

EnvH 536: Health Impact Assessment

Dept. of Environmental and Occupational Health Sciences, UW School of Public Health

UrbDP 536: Health Impact Assessment

Dept. of Urban Design and Planning, UW College of Built Environments

EnvH 536 and UrbDP 536 are taught concurrently. 2 credits.

3rd credit available for student(s) who volunteer to edit and integrate final class project HIA report into form suitable for submission to external project stakeholders/decision-makers.

Instructor

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Course collaborators

Edmund Seto, PhD, MS, Associate Professor, Dept. of Environmental and Occupational Health Sciences, UW School of Public Health, eseto@uw.edu

Chris Saleeba, PLA, MPH, Design Associate, Alta Planning + Design, Seattle, chrissaleeba@altaplanning.com

Fritz Wagner, PhD, Dean Emeritus, University of New Orleans College of Urban and Public Affairs; Research Professor, Dept. of Urban Design and Planning, UW College of Built Environments; Managing Director, Northwest Center for Livable Communities, fwagner@uw.edu

Class sessions: Spring Quarter, Thursdays, 5:00-6:50pm, March 31 – June 2, 2016

Location: Gould Hall, Room 435, University of Washington

Course Description

Health impact assessment (HIA) is a process used to inform decision-makers about the potential health impacts of proposed projects, plans, programs, and policies that do not traditionally focus on health outcomes (e.g. transportation, education, housing), but are likely to affect the public's health (<http://www.cdc.gov/healthyplaces/hia.htm>). HIAs are commonly used in Europe, Australia, and elsewhere. Over the past decade, HIA practice has grown rapidly in the United States. This course is appropriate for students interested in evaluating the links between community design and public health and applying this evidence to inform decision-making for new policies and plans. In the course, students consider the rationale for conducting HIAs, learn the steps to conduct an HIA, review national and international case studies, and discuss how HIA findings may impact decision-making. Then students conduct a detailed HIA of the health aspects of a currently proposed project or plan. For Spring Quarter 2016, this project will be an HIA of a plan to revitalize and redevelop the main street corridor (Commercial Avenue) in Anacortes WA, with assistance for obtaining project information from Chris Saleeba from Alta Planning and Design. During the course, students will participate in a field visit to Anacortes to help them visualize the issues involved in the plan.

Prerequisites: Prior classes and/or experience in health and built environment, health policy, and urban planning issues are helpful but not required.

Course Learning Objectives

At the conclusion of the course, students should be able to:

- Describe the purpose, benefits, and challenges of using health impact assessments to convey information about health to decision-makers
- Describe the core steps used to conduct HIAs including screening, scoping, assessment, making recommendations, reporting, and monitoring and evaluation
- Summarize the similarities and differences in using HIA as an approach separate from Environmental Impact Assessments
- Collaborate effectively with others in completing an HIA in an interdisciplinary environment
- Explain the application of HIAs to the policymaking process

Student Evaluation

- Class participation including discussion of ideas from required readings - 15%
- Contribution to HIA conducted as class project - 50%
- Three to five page paper and presentation analyzing an existing completed HIA - 35%

Access and Accommodations

Your experience in this class is important to us, and it is the policy and practice of the University of Washington to create inclusive and accessible learning environments consistent with federal and state law. If you experience barriers based on a disability or temporary health condition, please seek a meeting with Disability Resources for Students (DRS) to discuss and address them. If you have already established accommodations with DRS, please communicate your approved accommodations to your instructor so we can discuss your needs in this course. DRS offers resources and coordinates reasonable accommodations for students with disabilities and/or temporary health conditions. Reasonable accommodations are established through an interactive process between you, your instructors, and DRS. If you have not yet established services through DRS, but have a temporary health condition or permanent disability that requires accommodations (this can include but not limited to; mental health, attention-related, learning, vision, hearing, physical or health impacts), you are welcome to contact DRS at 206-543-8924 or uwdrs@uw.edu or <http://depts.washington.edu/uwdrs/>.

Academic Integrity

Students at UW are expected to maintain the highest standards of academic conduct, professional honesty, and personal integrity. UW is committed to upholding standards of academic integrity consistent with the academic and professional communities of which it is a part. Plagiarism, cheating, and other misconduct are serious violations of the UW Student Conduct Code (WAC 478-120). We expect you to know and follow the university's policies on cheating and plagiarism, and the [SPH Academic Integrity Policy](#). Any suspected cases of academic misconduct will be handled according to UW regulations. For more information, see the UW Community Standards and Student Conduct website <http://www.washington.edu/cssc/>.

