

An Overview of Education and Training Requirements for Global Healthcare Professionals

❖ *Public Health Practitioner* ❖

GLOBAL KNOWLEDGE EXCHANGE NETWORK
on Healthcare

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EXECUTIVE SUMMARY

Unlike the clinical healthcare professions, public health does not address the application of medical treatment to individuals, but examines health issues, prevention and health promotion at the population level. As explained by the Association of Schools of Public Health, the field deals with “the science and art of protecting and improving the health of communities through education, promotion of healthy lifestyles, and research for disease and injury prevention.”¹ Practitioners work in five core disciplines including biostatistics, epidemiology, health services administration, health education and behavioral science, and environmental health.² You will find practitioners working in both the public and private sector, from academic institutions to government departments of health to the non-profit sector.

Formal graduate public health education programs culminating in a Master of Public Health (MPH) degree are new to many countries and regions such as Singapore in 2007, France in 2008, Germany in 2003 and Canada in 2001. Dedicated Schools of Public Health are being developed, whereas in the past many countries educated their public health workforce in Diploma programs or academic programs within other university departments such as medicine, social work and kinesiology.

MPH programs most often are one to two years in length and focus on the five core disciplines followed by optional specialization, an extended fieldwork practicum and a culminating experience project (research thesis, action-research). Admission criteria include an undergraduate degree in a related field and many times a minimum number of professional working years, as the programs are most often conceived as professional vocation training. Until recently, some countries such as Singapore did not allow non-medical graduates without a medical background to matriculate in public health graduate programs.

Innovative collaborations are on the rise as part of an effort to expand the public health workforce. For example, France’s new School of Public Health (EHESP – Ecole des Hautes Etudes en Santé Publique) partners with seven other university programs. Students first attend courses in either England or Spain, followed by a year of specialist education at one of the seven campuses, depending on the selected concentration area. Also, in Australia at the Victorian Consortium for Public Health, four universities collaborate to provide a common first year of public health studies followed by further specialization at the respective home campuses.

Continuing education and professional development are usually a work requirement and individual pursuit, but several countries including the United Kingdom and Australia have extended voluntary training schemes involving competency examinations, mentoring, and job training. In the United States and Canada, well developed and respective Public Health Services offer graduates training through job placement. Also, the National Board of Public Health Examiners developed a competency-based examination leading to a Certified Public Health Professional (CPH) credential in 2005, and it offers annual testing sites in 52 countries worldwide.

EDUCATION AND TRAINING REQUIREMENTS FOR PUBLIC HEALTH PRACTITIONERS

United States

The Master of Public Health (MPH) and the Master of Science in Public Health (MSPH) are the primary entry points for working in the United States public health field, but many programs offer a one-year Certificate in Public Health option for individuals already working within health departments, health system agencies and hospitals.³ While universities offers a Bachelor in Public Health degree, it is not a prerequisite for graduate study and students from various other bachelor degree programs in biology, health sciences and the arts attend graduate school in public health. Admission criteria include scores on the Graduate Record Examination (GRE) and professional experience. Further education programs, including Doctor of Philosophy (PhD) or Doctor of Public Health (DrPH) are widespread.

MPH programs are two years in length, however many students that work full-time extend the period and take classes part-time. Within the program, students take courses in each of the five core disciplines (biostatistics, epidemiology, health services administration, health education and behavioral science and environmental health) and then further specialize within their respective academic division. A global competency movement has grown within the field's academic world and has prompted educational institutions to structure curricula around the Core Competencies for Public Health Professionals (developed by the Council on Linkages Between Academia and Public Health Practice) to ensure that all students have a strong background in the essential public health services. A similar competency movement has grown at the organization level, and *The Public Health Competency Handbook: Optimizing Individual and Organizational Performance for the Public's Health* is owned by all local and state health departments as of 2002.⁴

