

Public Health Research Tools and
Learning Resources

GLOBAL POPULATION HEALTH AND WELL-BEING IN THE 21ST CENTURY

Toward New Paradigms, Policy, and Practice

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Introduction

The public health research tools and learning resources listed in this supplement are meant to support students (undergraduate and postgraduate) and teaching staff as they engage in research issues or concerns in the areas of global public health—human, animal, plant, environmental. The list is not exhaustive but rather illustrative of the many helpful resources available. Students and educators are encouraged to add to these resources and to share these widely with others within and across public/clinical/environmental communities of practice.

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1.0 Health Topics of Interest

- *WHO*: <http://www.euro.who.int/en/health-topics>
- *Directorate General for Health and Consumer Affairs* (acronym, DG SANCO) European Commission: http://ec.europa.eu/dgs/health_consumer/index_en.htm
- *The One Health Initiative* (OHI)—“The OHI website, originated October 1, 2008 by the One Health Initiative team, has been called “the international clearing house for significant One Health information,” and recently by some the “*New York Times* of One Health.” Its world-wide circulation has been strengthened by its up-to-date *One Health News*, Publications* and Upcoming Events postings relative to animal, human and environmental health. It is currently estimated to be accessed each month by *roughly* 20,000-plus individual visitors from over 150 countries. The OHI website now is known to have had at least 110 reciprocal links: http://www.onehealthinitiative.com/reciprocal_link/RECIPROCAL%20LINK%20September%2025,%202014%20.pdf, like CEEZAD <http://www.ceezaad.org/resources/links.html> and others, from within the United States and internationally. Further evidence of national and international One Health informational website status: among the recognized high profile search engines, the top three, i.e., Google, Bing, and Yahoo list the One Health Initiative website www.onehealthinitiative.com *first* when either “One Health” or “One Health Initiative” are typed in.
- *The One Health Commission*: https://www.onehealthcommission.org/en/one_health_resources/one_health_library
- *Public Health*: http://ec.europa.eu/health/index_en.htm
- *Rand Health*: <http://www.rand.org/health/browse-health.html>

*<http://www.onehealthinitiative.com/publications/Posted%20on%20One%20Health%20Initiative%20website%20December%2016,%202014.pdf>

2.0 Research Support

Print

- Huber, J T. *Introduction to reference sources in the health sciences* (6th ed.). Chicago: Neal-Schuman, an Imprint of the American Library Association; 2014.

On-Line

- *UNC Health Sciences Library—Citing and Writing Tools*: <http://hsl.lib.unc.edu/citing>
- Global health researchers can also look at Zotero, Mendeley, or one of the other, free citation managers. “Free” is good if you plan on partnering with researchers who do not have access to RefWorks. *Advice on Research and Writing*: <http://www.cs.cmu.edu/afs/cs.cmu.edu/user/mleone/web/how-to.html>
Focused on math and computer science, this web page from Georgia Tech includes helpful links for all graduate learners, including general links on success in graduate school, links pertaining to women’s success in computer science (and for women graduate learners, generally), “The Unwritten Milestones for the Ph.D.” and other useful links.
- *University of Pittsburg—Library of Alexandria and Supercourse*.
The University of Pittsburg in Pennsylvania U.S., under the tireless efforts of Professor Ronald LaPorte (ronaldlaporte@gmail.com) and his colleagues (including Eugene Shubnikov (evgeniy.shubnikov@gmail.com), have spearheaded the efforts to establish a help desk at the University of Alexandria in Egypt for helping young researchers from developing countries and also improve the teaching of prevention and global health. Their efforts include the RESEARCH METHODS LIBRARY OF ALEXANDRIA (RMLA) PROGRAMME (alsocalled BA Research Library).
Available on http://sac.bibalex.org/help_desk/introduction.jsf is described as “a one-stop shopping center for budding researchers to find answers to their research methods and statistical questions.” University libraries are encouraged to join the RMLA and become regional centers. So far, there are 48 centers participating in the RMLA. The aim of the help desk is to improve the current alarming statistics which show that only 3% of publications come from developing countries despite the fact that these countries have 27% and 80% of scientists and population respectively (also see “How Statophobia is preventing publication.” *British Medical Journal*, 346; published on 22 January 2013, available from <http://dx.doi.org/10.1136/hmm.f366>).
- *European Centre for Disease Control (ECDC)*: Training catalogue for public health professionals: http://www.ecdc.europa.eu/en/activities/training_activities/Documents/2014-2015-ECDC-Training-Catalogue.pdf