Readings

Readings are available online and/or on Canvas Share Space. **For each class there are 1 or 2 REQUIRED readings and several optional readings. It is expected that, in addition to the required readings, you will read at least the abstract or executive summary of each of the optional articles and HIA reports listed.** Excellent performance involves reading completely at least half of all articles listed and contributing ideas from these readings to the class discussions.

Class schedule

March 31: Introduction to course and introduction to HIA: Andrew Dannenberg

Readings

- **REQUIRED:** Dannenberg AL, Wernham A. Health impact assessment in the USA. Chapter 23 in: John Kemm, Editor. *Health Impact Assessment: Past Achievement, Current Understanding, and Future Progress*. Oxford UK: Oxford University Press, 2013.

Additional readings for those with little knowledge in healthy community design:

- Malizia EE. City and regional planning: a primer for public health officials. *American Journal of Health Promotion*. 2005; 19(5S):1–13.
- Frumkin H, Wendel A, Abrams R, Malizia E. Introduction to healthy places. Chapter 1 in Dannenberg AL, Frumkin H, Jackson RJ, editors. *Making Healthy Places: Designing and Building for Health, Well-being and Sustainability*. Island Press, 2011 (www.makinghealthyplaces.com). Chapter 1 available on Canvas Share Space. Book is on reserve in CBE Library.

April 7: Introduction to Anacortes Corridor Plan for class HIA project: Chris Saleeba, Alta Planning and Design; HIA screening step: Andrew Dannenberg

Readings:

- **REQUIRED:** HIA Toolkit, pages 31-38, Chapter 3 (Screening) <http://www.humanimpact.org/component/jdownloads/finish/11/81>
- **REQUIRED:** UW Spring 2015 HIA class project on Delridge Corridor Transportation Plan: http://www.seattle.gov/transportation/docs/DelridgeCorridorHIA_FinalReport_8June2015.pdf
- State Route 520 bridge replacement HIA report: <http://www.kingcounty.gov/healthservices/health/ehs/hia.aspx>
- Humboldt County (CA) General Plan HIA: <http://www.healthimpactproject.org/hia/us/humboldt-county-general-plan-update>
- UW Spring 2011 HIA class project on King Street Multi-modal Hub for Seattle Department of Transportation: <http://www.seattle.gov/transportation/docs/KingStreetStationMultimodalHubHIA.pdf>
- UW Spring 2012 HIA class project on Duwamish River Superfund Cleanup: <http://deohs.washington.edu/sites/default/files/2012-07-25-Duwamish-HIA-Report.pdf>
- UW Spring 2013 HIA class project on Tacoma South Downtown Subarea Plan: [http://cms.cityoftacoma.org/planning/Dome-Brewery%20Subarea/HIA_SouthDowntown_Tacoma_Low%20\(6-10-13\).pdf](http://cms.cityoftacoma.org/planning/Dome-Brewery%20Subarea/HIA_SouthDowntown_Tacoma_Low%20(6-10-13).pdf)
- UW Spring 2014 HIA class project on Pioneer Square Plan: http://allianceforpioneersquare.org/wp/wp-content/uploads/2014/07/Pioneer_Square_HIA_final_16June2014.pdf

April 14: Scoping step of HIA: Edmund Seto
Interactive session: Scoping phase for Anacortes Corridor HIA

Readings:

- **REQUIRED:** HIA Toolkit, pages 39-48, Chapter 4 (Scoping) <http://www.humanimpact.org/component/jdownloads/finish/11/81>
- **REQUIRED:** Bhatia R, Farhang L, Heller J, Lee M, Orenstein M, Richardson M, Wernham A. *Minimum elements and practice standards for health impact assessment*, Version 3. September 2014. <http://hiasociety.org/wp-content/uploads/2013/11/HIA-Practice-Standards-September-2014.pdf>
- World Health Organization Regional Office for Europe. Gothenburg Consensus Paper. *Health impact assessment: main concepts and suggested approach*. Brussels, 1999. <http://www.apho.org.uk/resource/item.aspx?RID=44163>