Most programs require students to gain extended fieldwork experience through a practicum or supervised internship as well as complete a thesis or focused research, policy or practice-based project. While there is not a mandatory national exam, the National Board of Public Health Examiners (NBPHE) formed in 2005 and offers further credentialing by exam to become a certified public health professional (CPH).⁵ The Council on Education for Public Health (CEPH), an independent agency recognized by the US Department of Education, accredits the graduate institutions, and a list of accredited schools and programs are available at: <http://www.ceph.org/i4a/pages/index.cfm?pageid=3344>. Only graduates of CEPH accredited schools or programs may take the NBPHE examination. Continuing education and professional development is not regulated at the national or state level, but is primarily a workplace requirement or individual pursuit. Numerous professional societies including the American Public Health Association, Center for Disease Control and Prevention, respective Schools of Public Health, and non-profit organizations such as the Public Health Foundation offer an extensive selection of learning programs and activities.

Canada

Though Canada has a very well developed public healthcare system, the country did not have a dedicated School of Public Health until March 2006. Before the University of Alberta started the country's first School of Public Health, Canada's public health workforce was and still is educated at master's level academic programs with public health components within other academic divisions (School of Kinesiology, Faculty of Medicine, and School of Health Studies). In the academic programs with public health components, the following degrees are awarded: Masters of Health Administration (MHA), Masters of Health Science (MHSc – Occupational Health, Clinical Epidemiology), and Master of Science (MSc – Biostatistics, Epidemiology, Population and Public Health, Community Health Sciences). In 2004 the University of British Columbia Center for Disease Control (UBC CDC) and the BC Center for Disease Control (BCCDC) conducted a feasibility study for starting a School of Public Health and have this development goal as part of their 2007 Operational Excellence Strategic Plan.⁶ UBC CDC and BCCDC envision their planned School of Public Health to be a one-year professional degree program without a thesis for current Canadian health workers.⁷

Until 2006, the closest equivalent beyond other university academic divisions that awarded MPH degrees was the Master of Science in Community Health Program at the University of Montreal (recently accredited by the Council on Education for Public Health). The mentioned academic programs fall into two categories – practicum or thesis-based. Both categories are completed in a minimum of two years full-time and a maximum of six years part-time. In addition, the MPH degree can be generalist or specialist. Canadian public health education programs have also closely followed the competency movement and in 2006 the Public Health Human Resources Task Group drafted a respective “Canadian Public Health Workforce Core Competencies” document, which was completed in 2008 and may be reviewed in full at: <http://www.phac-aspc.gc.ca/ccph-cesp/pdfs/cc-manual-eng090407.pdf>. Admission criteria for the mentioned programs include an undergraduate degree and professional experience.⁸ Beyond the academic program, the Canadian Public Health Association offers extensive voluntary continuing education and professional development opportunities. Further education programs including the PhD degree in the mentioned areas are widely available in the Canadian provinces.

To continue reading about the evolving public health education experience in Canada, read the full UBC CDC and BCCDC report at: <http://www.bccdc.org/downloads/pdf/Public%20Health%20Education%20in%20Canada.pdf>. In addition, the Public Health Agency of Canada well outlines the country's graduate public health offerings at: http://www.phac-aspc.gc.ca/php-psp/master_of_php-eng.php.

United Kingdom

In the United Kingdom, public health graduate work involves one full time year of academic study and leads to a MPH/MSPH (180 credits) or Diploma of Higher Education in Public Health (DipHE Public Health – 120 credits). Within the program, the student

takes core courses in areas such as Biostatistics, Health Economics, Epidemiology, and Evidence-Based Practice followed by additional coursework from optional modules and specialist plans including Health Policy, Health Services, Health Promotion, Global Health and Emergency Humanitarian Assistance.⁹ The programs also often involve a research dissertation or extended project. A 60 credit Post-Graduate Certificate in Public Health is also offered at select institutions.¹⁰ Admission criteria include a baccalaureate degree from a medical program, health related baccalaureate program with additional professional experience or non-health baccalaureate graduates with professional experience that have also passed the approved exams.¹¹

