

**Spring Quarter 2012**

**EnvH 590-D: Health Impact Assessment**

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

**URBDP 598-Q: Health Impact Assessment**

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

EnvH 590-D and URBDP 598-Q are taught concurrently. 2 credits.

3<sup>rd</sup> 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.

Instructors

**Andrew L. Dannenberg, MD, MPH**

Affiliate Professor, Dept. of Environmental and Occupational Health Sciences, School of Public Health, and Dept. of Urban Design and Planning, College of the Built Environments, University of Washington

Consultant and former Team Lead, Healthy Community Design Initiative, National Center for Environmental Health, Centers for Disease Control and Prevention

Email [adannen@uw.edu](mailto:adannen@uw.edu); phone 404-272-3978 (cell)

**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 the Built Environments

Managing Director, Northwest Center for Livable Communities, [fwagner@uw.edu](mailto:fwagner@uw.edu)

Course collaborators

Barbara Wright, formerly with Seattle-King County Public Health Department, [barbarawright100@msn.com](mailto:barbarawright100@msn.com)

Bill Daniell, MD, MPH, Associate Professor, Dept. of Environmental and Occupational Health Sciences, UW School of Public Health, [bdaniell@uw.edu](mailto:bdaniell@uw.edu)

BJ Cummings, MA, Duwamish River Cleanup Coalition/Technical Advisory Group

Linn Gould, MS, MPH, Just Health Action

Class sessions: Spring Quarter, Wednesdays 5:00-6:50pm, March 28-May 30, 2012

Location: Gould Hall Room 440, University of Washington

Course Description

Health impact assessment (HIA) is a public health tool used to inform decision-makers about the potential health impacts of proposed projects, 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. While HIAs are commonly used in Europe, Canada, Australia, New Zealand, and elsewhere, HIAs are a new and emerging practice in the United States

(<http://www.cdc.gov/healthyplaces/hia.htm>). This course is particularly appropriate for students interested in the links between public health and community design. In the course, students will first consider the rationale for conducting HIAs, learn the necessary steps to conduct an HIA, review national and international case studies, and discuss how HIA findings may impact decision making. Then students will work to conduct a detailed HIA of the health aspects of a current proposed project. For Spring Quarter 2012, this project will be an HIA of the Lower Duwamish Waterway cleanup plan, with assistance for obtaining project information from Dr. Bill

Daniell and Duwamish stakeholders. During the course, students will participate in a field visit to the Duwamish cleanup site.

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 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 - 30%
- Contribution to HIA conducted as class project - 40%
- Three to five page paper and presentation analyzing an existing completed HIA - 30%

### Accommodations

Students with disabilities are welcome to request academic accommodations. To request academic accommodations due to a disability, please contact Disability Resources for Students, 448 Schmitz Hall, 206-543-8924 (V/TTY). If you have a letter from Disability Resources for Students indicating that you have a disability which requires academic accommodations, please present the letter to the instructor (Andrew Dannenberg or Fritz Wagner) so we can discuss the accommodations you might need in class.

### **Class schedule**

Readings are available online and/or on Catalyst Share Space.

- March 28:** A. Introduction to course; Introduction to HIA: Andrew Dannenberg  
B. Introduction to Duwamish Waterway Cleanup Project for class HIA: Bill Daniell

#### Readings

- Details about Duwamish Cleanup Project available at
  1. EPA website: <http://yosemite.epa.gov/r10/cleanup.nsf/sites/lduwamish>
  2. Duwamish River Superfund Cleanup Health Impact Assessment Screening Summary February, 2012 (6 pages)
  3. Draft final feasibility study. [http://www.ldwg.org/assets/fs/final\\_2010-10-15/LDWG\\_FS\\_ExecutiveSummary\\_Final\\_101510.pdf](http://www.ldwg.org/assets/fs/final_2010-10-15/LDWG_FS_ExecutiveSummary_Final_101510.pdf) (43 pages)
- UW Spring 2011 HIA class project on King Street Multi-modal Hub for Seattle Department of Transportation is available at <http://www.seattle.gov/transportation/docs/KingStreetStationMultimodalHubHIA.pdf>

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

- 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.org](http://www.makinghealthyplaces.org)). Chapter 1 available on Catalyst Share Space. Book is on reserve in CBE Library.