- Tamburrini A, Gilhuly K, Harris-Roxas B. Enhancing benefits in health impact assessment through stakeholder consultation. *Impact Assessment and Project Appraisal* 2011; 29(3):195-204.
<http://www.tandfonline.com/doi/abs/10.3152/146155111X12959673796281>
 - Bhatia R. *Health impact assessment: a guide for practice*. Human Impact Partners, 2011. <http://www.humanimpact.org/downloads/hia-guide-for-practice/> (skim this 89-page HIA reference guide now and use it later in course as needed).
- Student teams to be formed to be responsible for sections of final Anacortes Corridor HIA report, due June 2. Volunteers are sought to integrate and edit the final HIA document, including writing the introduction and conclusions. An extra credit hour is available for this role.**

April 21: Student presentations (½ of class): Analysis of selected completed HIAs
HIA Assessment step: Andrew Dannenberg

Readings:

- **REQUIRED:** James P, Ito K, Buonocore JJ, Levy JI, Arcaya MC. A health impact assessment of proposed public transportation service cuts and fare increases in Boston MA. *International Journal of Environmental Research and Public Health*. 2014;11:8010-8024; <http://www.mdpi.com/1660-4601/11/8/8010>
- Bhatia R, Seto E. Quantitative estimation in Health Impact Assessment: Opportunities and challenges. *Environmental Impact Assessment Review* 2011; 31:301-309.
- Forsyth A, Slotterback CS, Krizek KJ. Health impact assessment in planning: Development of the design for health HIA tools. *Environmental Impact Assessment Review*. 2010; 30: 42–51.
- Dannenberg AL, Ricklin A, Ross CL, Schwartz M, West J, White S, Wier ML. Use of health impact assessment for transportation planning: importance of transportation agency involvement in the process. *Transportation Research Record*. 2014; 2452:71-80.
- Paid sick leave HIA:
<http://www.humanimpact.org/component/jdownloads/finish/5/72>

April 28: Student presentations (½ of class): Analysis of selected completed HIAs
Interactive session: Assessment phase of Anacortes Corridor HIA

Readings:

- **REQUIRED:** HIA Toolkit, pages 49-72, Chapter 5 (Assessment)
<http://www.humanimpact.org/component/jdownloads/finish/11/81>
- **REQUIRED:** Gase LN, Pennotti R, Smith KD. "Health in All Policies": taking stock of emerging practices to incorporate health in decision making in the United States. *Journal of Public Health Management and Practice*. 2013; 19(6):529-540.
- Cole BL, Shimkhada R, Morgenstern H, Kominski G, Fielding JE, Wu S. Projected health impact of the Los Angeles City living wage ordinance. *Journal of Epidemiology and Community Health*. 2005; 59(8):645-650.
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1733099/pdf/v059p00645.pdf>
- Johnson-Thornton RL, Greiner A, Fichtenberg CM, Feingold BJ, Ellen JM, Jennings JM. Achieving a healthy zoning policy in Baltimore: results of a health impact assessment of the TransForm Baltimore zoning code rewrite. *Public Health Reports*. 2013; 128(suppl 3):87-103.
<http://www.publichealthreports.org/issueopen.cfm?articleID=3056>
- Richardson MJ, English P, Rudolph L. A health impact assessment of California's proposed cap-and-trade regulations. *American Journal of Public Health*. 2012; 102(9):e52-e58.

PAPER DUE: ANALYSIS OF AN EXISTING COMPLETED HIA

May 5: Field visit to Anacortes. Guided by Eric Schjarback, Anacortes City Engineer, and Chris Saleeba, Alta Planning + Design; depart Seattle 1:00pm, return 7:00pm

Readings:

- **REQUIRED:** Bhatia R, Wernham A. Integrating human health into environmental impact assessment: An unrealized opportunity for environmental health and justice. *Environmental Health Perspectives*. 2008; 116(8):991-1000. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2516559/pdf/ehp0116-000991.pdf>
- Council on Environmental Quality. A Citizen's Guide to the National Environmental Policy Act (NEPA). 2007. https://ceq.doe.gov/nepa/Citizens_Guide_Dec07.pdf
- Heller J, Givens ML, Yuen TK, Gould S, Jandu MB, Bourcier E, Choi T. Advancing efforts to achieve health equity: equity metrics for health impact assessment practice. *International Journal of Environmental Research and Public Health*. 2014; 11(11):11054-11064. <http://www.mdpi.com/1660-4601/11/11/11054>
- Witter RZ, McKenzie L, Stinson KE, Scott K, Newman LS, Adgate J. The use of health impact assessment for a community undergoing natural gas development. *American Journal of Public Health*. 2013; 103(6):1002-1010.
- Mindell J, Biddulph J, Taylor L, Lock K, Boaz A, Joffe M, Curtis S. Improving the use of evidence in health impact assessment. *Bulletin of the World Health Organization*. 2010; 88(7):543-550. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2897984/pdf/BLT.09.068510.pdf>