Public health graduates have the option to participate in a specialist accreditation program offered by the Faculty of Public Health (FPH) which involves five years of training. The academic study culminating in a MPH, MSPH or Diploma of Higher Education in Public Health comprises only a portion of the training scheme. Following academic studies and receiving the degree title, a graduate is eligible to take the first part of the Member of the Faculty of Public Health (MFPH) Objective Structured Public Health Examination (OSPHE). Completion of Part A of the exam leads to FPH Diplomate Membership, followed by completion of Part B of the exam 6 to 12 months afterward, which awards full FPH membership. Part A tests theoretical knowledge while Part B includes oral and multiple choice sections. Following examinations and 48 months of part- or full-time job training, a Certificate of Completion of Training is issued.¹² The NBPHE annually offers testing sites for the CPH credential in London. In addition, FPH members must complete 50 continuing professional development credits annually and maintain an online portfolio logging the activities undertaken.¹³ To learn more about the training scheme, visit the FPH website at: <http://www.fph.org.uk/default.asp>.

Germany

In 2003, the University of Hamburg Applied Sciences expanded its public health academic offerings beyond the Diploma in Health to a three semester Master of Public Health Program.¹⁴ In the first semester students share a common curriculum in five core study areas (Public Health Systems, Health Policy & Management, Epidemiology/Biostatistics, Environmental Health, and Health Promotion) followed by a second semester of specialty modules in either Health Policy & Management, Epidemiology & Biostatistics or Health Promotion & Health Education, and a final semester dedicated to a research thesis.¹⁵ Admission criteria include a graduate degree in health, social work, education psychology, medical technology or medicine with a minimum of one year of professional experience. Continuing education and professional development is voluntary and many opportunities are offered by the Federal Center for Health Education and the Association of German Public Health Postgraduates (PHAD - Public Health Absolventen Deutschland). In addition, the NBPHE CPH exam from the UK is offered annually within the country. To read further about the public healthcare system in Germany, visit the European Centre for Disease Prevention and Control Country Profiles at <http://ecdc.europa.eu/en/countryinfo/Pages/Germany.aspx>.

France

In January of 2008, the French School of Public Health (EHESP – Ecole des Hautes Etudes en Santé Publique) began as an innovative collaboration with seven other European partner universities in Denmark, Spain, Poland, and the United Kingdom in order to offer a European Master of Public Health degree. The EHESP was conceived as vocational training for senior healthcare managers and candidates must have a university bachelor degree to enter the program.¹⁶ The two-year full-time program first involves core courses in the foundations of public health in either England or Spain followed by a year of specialist education at one of the seven campuses, depending on the selected concentration area. The French campuses offer specialization in Environmental and Occupational Health, and Law, Health and Ethics. Currently there is not mandatory continuing education or professional development activities.

Before the start of the new program, public health education was provided by the National Public Health School (ENSP –Ecole Nationale de la Santé Publique), but the 2008 conversion was prompted by a long desired focus on post-graduate public health education options and to broaden the number of diploma options.¹⁷ To learn more about the French public health system, the Ministry of Foreign Affairs (Ministere Des Affaires Etrangeres) has published the document, “Public Health and Prevention in France,” available at: http://ambafrance-np.org/IMG/pdf/Health_and_prevention.pdf.