**April 4:** Reflections on completed HIAs: Barbara Wright, Julia Walton

Readings:

- Gottlieb LM, Fielding JE, Braveman PA. Health impact assessment: necessary but not sufficient for healthy public policy. *Public Health Reports*. 2012; 127:156-162.
- Dannenberg AL, Bhatia R, Cole BL, Heaton SK, Feldman JD, Rutt CD. Use of health impact assessment in the U.S.: 27 case studies, 1999-2007. *American Journal of Preventive Medicine*. 2008; 34(3):241-256.
- State Route 520 HIA report: <http://www.kingcounty.gov/healthservices/health/ehs/hia.aspx>
- Paid sick leave HIA: <http://www.humanimpact.org/component/jdownloads/finish/5/72>
- Humboldt County CA General Plan HIA: <http://www.humanimpact.org/component/jdownloads/finish/4/58>

**April 11:** Interactive session: Scoping phase for Duwamish project HIA

Readings:

- HIA Toolkit, pages 31-48, Chapters 3,4 (Screening and Scoping) <http://www.humanimpact.org/component/jdownloads/finish/11/81>
- Dannenberg AL, Wernham A. Chapter 22: Health Impact Assessment in the U.S. Draft chapter in forthcoming book edited by John Kemm, 2012.
- 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>
- Wright J, Parry J, Mathers J. Participation in health impact assessment: objectives, methods and core values. *Bull World Health Organ*. 2005;83(1):58-63. <http://www.who.int/bulletin/volumes/83/1/58.pdf>
- Bhatia R. Health impact assessment: a guide for practice. Human Impact Partners, 2011. <http://www.humanimpact.org/component/jdownloads/finish/11/139/0> (this is an 89-page HIA reference guide – skim it now and use it later in course as needed).

**Student teams to be formed to be responsible for sections of final Duwamish HIA report, due May 30. 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 18:** Student presentations (½ of class): Analysis of selected completed HIAs

Readings:

- Collins J, Koplan JP. Health impact assessment: a step toward health in all policies. *JAMA*. 2009; 302(3):315-317.
- 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.
- Oak to Ninth Redevelopment HIA, Oakland CA: <http://ehs.sph.berkeley.edu/hia/OaktoNinthHIA.pdf>

- Home energy assistance and child health HIA:  
<http://www.hiaguide.org/sites/default/files/ChildHIAofenergycostsandchildhealth.pdf>

**April 25:** Interactive session: Assessment phase for Duwamish project HIA

Readings:

- HIA Toolkit, pages 49-72, Chapter 5 (Assessment)  
<http://www.humanimpact.org/component/jdownloads/finish/11/81>
- Veerman JL, Barendregt JJ, Mackenbach JP. Quantitative health impact assessment: current practice and future directions. *J Epidemiol Community Health*. 2005;59:361–370.  
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1733071/pdf/v059p00361.pdf>
- Gase LN, Kuo T, Dunet D, Schmidt SM, Simon PA, Fielding JE. Estimating the potential health impact and costs of implementing a local policy for food procurement to reduce the consumption of sodium in the county of Los Angeles. *American Journal of Public Health*. 2011; 101(8):1501-1507.  
<http://ajph.aphapublications.org/doi/pdf/10.2105/AJPH.2011.300138>
- Seto EYW, Holt A, Rivard T, Bhatia R. Spatial distribution of traffic induced noise exposures in a US city: an analytic tool for assessing the health impacts of urban planning decisions. *International Journal of Health Geographics*. 2007; 6:24.  
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1914342/pdf/1476-072X-6-24.pdf>

**May 2:** Student presentations (½ of class): Analysis of selected completed HIAs

Readings:

- 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://ehp03.niehs.nih.gov/article/info:doi/10.1289/ehp.11132>
- National Environmental Policy Act of 1969 (NEPA). 1969. Public Law 91-190, 42 U.S.C. 4321-4347. Available at:  
<http://www.fhwa.dot.gov/environment/nepatxt.htm>
- Roof K, Glandon R. Tool created to assess health impacts of development decisions in Ingham County, Michigan. *Journal of Environmental Health*. 2008; 71(1):35-38. Available at:  
[http://www.neha.org/pdf/land\\_use\\_planning/JEH\\_JulAug\\_08\\_Michigan.pdf](http://www.neha.org/pdf/land_use_planning/JEH_JulAug_08_Michigan.pdf)
- Mindell J, Biddulph J, Taylor L, Lock K, Boaz A, Joffe M, Curtis S. Improving the use of evidence in health impact assessment. *Bull World Health Organ*. 2010; ;88(7):543-550.  
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2897984/pdf/BLT.09.068510.pdf>

**PAPER DUE: ANALYSIS OF AN EXISTING COMPLETED HIA**

**May 9:** Interactive session: Recommendations phase for Duwamish project HIA

Readings:

- HIA Toolkit, pages 73-75, Chapter 6 (Recommendations)  
<http://www.humanimpact.org/component/jdownloads/finish/11/81>
- 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.

<http://download.journals.elsevierhealth.com/pdfs/journals/0749-3797/PIIS0749379711009093.pdf>

- 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* 124: 107–114, 2010.
- Mindell J, Sheridan L, Joffe M, Samson-Barry H, Atkinson S. Health impact assessment as an agent of policy change: improving the health impacts of the mayor of London's draft transport strategy. *J Epidemiol Community Health*. 2004; 58(3):169-174.  
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1732710/pdf/v058p00169.pdf>

**May 16:** Interactive session: Reporting and evaluation phases for Duwamish project HIA

Readings:

- HIA Toolkit, pages 76-98, Chapters 7,8,9 (Reporting, Monitoring, Evaluation)  
<http://www.humanimpact.org/component/jdownloads/finish/11/81>
- Hoehner CM, Rios J, Garmendia C, Baldwin S, Kelly CM, Knights DM, Lesorogol C, McClendon GG, Tranel M. Page Avenue health impact assessment: building on diverse partnerships and evidence to promote a healthy community. *Health Place*. 2012;18(1):85-95.
- Cole BL, Fielding JE. Health impact assessment: a tool to help policy makers understand health beyond health care. *Annual Review of Public Health*. 2007;28:393-412.
- Dannenberg AL, Bhatia R, Cole BL, et al. Growing the field of Health Impact Assessment in the United States: An agenda for research and practice. *American Journal of Public Health*. 2006; 96(2):262-270.  
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1470491/pdf/0960262.pdf>

**May 23:** Evaluation of HIAs – Andrew Dannenberg; Small group work on Duwamish HIA

Readings:

- 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](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/InformationSources/Publications/Catalogue/20071015\\_1](http://www.euro.who.int/InformationSources/Publications/Catalogue/20071015_1).
- Mathias KR, Harris-Roxas B. Process and impact evaluation of the Greater Christchurch Urban Development Strategy Health Impact Assessment. *BMC Public Health*. 2009 Apr 5;9:97.  
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2670296/pdf/1471-2458-9-97.pdf>
- Wernham A. Health impact assessments are needed in decision making about environmental and land-use policy. *Health Aff (Millwood)*. 2011; 30(5):947-956.

**May 30:** Student presentations: Duwamish HIA report

**ALL SECTIONS OF DUWAMISH HIA REPORT DUE.**

**June 4 (Monday): Due date for Duwamish HIA integrated final report**, ready for submission to external stakeholders. Students completing report integration and editing will receive 3<sup>rd</sup> credit hour for course.