May 12: HIA recommendations step: Andrew Dannenberg

Interactive session: Recommendations phase for Anacortes Corridor HIA

Readings:

- **REQUIRED:** HIA Toolkit, pages 73-75, Chapter 6 (Recommendations) <http://www.humanimpact.org/component/jdownloads/finish/11/81>
- **REQUIRED:** Ross CL, Leone de Nie K, Dannenberg AL, Beck LF, Marcus MJ, Barringer J. Health impact assessment of the Atlanta BeltLine. *American Journal of Preventive Medicine*. 2012; 42(3):203-213. **See especially Table 2.**
- Gottlieb LM, Fielding JE, Braveman PA. Health impact assessment: necessary but not sufficient for healthy public policy. *Public Health Reports*. 2012; 127(2):156-162. <http://www.publichealthreports.org/issueopen.cfm?articleID=2819>
- Bhatia R, Corburn J. Lessons from San Francisco: health impact assessments have advanced political conditions for improving population health. *Health Affairs (Millwood)*. 2011; 30(12):2410-2418. <http://content.healthaffairs.org/content/30/12/2410.full.pdf+html>
- Mindell J, Bowen C, Herriot N, Findlay G, Atkinson S. Institutionalizing health impact assessment in London as a public health tool for increasing synergy between policies in other areas. *Public Health* 2010; 124:107-114.

May 19: HIA reporting step: Andrew Dannenberg

Interactive session: Reporting phase for Anacortes Corridor HIA

Readings:

- **REQUIRED:** HIA Toolkit, pages 76-84, Chapter 7 (Reporting) <http://www.humanimpact.org/component/jdownloads/finish/11/81>
- **REQUIRED:** SOPHIA Equity Workgroup. Communicating about equity in health impact assessment: a guide for practitioners. 2016. http://hiasociety.org/wp-content/uploads/2013/11/Communicating_Equity_in_HIA_Final.pdf
- National Research Council. Chapter 4: Current issues and challenges in the development and practice of HIA. **Pages 90-118** in: National Research Council. *Improving health in the United States: the role of health impact assessment*. Washington, DC: National Academies Press; 2011. http://www.nap.edu/catalog.php?record_id=13229

- Home energy assistance and child health HIA:
<http://www.hiaguide.org/sites/default/files/ChildHIAofenergycostsandchildhealth.pdf>
- Hoehner CM, Rios J, Garmendia C, Baldwin S, Kelly CM, Knights DM, et al. Page Avenue health impact assessment: building on diverse partnerships and evidence to promote a healthy community. *Health and Place*. 2012; 18(1):85-95.

FIRST DRAFT OF INDIVIDUAL HIA CHAPTERS DUE

May 26: Monitoring and evaluation of HIAs – Andrew Dannenberg
Interactive session: Monitoring and evaluation phases for Anacortes Corridor HIA
Readings:

- **REQUIRED:** HIA Toolkit, pages 85-98, Chapters 8 and 9 (Monitoring and Evaluation) <http://www.humanimpact.org/component/jdownloads/finish/11/81>
- **REQUIRED:** Bourcier E, Charbonneau D, Cahill C, Dannenberg AL. An evaluation of health impact assessments in the United States, 2011–2014. *Preventing Chronic Disease*. 2015; 12:140376.
<http://dx.doi.org/10.5888/pcd12.140376>
- Evaluation of Health Impact Assessment: Clark County Bicycle and Pedestrian Master Plan. 2011. http://bikeportland.org/wp-content/uploads/2011/12/HIA_BPplan-copy.pdf
- Wismar M, Blau J, Ernst K, Figueras J. *The effectiveness of health impact assessment: Scope and limitations of supporting decision-making in Europe*. Brussels: European Observatory on Health Systems and Policies, 2007. Book pages xix-xxvii and 3-33 (PDF pages 20-62).
http://www.euro.who.int/_data/assets/pdf_file/0003/98283/E90794.pdf
- Mathias KR, Harris-Roxas B. Process and impact evaluation of the Greater Christchurch Urban Development Strategy Health Impact Assessment. *BMC Public Health*. 2009; 9:97.
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2670296/pdf/1471-2458-9-97.pdf>