Australia

Public health professionals in Australia come from both academic and non-academic backgrounds, but all have undergone extensive education such as job in-services, continuing professional development, short-courses and often the one- to two-year MPH postgraduate degree.¹⁸

In the State of Victoria, students pursuing their MPH at the Victorian Consortium for Public Health (comprised of four universities) share a common first year of core curriculum and then return to their home university for specialized coursework. Many of the country’s universities have both research and practice tracks, which both involve a long-term research or action-learning project. Admitted students already have completed undergraduate work and usually have public health fieldwork experience. Part I of the program includes core courses (Biostatistics, Health Promotion, Health Economics, Public Health Policy, Social and Cultural Perspectives in Public Health, Environmental Health, Principles and Practice of Public Health) followed by specialist streaming in Part II (Health Promotion, Public Health Nutrition, Public Health Research, Environmental Health).¹⁹

While continuing professional development and education are optional, extensive learning and work program options are offered by organizations such as the Public Health Association of Australia, the Australian Health Promotion Association and the National Public Health Partnership. In addition, the Public Health Division of the Department of Human Services coordinates with local universities to offer a training scheme similar to that of the UK. Within the two-year training scheme the graduates have both an

academic and fieldwork mentor, complete six different job placements in the public health system, attend monthly meetings, and participate in conferences and seminars.²⁰

Singapore

As in Canada, Singapore did not have a dedicated School of Public Health until recently. Before 2007, the public health workforce was first educated at a nine-month Diploma of Public Health Program at the University of Malaya Faculty of Medicine, Department of Social Medicine and Public Health. After 1970 the program evolved into the Department of Community, Occupational and Family Medicine and then the Department of Epidemiology and Public Health (March 2009) now at the National University of Singapore School of Medicine. Until 2007, non-medical professionals were not allowed to matriculate in the Master of Science (Public Health or Occupational Health) programs. Further transformations took place and resulted in a new one- to two-year MPH program opening in August 2007. Students take core courses and may specialize either in General Public Health, Environmental and Public Health or Clinical Epidemiology/Clinical Effectiveness.²¹ The admission criteria depend on the students' background, and whether they have medical training. "Medically qualified" students that have completed a year of physician housemanship (internship) and general clinic experience, as well as one year of public health experience, are eligible to apply while non-health trained individuals must have an Honors bachelor degree and two years of professional experience.²² Continuing education and professional development activities are not regulated, but learning programs are offered by the Singapore Health Promotion Board and graduates are eligible to take the NBPHE CPH exam annually at the testing opportunity in the country. The new MPH program plays an important role in the region as there are 12 graduate schools of public health in Southeast Asia for 1.5 billion people.²³

**TABLE 1: PUBLIC HEALTH TRAINING AND EDUCATION –
SELECT COUNTRIES**

<u>Requirement</u>	US	UK	France
Previous Undergraduate degree required?	Yes – 4 year bachelors degree, additional professional experience often required	Yes – 4 year bachelor degree, with additional professional experience and Exam Boards often required for non-health graduate candidates	Yes – 4 year bachelors degree, additional professional experience often required, conceived as vocational training for senior healthcare managers
Years of school	2	1	2
Degree Title	MPH MSPH	MPH MSPH DipHE in Public Health	European MPH
Clinical/ residency training	Extended fieldwork practicum during MPH program and research/practice-based project	Voluntary Faculty of Public Health (FPH) training scheme involves 48 months of job training post MPH/MSPH/DipHE graduation	Dissertation completed by all students
Specialty training	Voluntary, U.S. Public Health Service training scheme to join Commissioned Corp	Voluntary 5-year specialist accreditation in public health training scheme offered by FPH	Specialize within the academic program
Licensing/ Certification/ Registration	Voluntary exam-based Certification in Public Health credential offered by the National Boards of Public Health Examiners as of 2005	Voluntary FPH training scheme culminates in Certificate of Completion of Training; Eligible to take voluntary Certification in Public Health credentialing exam offered by the National Boards of Public Health Examiners as of 2005	Eligible to take voluntary Certification in Public Health credentialing exam offered by the National Boards of Public Health Examiners as of 2005
Re-licensure	No	A FPH revalidation program involving licensure renewal and re-certification is being developed http://www.fph.org.uk/prof_standards/revalidation/FAQ/default.asp	No
Continuing Education required?	No, voluntary	FPH members must complete 50 credits annually	No, voluntary