3.0 Health Policy Research

Stakeholder analysis

- WHO Stakeholder analysis policy toolkit for strengthening health sector reform. Stakeholder Analysis Guidelines: <http://www.who.int/workforcealliance/knowledge/toolkit/33/en/>

European Observatory on Health Systems and Policies

- <http://www.euro.who.int/en/about-us/partners/observatory>

Useful publications

- The Health Systems and Policy Monitor: <http://www.hspm.org/searchandcompare.aspx>
- Health Systems in Transition (HiT) series: <http://www.euro.who.int/en/about-us/partners/observatory/health-systems-in-transition-hit-series>
- <http://www.euro.who.int/en/about-us/partners/observatory/health-systems-in-transition-hit-series/countries-and-subregions>
- Policy briefs and summaries: <http://www.euro.who.int/en/about-us/partners/observatory/policy-briefs-and-summaries>
- Health and Financial Crisis Monitor: <http://www.hfcm.eu/>
- The Eurohealth Observer: <http://www.euro.who.int/en/about-us/partners/observatory/eurohealth>
- Health professionals' mobility:

This report underlines WHO's unwavering commitment to supporting the implementation of the Global Code of Practice in the International Recruitment of Health Personnel and provides a wide range of detailed examples from the countries themselves of how they are tackling the many complex issues involved. It provides not just numerous insights into progress but also gives other countries valuable guidance and recommendations on how they, too, can implement the Code. <http://www.euro.who.int/en/publications/abstracts/health-professional-mobility-in-a-changing-europe.-new-dynamics,-mobile-individuals-and-diverse-responses>

Netherlands Institute for Health Services Research

Nivel: <http://www.nivel.nl/en>: Facts and figures Publications:

- Home care: <http://www.nivel.nl/en/home-care>
- Primary care: <http://www.nivel.nl/en/primary-care>
- Technology and e-health: <http://www.nivel.nl/en/technology-and-e-health>

One Health: print—books

- *Animals, Diseases and Human Health: Shaping Our Lives Now and in the Future*, October 20, 2011, edited by Radford G. Davis, DVM, MPH. <http://www.amazon.com/Animals-Diseases-Human-Health-Shaping/dp/0313385297>