SECOND DRAFT OF INDIVIDUAL HIA CHAPTERS DUE

FIRST DRAFT OF INTEGRATED FULL HIA REPORT DUE

June 2: Student presentations to stakeholders: Anacortes Corridor HIA report
Readings:

- **REQUIRED:** Harris-Roxas B, Vilianni F, Bond A, Cave B, Divall M, Furu P, Harris P, Soeberg M, Wernham A, Winkler M. Health impact assessment: the state of the art. *Impact Assessment and Project Appraisal*, 2012; 30:1, 43-52
<http://www.tandfonline.com/doi/pdf/10.1080/14615517.2012.666035>
- Wernham A. Health impact assessments are needed in decision making about environmental and land-use policy. *Health Affairs (Millwood)*. 2011;30(5):947-956.

SEMI-FINAL DRAFT OF ANACORTES CORRIDOR HIA REPORT DUE

June 7 (Tuesday): Due date for Anacortes Corridor HIA integrated final report, ready for submission to external stakeholders. Students completing report integration and editing will receive 3rd credit hour for course.

CLASS ACTIVITIES/REQUIREMENTS

- 1. Required paper** (submit to Canvas): 3 to 5 page single-spaced paper reviewing and critiquing an existing completed HIA, including
 - description of project/policy,
 - HIA quantitative and qualitative methods used,
 - major findings,
 - major recommendations,
 - strengths and weaknesses of this HIA, and
 - impact of HIA on subsequent decisions if available.

Choose your HIA for review from one of the following overlapping sources:

- a. List of 18 exemplary HIAs selected by SOPHIA – see below.
- b. List of ~380 HIAs completed in the US: Go to <http://www.healthimpactproject.org/hia/us>, use the “List View” tab (not “Map View”) and check the box for “Completed HIAs”. On this website, you can select an HIA by location or by sector such as agriculture and food, built environment, climate change, economic policy, education, gambling, housing, labor and employment, natural resources and energy, physical activity, transportation, and water. Some HIAs listed may contain too little or too much information to be useful for review purposes.

DUE DATE: April 28

2. Student presentations of their analyses of existing completed HIAs:

On **April 21** (½ of students) and **April 28** (other ½ of students) **in class**, students will present and discuss the HIA they reviewed for their written paper. Presentations will be 5 minutes per student plus 3 minutes for questions and discussion. Those who present on April 21 may have until April 28 to submit their written paper to Canvas.

3. Class report with contributions by all students: HIA of Anacortes Corridor

On **June 2 in class**, a spokesperson for each of the 4-5 small groups of students will present for about 10 minutes the details of the portion of the Anacortes Corridor HIA for which they took primary responsibility, followed by class discussion of the issues presented. A student editor/synthesizer will open and close the student presentations. Anacortes Corridor stakeholders will be present and will provide feedback.

4. Field trip to Anacortes Corridor – May 5. Depart Seattle 1:00pm, return 7:00pm. Photos taken by students during field trip will be used in final HIA report. Participation strongly encouraged. Alternate option will be to do a self-guided tour of site and write a brief report on observations.

Examples of exemplary HIAs based on reviews by SOPHIA, available at

http://hiasociety.org/?page_id=57

- Healthy Neighborhood Equity Fund HIA, 2013, Roxbury, MA; Community development
- Full-service grocery store development in a food desert HIA, 2013, Indianapolis; Food & nutrition
- US Equal Employment Opportunity Commission policy guidance HIA, 2013; Criminal justice
- San Francisco Bay Area's regional transportation plan HIA, 2013; Transportation
- Baltimore-Washington rail intermodal facility HIA, 2013; Transportation
- Rental assistance demonstration project HIA, 2012, U.S.; Housing
- Hawaii County agriculture development plan HIA, 2012; Agriculture
- Madison (WI) alcohol license density ordinance HIA, 2014; Government policy
- Preesall underground gas storage facility, Lancashire (UK) HIA, 2011; Industrial facility
- Baltimore comprehensive zoning code rewrite HIA, 2010; Urban development
- Christchurch urban development strategy options HIA, 2006, New Zealand; Urban development
- Page Avenue HIA, 2010, St. Louis; Urban redevelopment
- HIA of mining activities near Keno City, Yukon, Canada, 2012; Resource development
- Poultry litter-to-energy facility in the Shenandoah Valley (VA) HIA, 2013; Resource development
- California Domestic Work Employee Equality and Fairness Act of 2011 HIA; Government policy
- Oregon HB 2800 farm-to-school and school garden policy HIA, 2011; Government policy
- Potential health effects of casino development in southeast Kansas, 2012; Government plan
- Health effects of road pricing in San Francisco, 2011; Municipal plan