<u>Requirement</u>	Germany	Australia	Canada	Singapore
Previous Undergraduate degree required?	Yes, graduate degree in health field and minimum of 1 year professional experience	Yes, 4-year bachelor degree, additional fieldwork experience often required	Yes, 4-year bachelor degree, additional fieldwork experience often required	Yes, Honors bachelor degree and 2 years professional experience for non-medical candidates
Years of school	3 semesters	1 – 2 years	2 years minimum full-time, Maximum 6 years part-time	1 – 2 (1 for medical graduates, 18 months non-medical)
Degree Title	MPH	MPH Graduate Diploma in Public Health	MPH MSc in Community Health/Population and Public Health	MPH
Clinical/ residency training	Semester-long research thesis conducted during MPH program	Extended fieldwork practicum during MPH program	Either extended fieldwork practicum or thesis during MPH program	No
Specialty training	Voluntary	Voluntary 2-year training scheme offered by select Departments of Human Services	Voluntary, Canadian Public Health Service offers training scheme to become Public Health Officers	Voluntary
Licensing/ Certification/ Registration	Eligible to take voluntary Certification in Public Health credentialing exam offered by the National Boards of Public Health Examiners as of 2005	Eligible to take voluntary Certification in Public Health credentialing exam offered by the National Boards of Public Health Examiners as of 2005	Eligible to take voluntary Certification in Public Health credentialing exam offered by the National Boards of Public Health Examiners as of 2005	Eligible to take voluntary Certification in Public Health credentialing exam offered by the National Boards of Public Health Examiners as of 2005
Re-licensure	No	No	No	No
Continuing Education required?	No, voluntary	No, voluntary	No, Voluntary	No, voluntary 10

PROFESSIONAL ORGANIZATIONS AND RESOURCES

United States

- U.S. Department of Health and Humans Services, <http://www.hhs.gov/>
- U.S. Public Health Service Commissioned Corps, <http://www.usphs.gov/>
- Center for Disease Control and Prevention, <http://www.cdc.gov/>
- American Public Health Association, <http://www.apha.org/>
- Association of Schools of Public Health, <http://www.aspsh.org/>
- National Association of County and City Health Officials (NACCHO), <http://www.naccho.org/>

United Kingdom

- Department of Health, <http://www.dh.gov.uk/en/index.htm>
- The Faculty of Public Health, <http://www.fphm.org.uk/>
- National Library for Public Health, <http://www.library.nhs.uk/publichealth/>
- National Association of Local Boards of Health, <http://www.nalboh.org/>
- The Association of State and Territorial Health Officials, <http://www.astho.org/>
- Centre for Public Health Research, <http://hsc.uwe.ac.uk/net/research/Default.aspx?pageid=24>

Australia

- Australian Government Department of Health and Ageing, <http://www.health.gov.au/>
- National Public Health Partnership, <http://www.nphp.gov.au/>
- Public Health Association of Australia, <http://www.phaa.net.au/>
- Public Health in Australia, <http://www.nphp.gov.au/publications/broch/contents.htm>
- Australian Health Promotion Association, <http://www.healthpromotion.org.au/index.html>
- Australian Public Health Nutrition Academic Collaboration, <http://www.aphnac.com/>

France

- French Ministry of Health (Ministère de la Santé et des Sports), <http://www.sante-jeunesse-sports.gouv.fr/>
- General Assembly on Prevention (Etats généraux de la prévention),
<http://www.sante.gouv.fr/htm/dossiers/prevention/sommaire.htm>

- High Council on Public Health (le Haut Conseil de la santé publique), <http://www.hcsp.fr/explore.cgi/accueil?ae=accueil>
- European Public Health Master (Europubhealth), <http://www.europubhealth.org/us/accueil/>
- The National Institute for Prevention and Health Education (INPES - Institut national de prevention et d'education pour la santé), <http://www.inpes.sante.fr/index.asp?page=inpes/eng/whatdowedo.htm>
- National Health/Environment Plan (PNSE - Plan National Sante-Environment), <http://www.sante-sports.gouv.fr/dossiers/sante/plan-national-sante-environnement-pnse/plan-national-sante-environnement-pnse-juin-2004-actualisation-septembre-2006.html>