- *Human-Animal Medicine: Clinical Approaches to Zoonoses, Toxicants and Other Shared Health Risks*, December 30, 2009; authors Peter M. Rabinowitz, MD, MPH, and Lisa A. Conti, DVM, MPH, DACVPM, CEHP. http://www.amazon.com/Human-Animal-Medicine-Clinical-Approaches-Toxicants/dp/1416068376/ref=sr_1_4?s=books&ie=UTF8&qid=1370130373 &sr=1-4&keywords=rabinowitz+peter
- *Red Book Atlas of Pediatric Infectious Diseases*, by the American Academy of Pediatrics, Ed. Baker. http://www.amazon.com/Book-Atlas-Pediatric-Infectious-Diseases/dp/1581107536/ref=sr_1_2?s=books&ie=UTF8&qid=1418933004&sr=1-2&keywords=redbook+pediatrics
- *Red Book 2012: 2012 Report of the Committee on Infectious Diseases (Red Book Report of the Committee on Infectious...)* June 8, 2012, by Larry K. Pickering, MD, FAAP, and Baker
- *Sick! Curious Tales of Pests and Parasites We Share with Animals*, May 4, 2014 by Elizabeth Arnold Stone (Editor), Cate Dewey (Editor), Tony Linka (Illustrator).
- *Spillover: Animal Infections and the Next Human Pandemic, October 1, 2012*, by David Quammen http://www.amazon.com/Spillover-Animal-Infections-Human-Pandemic/dp/0393066800/ref=sr_1_1?ie=UTF8&qid=1350512814&sr=8-1&keywords=spillover+book
- *Vector Borne Diseases: Understanding Environmental, Human Health and Ecological Connections*, National Academies Press, Workshop Summary, Institute of Medicine Forum on Microbial Threats, 2008, Lemonm, S., Sparling, F., Hamburg, M., Relman, D., Choffnes, E., Mack, A.; <http://www.nap.edu/catalog/11950/vector-borne-diseases-understanding-the-environmental-human-health-and-ecological>
- *Who's in Charge: Leadership during Epidemics, Bioterror Attacks, and Other Public Health Crises* by Laura Kahn, 2009, <http://www.amazon.com/Whos-Charge-Leadership-Epidemics-International/dp/0275994856>
- *Zoobiquity: What Animals Can Teach Us About Health and the Science of Healing*, Natterson-Horowitz, B., Bowers, K.; April 2013, <http://zoobiquity.com/books>
- *Zoonoses: Protecting People and Their Pets*, The Center for Food Security & Public Health, Editors: Dvorak, Roth, Gray, and Kaplan, First Edition, 2013. Also an accompanying online course. <http://www.cfsph.iastate.edu/Products/zoonoses-protecting-people-and-their-pets.php?lang=en>
- *Zoonoses, Volume I. Bacterioses and mycoses*, Scientific and Technical Publication No. 580, 2001, Pan American Health Organization, <http://www2.paho.org/hq/dmdocuments/2010/ZoonosesVol-1.pdf>
- *Zoonoses, Volume II. Chlamydioses, rickettsioses, and viroses*, Scientific and Technical Publication No. 580, 2003, Pan American Health Organization, <http://www2.paho.org/hq/dmdocuments/2010/ZoonosesVol-2.pdf>
- *Zoonoses Volume III. Parasitoses*, Scientific and Technical Publication No. 580, 2003, Pan American Health Organization, <http://www2.paho.org/hq/dmdocuments/2010/ZoonosesVol-3.pdf>
- *Zoonotic Tuberculosis: Mycobacterium bovis and Other Pathogenic Mycobacteria*, 3rd Edition. Editors: Thoen, Steele & Kaneene, May 2014.

One Health-journal articles

- **The global one health paradigm: challenges and opportunities for tackling infectious diseases at the human, animal, and environment interface in low-resource settings**, Gebreyes, W.A. et al., PLOS Neglected Tropical Diseases, Nov. 2014, Volume 8, Issue 11
- **Executive summary of the AVMA One Health Initiative Task Force Report**, King et al, JAVMA, Vol 233, No. 2, July 15, 2008, <http://avmajournals.avma.org/doi/pdfplus/10.2460/javma.233.2.259>

Online

- **Bat Rabies Educational Poster for Children**, sponsored by Bat Conservation International, Global Alliance for Rabies Control and the One Health Commission, 2012. Free downloads: https://www.onehealthcommission.org/documents/filelibrary/rabies_poster/Never_touch_a_bat_childfinal_1213_190D0C618329A.pdf
- **Bat Rabies Educational Poster for Adults**, sponsored by Bat Conservation International, Global Alliance for Rabies Control and the One Health Commission, 2012. Free downloads: https://www.onehealthcommission.org/documents/filelibrary/resources/Never_touch_a_bat_Adultfinal_1213_BC0191B363B10.pdf
- **First International Who's Who in One Health Webinar**, hosted November 10, 2014 by the One Health Commission, speaker recordings, <https://www.onehealthcommission.org/index.cfm?nodeID=78899&audienceID=1>
- **One Health Commission Resources webpage**, <https://www.onehealthcommission.org/index.cfm?nodeID=79604&audienceID=1>
- **One Health, CDC**, <http://www.cdc.gov/onehealth>
- **One Health: It's All Connected**, AVMA website, <https://www.avma.org/KB/Resources/Reference/Pages/One-Health.aspx>