## **CLASS ACTIVITIES/REQUIREMENTS**

- 1. Required paper:** 3 to 5 page paper about an existing completed HIA to include description of project/policy, HIA methods used, major findings, major recommendations, strengths and weaknesses of this HIA, and impact of HIA on subsequent decisions if available. To identify a completed HIA in the United States, 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 sector or topic 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 of the HIAs listed may contain too little or too much information to be useful as a model HIA report.  
**DUE DATE: May 2**
- 2. Student presentations of their analyses of existing completed HIAs:**  
On **April 18** (½ of students) and **May 2** (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 5 minutes for questions and discussion. Those who present on April 18 may have until May 2 to turn in their written paper.
- 3. Class report with contributions by all students: HIA of Duwamish project**  
On **May 30 in class**, each small group of students will present for about 10 minutes the details of the portion of the Duwamish HIA for which they took primary responsibility, followed by class discussion of the issues presented. Duwamish stakeholders will be present.
- 4. Field trip to Duwamish River cleanup site:** Participation required; date to be announced. Alternate option will be to do a self-guided tour of site (instructions will be provided) and write a brief report on observations.

## **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](http://www.nap.edu/catalog.php?record_id=13229).

Birley M. (2011). *Health Impact Assessment: Principles and Practice*. London: EarthScan/Taylor and Francis. See <http://www.routledge.com/books/details/9781849712774/>

Kemm JR, Parry J, Palmer S (eds). (2004). *Health Impact Assessment: Concepts, Theory, Techniques, and Applications*. Oxford: Oxford University Press.

## **Websites** for more information about HIA

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

## **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*. 34:74-82, 2012. Available on Catalystr.

Bhatia R. Health impact assessment: a guide for practice. Human Impact Partners, 2011. <http://www.humanimpact.org/component/jdownloads/finish/11/139/0>

Health Scotland. Health impact assessment: a guide for local authorities. 2006. [www.healthscotland.com/documents/1283.aspx](http://www.healthscotland.com/documents/1283.aspx).

Human Impact Partners. A health impact assessment toolkit: a handbook to conducting HIA. 2010. [www.humanimpact.org/component/jdownloads/finish/11/8](http://www.humanimpact.org/component/jdownloads/finish/11/8).

Institute of Public Health in Ireland. Health impact assessment guidance. 2009. [www.publichealth.ie/publications/healthimpactsassessmentguidance2009](http://www.publichealth.ie/publications/healthimpactsassessmentguidance2009).

International Finance Corporation. Introduction to health impact assessment. 2009. [www.ifc.org/ifcext/sustainability.nsf/AttachmentsByTitle/p\\_HealthImpactAssessment/\\$FILE/HealthImpact.pdf](http://www.ifc.org/ifcext/sustainability.nsf/AttachmentsByTitle/p_HealthImpactAssessment/$FILE/HealthImpact.pdf).

International Health Impact Assessment Consortium, Liverpool, UK. The Merseyside guidelines for health impact assessment. 2001. [www.liv.ac.uk/ihia/IMPACT%20Reports/2001\\_merseyside\\_guidelines\\_31.pdf](http://www.liv.ac.uk/ihia/IMPACT%20Reports/2001_merseyside_guidelines_31.pdf)

International Health Impact Assessment Consortium, Liverpool, UK. European policy health impact assessment: a guide. 2004. [www.liv.ac.uk/ihia/IMPACT%20Reports/EPHIA\\_A\\_Guide.pdf](http://www.liv.ac.uk/ihia/IMPACT%20Reports/EPHIA_A_Guide.pdf)

North American HIA Practice Standards Working Group. Minimum elements and practice standards for health impact assessment. 2010. <http://www.humanimpact.org/doc-lib/finish/11/9>

Quigley R, den Broeder L, Furu P, Bond A, Cave B, Bos R. *Health Impact Assessment International Best Practice Principles*. Fargo, ND: International Association for Impact Assessment; 2006:1. Special Publication Series 5. <http://www.iaia.org/publicdocuments/special-publications/SP5.pdf>

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](http://www.apho.org.uk/resource/item.aspx?RID=44927)

University of Minnesota, Design for Health. Rapid health impact assessment toolkit. 2008. [www.designforhealth.net/pdfs/HIA/BCBS\\_Rapidassessment\\_011608.pdf](http://www.designforhealth.net/pdfs/HIA/BCBS_Rapidassessment_011608.pdf)