Germany

- Federal Ministry of Health (BMG - Bundesministerium für Gesundheit), <http://www.bmg.bund.de/>
- Federal Centre for Health Education and Promotion (BZgA - Bundeszentrale für gesundheitliche Aufklärung), <http://www.bzga.de/>
- Robert-Koch Institute, <http://www.rki.de/>
- German Association for Health Sciences and Public Health (DVGPH - Deutscher Verband für Gesundheitswissenschaften), <http://www.public-health.tu-dresden.de/dotnetnuke3/Default.aspx?alias=www.public-health.tu-dresden.de/dotnetnuke3/dvgph>
- German Society of Public Health (Deutsche Gesellschaft für Public Health), <http://deutsche-gesellschaft-public-health.org/>
- German Coordinating Agency of Public Health (GCAPH - Deutsche Koordinierungsstelle für Gesundheitswissenschaften), <http://www.medsoz.uni-freiburg.de/dkgw/welcome.htm>
- The Association of German Public Health Postgraduates (PHAD - Public Health Absolventen Deutschland), <http://www.phad-ev.de/index.php>

Canada

- Canadian Public Health Association, <http://www.cpha.ca/en/about.aspx>
- Public Health Agency of Canada, <http://www.phac-aspc.gc.ca/index-eng.php>
- Canadian Integrated Public Health Surveillance Program, <http://www.phac-aspc.gc.ca/php-psp/ciphs-eng.php>
- Health Canada, <http://www.hc-sc.gc.ca/>
- Pan-Canadian Public Health Network, http://www.phn-rsp.ca/About_e.html
- Canadian Institute of Health Research, Institute of Population and Public Health, <http://www.cihr-irsc.gc.ca/e/13777.html>

Singapore

- Ministry of Health, Singapore, <http://www.moh.gov.sg/mohcorp/default.aspx>
- Health Promotion Board, <http://www.hpb.gov.sg/>
- Health Sciences Authority, <http://www.hsa.gov.sg/publish/hsaportal/en/home.html>
- Action for AIDS, <http://www.afa.org.sg/>
- Singapore Health Services, <http://www.singhealth.com.sg/Pages/Home.aspx>
- Academy of Medicine Singapore, Public Health and Occupational Physicians Chapter, http://www.ams.edu.sg/chapter/home.aspx?sec_id=9

Other Resources:

- World Health Organization, <http://www.who.int/bulletin/en/>
- United Nations Millennium Development Goals, <http://www.un.org/millenniumgoals/>
- World Federation of Public Health Associations, <http://www.wfpha.org/>
- Advancing Health Populations: The Pfizer Guide to Careers in Public Health, <http://www.nynj-phc.org/PHNX/res/pfizer-publichealthcareers.pdf>
- The Public Health Competency Handbook, Population Health Futures, <http://www.populationhealthfutures.com/handbook.htm>
- Core Competencies in Public Health, Council on Linkages Between Academia and Public Health Practice, <https://www.train.org/Competencies/corecompetencies.aspx?tabid=94>
- What is Public Health?, <http://www.whatispublichealth.org/index.html>
- European Center for Disease Control and Prevention, <http://ecdc.europa.eu/en/Pages/home.aspx>
- European Public Health Association, <http://www.eupha.org/>
- Strengthening Public Health Research in Europe (SPHERE), <http://www.ucl.ac.uk/public-health/sphere/spherehome.htm>
- European Union High Level Committee on Public Health, http://ec.europa.eu/health/ph_overview/co_operation/high_level/high_level_en.htm
- European Public Health Alliance, <http://www.epha.org/r/12>
- Asia-Pacific Academic Consortium for Public Health, <http://www.apacph.org/site/index.php>
- Asia Conference on Emerging Issues in Public Health, <http://www.sph.cuhk.edu.hk/asiaphconference2009/indexpage.html>
- Vivian Lin, James Smith, and Sally Fawkes, *Public Health Practice in Australia: The Organised Effort*, Allen & Unwin Publishing, Australia, 2007.