Other resources available

Books

- National Research Council of the National Academies. *Improving health in the United States: The role of health impact assessment*. Washington, DC: National Academies Press, 2011. Available free online at http://www.nap.edu/catalog.php?record_id=13229.
- Birley M. *Health impact assessment: Principles and practice*. London: EarthScan/Taylor and Francis, 2011. See <http://www.routledge.com/books/details/9781849712774/>
- Kemm JR, editor. *Health impact assessment: Past achievement, current understanding, and future progress*. Oxford: Oxford University Press, 2012. See http://www.amazon.com/dp/0199656010/ref=rdr_ext_tmb
- O'Mullane M, editor. *Integrating health impact assessment with the policy process: Lessons and experiences from around the world*. Oxford: Oxford University Press, 2013. See <http://ukcatalogue.oup.com/product/9780199639960.do>.
- Ross CL, Orenstein M, Botchwey N. *Health impact assessment in the United States*. New York: Springer, 2014. See <http://www.springer.com/medicine/book/978-1-4614-7302-2?otherVersion=978-1-4614-7303-9>
- Wismar M, Blau J, Ernst K, Figueras J. *The effectiveness of health impact assessment: Scope and limitations of supporting decision-making in Europe*. Brussels: European Observatory on Health Systems and Policies, 2007. Available free at: http://www.euro.who.int/_data/assets/pdf_file/0003/98283/E90794.pdf

Websites for more information about HIA

- Pew Charitable Trusts Health Impact Project: www.healthimpactproject.org
- Human Impact Partners, Oakland CA: www.humanimpact.org
- Centers for Disease Control and Prevention: www.cdc.gov/healthyplaces/hia.htm
- UCLA HIA Clearinghouse: www.hiaguide.org
- American Planning Association: Online introductory HIA course available free at <http://advance.captus.com/Planning/hia2/home.aspx>
- HIA Gateway, Association of Public Health Observatories (UK): http://www.apho.org.uk/default.aspx?QN=P_HIA
- World Health Organization: <http://www.who.int/hia/en/>

List of HIA publications with US authors, 1999-2016

http://www.cdc.gov/healthyplaces/docs/hiaarticles_usauthors_29february2016.pdf

Selected guides to conducting HIAs

Review of all guides to conducting HIAs: Hebert KA, Wendel AM, Kennedy SK, Dannenberg AL. Health impact assessment: a comparison of 45 local, national, and international guidelines. *Environmental Impact Assessment Review*. 2012; 34:74-82. Available on Canvas.

Bhatia R. *Health impact assessment: a guide for practice*. Human Impact Partners, 2011. <http://www.humanimpact.org/downloads/hia-guide-for-practice/>

Human Impact Partners. *A health impact assessment toolkit: a handbook to conducting HIA*. 3rd edition. 2011. <http://www.humanimpact.org/downloads/hia-toolkit-2011/>

International Health Impact Assessment Consortium, Liverpool, UK. *The Merseyside guidelines for health impact assessment*. 2001. <http://www.apho.org.uk/resource/item.aspx?RID=44256>

International Health Impact Assessment Consortium, Liverpool, UK. *European policy health impact assessment: a guide*. 2004. <http://www.apho.org.uk/resource/item.aspx?RID=44882>

University of Birmingham, Department of Public Health and Epidemiology. *A training manual for health impact assessment*. 2003. www.apho.org.uk/resource/item.aspx?RID=44927

University of Minnesota, Design for Health. *Rapid health impact assessment toolkit*. 2008. http://designforhealth.net/wp-content/uploads/2012/12/BCBS_Rapidassessment_011608.pdf