4.0 Health Indicators, Ddata Bases and Evidence

- ECHI: http://ec.europa.eu/health/indicators/echi/index_en.htm
- Healthy Life Years: http://ec.europa.eu/health/indicators/healthy_life_years/index_en.htm
- OECD Health Indicators: <http://www.oecd.org/els/health-systems>
- World Health Statistics: http://www.who.int/gho/publications/world_health_statistics/2013/en/
- World Bank Health Indicators: <http://data.worldbank.org/topic/health>
- Health for All Database: <http://www.euro.who.int/en/data-and-evidence/databases/european-health-for-all-database-hfa-db>
- WHO/Europe's portal to health statistics and to detailed monitoring and assessment tools for key areas of health policy: <http://www.euro.who.int/en/data-and-evidence/databases>
- Eurostat Database contains the full range of publically available data from Eurostat. The data are presented in multi-dimensional tables with multiple selection features and export formats: <http://epp.eurostat.ec.europa.eu/portal/page/portal/waste/data/database>
- Eurostat visual aids: <http://epp.eurostat.ec.europa.eu/guip/introAction.do?profile=cpro&theme=eurind&lang=en>
- Netherlands institute for health services research Nivel: <http://www.nivel.nl/en> Publications:
 - Home care: <http://www.nivel.nl/en/home-care>
 - Primary care: <http://www.nivel.nl/en/primary-care>
 - Technology and e-health: <http://www.nivel.nl/en/technology-and-e-health>
- European Centre for Disease Control (ECDC):
 - <http://www.ecdc.europa.eu/en/Pages/home.aspx>
 - Training programmes: <http://www.ecdc.europa.eu/en/Pages/home.aspx>

5.0 Learning Resources

Scenarios and case-based learning

- Health Leadership Cases—Gillings School of Global Public Health
<http://www.healthleadershipcases.sph.unc.edu>

An open-access web site is available with a searchable collection of cases appropriate for use by teachers and advanced undergraduate and graduate level learners worldwide. The cases vary along two dimensions:

- A wide range of leadership issues including power and influence, politics, financial management, ethics, strategic leadership, and leading teams, among others.
- A variety of settings from a struggling NGO in a developing country to a tertiary care hospital in a major American city and a rural public health department in a western state.

E-learning package

- ePathGen—Pathogen Genomics for Epidemiology’ is an e-learning package that has been developed by a multi-disciplinary team from PHE working with collaborating academics as a beginners guide to using genomic sequencing by public health microbiologists and epidemiologists. It is now publicly available at:
<http://public-health-genomics.phe.org.uk>
- Useful links related to Epidemiology at the web site of CAPHRI School for Public Health and Primary Care, Maastricht University
<http://www.maastrichtuniversity.nl/web/Institutes/FHML/FHML/DepartmentsCAPHRI/Epidemiology/LinksEPID.htm>

Massive Open Online Courses (MOOC) - <https://www.class-central.com/university/stanford>

The Coursera Organization (Oct 2014 : Ten million users in 839 courses from 114 institutions) is an online platform that partners with top universities and organizations worldwide, provides an opportunity to many global citizens to access key courses in many disciplines for free.

In the area of health, courses, which have been listed by participating universities and organizations, include the following: nutrition; clinical psychology; key topics in biostatistics such as data collection and cleaning, data analysis, inference and regression models; climate change; understanding research; introduction to global health; health literacy and communication for health professionals; sustainability, and many others.

See also <https://www.mooc-list.com/>

Supercourses

Available from www.pitt.edu/~super1. Supercourse is a repository of lectures on global health and prevention designed to improve the teaching of prevention. There are courses, collection of lectures by topics, and special lectures. There are also lectures on research methods. Many of the lectures are available in multiple languages.

YouTube Supercourse of Science

Available from https://www.youtube.com/watch?v=2z_CsRVbBCI

Example Syllabi (Undergraduate and Postgraduate)

The syllabi for research courses offered in the Executive Doctoral Program in Health Leadership (DrPH) at the Gillings School of Global Public Health provide a good guide for learners who wish to strengthen their understanding of practical research methods in public health. Texts and other resources listed in these syllabi offer further guidance on helpful resources.

For more information about the curriculum, see: <http://sph.unc.edu/hpm/hpm-degrees-and-certificates/executive-doctoral-program-in-health-leadership-drph-2/>

HPM 950: The Research Process

HPM 951: Literature Review & Appraisal

HPM 953: Essentials of Practice-based Research HPM 956: Fundamentals of Research Analysis

