: ▲ = limited evidence, ▲▲ = limited but consistent evidence, ▲▲▲ = causal relationship established. A causal effect means that the effect is likely to occur, irrespective of the magnitude or severity.
- Intensity/Severity reflects the nature of the effect its affects on function, life-expectancy and its permanence (High = very severe/intense, Mod = Moderate)
- Who impacted refers to which populations are impacted by the health outcomes associated with proposed sleep requirements. DW = Domestic Workers, CR = Care Recipient, GP = General Population.
- Magnitude reflects a qualitative judgment of the size of the anticipated change in the health effect (e.g. the increase in the number of cases of disease, injury, adverse events).

A HIA of CA Assembly Bill 889: The California Domestic Work Employee Equality, Fairness, and Dignity Act of 2011, SF Department of Public Health, 2011

Characterizing Health Effect: You Try

Proposal: Tax Food in New Mexico HIA

Current condition examples:

- 1 in 3 children and 1 in 5 adults already food insecure
- Low income families in NM spend a large share of their income on food (i.e. lowest 20% spend $\frac{1}{4}$ of income on food)
- The lowest 20% of NM folks (\$17k or below) pay 11% in state and local taxes, the top 1% (\$335k and up) pay 4.5% in state and local taxes

Impact finding example:

- If food was taxed at 6.8%, people who earn <\$10K would pay 3.9% of income to that tax, relative to 0.7% for people who earn >\$200K

Who is most impacted?

How likely is existing food insecurity to be affected by the food tax?

Your Expertise: Assessment

- What is familiar about this?
- What skills do you already use?
- What resources could you draw on for characterizing evidence?

Health Impact Assessment: Step 4 Recommendations

Preparing for Recommendations

- During Scoping and Assessment:
 - Identify what you can't answer, but is a large community concern
 - Identify issues that advisory committee is thinking creatively about
 - Identify issues that begin to show up, having a large health impact, + or -, or affect health equity

HIAs & Equity – Identify and Recommend How to Minimize Harm, Maximize Benefits

- Identify how the results connect to recommendations
- Work with stakeholders to prioritize recommendations, make that prioritization process clear to others
- Recommend practical ways to minimize harm
- Recommend practical methods to maximize benefits

Stages of HIA: Recommendations

Purpose: Suggest alternatives that could be implemented to improve health or minimize harm (e.g. manage health effects)

Minimize Harm	Actions intended to mitigate adverse health impacts identified during assessment
Maximize Health	Actions intended to improve health by amending or complementing the proposal under question
Adoption	Actions for the decision-makers regarding whether or not to adopt one of the proposed scenarios
Implementation	Actions for good implementation, or other organizations to support

Good Recommendations Are..

1. Responsive to predicted impacts
2. Specific and actionable
3. Experience-based and effective
4. Technically feasible- with outside expert help
5. Politically feasible
6. Unaccompanied by additional negative consequences
7. Enforceable
8. Able to be monitored
9. Cost-effective
10. Implementable within the regulatory, administrative, or legislative framework of the proposal being considered



Recommendations to Minimize Harm Example



Figure 1: A map of the Jack London Gateway site (from Google Maps).

Jack London Gateway
Senior Housing in CA

HIA recommended new standards to improve ventilation and a change in location of HVAC in the new development with the developer.

Standards Were Used.

Recommendation to Maximize Health Determinant Benefits

The Potential Health Impact of a Poultry Litter-to-Energy Facility in the Shenandoah Valley, Virginia, VCU Center on Human Needs, 2013

- **Employment:** The facility would result in an increase in the number of jobs available for its facility operations and production of phosphorus fertilizer. *A committee of local residents and stakeholders should be created to provide input on strategies to increase local hiring. This group should include representatives from the local Chamber of Commerce and Shenandoah Valley Partnership....*

Recommendation - Adoption Example

Definition: Adoption	Actions for the decision-makers regarding whether or not to adopt an element, or all of, a proposal.
Example Finding from Benton County Roundabout Report	Research shows that there are 20-30% less toxic emissions and 20-30% less greenhouse gases at roundabouts in comparison to traditional signalized intersections. Reducing air pollution levels can help reduce the burden of disease, since as chronic exposure to airborne particles contributes to the risk of developing cardiovascular and respiratory diseases, as well as lung cancer. Poor individual, children, the elderly, and some racial and ethnic groups tend to carry more of the burden when facing higher exposure to pollutants.
Adoption Example	We recommend a single-lane roundabout be installed at the intersection of 53 rd and West Hills Rd

Recommendation to Implement Example

Definition: Implementation	Actions for the decision-makers to implement additional elements identified in the assessment connected to a proposal.
Example Finding from HIA of City or Portland's Rental Housing Inspections Program	Independent of building characteristics and management practices, the literature and stakeholder input indicates tenant behaviors can limit or degrade the ability of housing to support health. Examples include: tobacco smoke, toxic cleaning chemicals, and pesticides; property damage; failing to use appliances such as ventilation systems properly; and not reporting maintenance issues in a timely manner.
Implementation Example	Implement the tenant/landlord education strategies developed by the Quality Rental Housing Workgroup.



You Try: Name That Recommendation Type

Case Study	HIA on proposed restrictions in the funding for the Massachusetts rental-voucher program for low income residents.
Example	HIA team found that the funding restrictions could be harmful to health and recommended against adopting them.

You Try: Name That Recommendation Type

Case Study	HIA of a rezoning from industrial to residential use in San Francisco adding 30,000 households identified “health-related noise and air-quality issues for the proposed residential units.”
Example	HIA recommended new standards for ventilation in the new development.

You Try: Name That Recommendation Type

Case Study	State Route 520 HIA
Example	HIA recommended during construction period to reduce construction related pollution, increase traffic management & provide for construction noise control.

You Try: Name that Recommendation

Case Study

State Route 520 HIA

Example

HIA recommended for Transit, Bicycling and Walking:

1. Increase and improve transit
2. Install connected walking & bicycling
3. Create a common wayfinding system
4. Provide safe mobility

Brain Break

1. Stand up
2. Start by waving your right hand in front of you left to right. Your palm should be facing away from you while keeping your hand with your fingers pointing up.
3. Now stop that hand and have your left hand in front you waving it up and down
4. Now practice moving them **AT THE SAME TIME**. Do not move your hands diagonally
5. Now switch to have your right hand up and down and your left hand left and right. Do this faster and switch often to make it difficult.