6.0 Other Important Global Websites

- Direcção Geral da Saúde, Portugal
<http://www.dgs.pt>
- Eurostat
<http://www.europa.eu.int/eurostat.html>
- 15 largest European cities
<http://www.elcha.co.uk/holp>
- Population Reference bureau
<http://www.prb.org>
- Oikos Cooperação e Desenvolvimento, Portugal
<http://www.oikos.pt>
- União das cidades capitais luso-afro-américo-asiáticas
<http://www.uccla.pt>
- United Nations Development Program
<http://www.undp.org>
- World Health Organization
<http://www.who.org>
- World Health Organization
<http://www.who.ind/whosis>
- Instituto Nacional de Estatística, Portugal
<http://www.ine.pt>
- World Health Organization – European health for all database
<http://data.euro.who.ind/hfadb/>
- Base de dados Portugal Contemporâneo
<http://www.pordata.pt>
- SIDAnet, Portugal
<http://www.aidsportugal.com>
- Portal de Saúde Pública da União Europeia
<http://ec.europa.eu/health-eu>
- SIDA in Europe
<http://www.eurohiv.org>
- Instituto Nacional de Emergência Médica, Portugal
<http://www.inem.min-saude.pt>
- Observatório Nacional de Saúde, Portugal
<http://www.onsa.pt>
- Ministério da Saúde de Portugal
<http://www.portaldasaude.pt>
- UNAIDS
<http://www.unaids.org>
- Bill and Melinda Gates Foundation
<http://www.gatesfoundation.org>

- Cruz Vermelha para o Brasil
<http://www.cruzvermelha.org.br>
- Fundação Ford
<http://www.fordfoundation.org>
- CVB
<http://www.cvb.org.br>
- Greenpeace
<http://www.greepeace.org/international/en/about/worldwide>
- Rockefeller Foundation
<http://www.rockefellerfoundation.org>
- UNESCO
<http://www.unesco.org>
- UNICEF
<http://www.unicef.org>
- World Bank
<http://www.worldbank.org>
- DATASUS – Database of the Brazilian Unified Health System
<http://www2.datasus.gov.br/DATASUS/index.php?area=02>
- Brazilian Institute of Geography and statistics
<http://www.ibge.gov.br>
- OECD
<http://www.oecd.org>
- Saúde e Sociedade
www.scielo.br/sausoc
- Programa de Aprimoramento das Informações de Mortalidade no Município de São Paulo
www.prefeitura.sp.gov.br/proaim
- CETESB - Companhia de Tecnologia de Saneamento Ambiental do Estado de São Paulo
www.cetesb.sp.gov.br/
- Panamerican Health Organization
<http://www.paho.org>
- Instituto Brasileiro de Análises Sociais e Econômicas (Ibase)
www.ibase.br/
- Fundação Sistema Estadual de Análise de Dados – São Paulo, Brazil
www.seade.gov.br/
- FAO
<http://www.fao.org>
- CEPAL – Comissão Econômica para América Latina e Caribe
<http://www.cepal.org/>
- Agência Nacional de Saúde- ANS, Brazil
<http://www.ans.gov.br>
- Agência Nacional de Vigilância Sanitária, Brazil
www.anvisa.gov.br

- ALASAG – Alianza Latinoamericana y del Caribe de Salud Global
- <http://alasag.org/es/>
- ABRASCO – Associação Brasileira de Saúde Coletiva
www.abrasco.org.br/
- Risk World
<http://www.riskworld.com>
- Society for Risk Analysis
<http://www.sra.org>
- US Environmental Protection Agency
<http://www.epa.gov>
- Reforma de la Ayuda Humanitaria
<http://www.humanitarianreform.org>
- Centro Regional de Información en Desastres (CRID)
<http://www.crid.or.cr>
- International Disaster Database (EM-DAT)
<http://www.emdat.be/database>
- Estrategia Internacional para la Reducción de Desastres (EIRD)
<http://www.eird.org>
- Área de Preparativos para Situaciones de Emergencia y Socorro en casos de desastres de la Organización Panamericana de la Salud
<http://www.disaster-info.net>
- OPAS/OMS Brasil- Organização Panamericana de Saúde, Brazil Office
www.opas.org.br
- Revista Brasileira de Epidemiologia
www.scielo.br/rbepid
- Revista de Saúde Pública
www.fsp.usp.br/rsp
- ATSDR Agency for Toxic Substances and Disease Registry
<http://www.atsdr.cdc.gov>

Centers for Disease Control and Prevention
www.cdc.gov

European Centre for Disease Prevention and Control (ECDC)

<http://www.ecdc.europa.eu/en/Pages/home.aspx>
Training programmes: <http://www.ecdc.europa.eu/en/Pages/home.aspx>