LITERATURE CITED

¹ Association of Schools of Public Health, “What is Public Health?” Available at: <http://www.whatispubicalehealth.org/>.

² Association of Schools of Public Health, “Frequently Asked Questions,” Available at: <http://www.asph.org/document.cfm?page=727>.

³ University of Washington School of Public Health, Department of Health Services, “Extended MPH Degree Program – Certificate Program,” Available at: <http://depts.washington.edu/hsedp/certificate>.

⁴ Robert Wood Johnson Foundation, Publications and Research, “Handbook on Core Competencies Distributed to All Local and State Health Departments,” July 2004, Available at: <http://www.rwjf.org/reports/grr/044484.htm>.

⁵ National Board of Public Health Examiners, “CPH Exam,” Available at: <http://www.publichealthexam.org/>.

⁶ BC Center for Disease Control, “Strategic Plan,” August 2007, Available at: http://www.bccdc.org/downloads/pdf/epid/reports/BCCDCStrategicPlanFINAL_Doc_07.pdf. UBC Centre for Disease Control and BC Center for Disease Control, *Public Health Education in Canada*, 2004, Available at: <http://www.bccdc.org/downloads/pdf/Public%20Health%20Education%20in%20Canada.pdf>.

⁷ UBC Center for Disease Control and BC Center for Disease Control. Public Health Education in Canada. January 2004. Available at: <http://www.bccdc.org/downloads/pdf/Public%20Health%20Education%20in%20Canada.pdf>.

⁸ MPH Guidelines Working Group, Public Health Human Resources Task Group, *Guidelines for MPH Programs in Canada*, July 2006, Available at: http://www.phac-aspc.gc.ca/php-psp/pdf/guidelines%20_for_mph_programs_in_canada_july_2006.pdf.

⁹ The University of Manchester School of Medicine, “Postgraduate Public Health Programme Structures,” Available at: <http://www.medicine.manchester.ac.uk/postgraduate/taught/mph/structure/>. London School of Hygiene and Tropical Medicine, “MSC Public Health,” Available at: <http://www.lshtm.ac.uk/prospectus/masters/msph.html>.

¹⁰ University of Glasgow, Public Health & Health Policy, “Postgraduate Study – Master of Public Health General Information,” Available at: <http://www.gla.ac.uk/departments/publichealthhealthpolicy/postgraduatesstudy/masterofpublichealth/#d.en.43214>.

¹¹ The University of Liverpool, “Master of Public Health – Admission Criteria,” Available at: <http://www.liv.ac.uk/PublicHealth/mph/root/master%20of%20public%20health/admission%20criteria/index.htm>.

¹² Faculty of Public Health, “Training,” Available at: <http://www.fph.org.uk/training/default.asp>. Public Healthy, “MFPH Exams,” 2009, Available at: <http://www.publichealthy.com/mfphexams.aspx>.

¹³ Faculty of Public Health, *Continuing Professional Development – CPD Policies, Processes And Strategic Direction*. Available at: http://www.fphm.org.uk/prof_standards/downloads/cpd/FPH_CPD_Policy_and_Guidance.pdf

¹⁴ Hamburg University of Applied Sciences, Hochschule fur Angewandte Wissenschaften Hamburg, “Master Program in Public Health,” Available at: <http://www.public-health-hamburg.de/MPH1.pdf>.

¹⁵ Hamburg University of Applied Sciences, Hochschule fur Angewandte Wissenschaften Hamburg, “MPH Program Structure,” Available at: <http://www.public-health-hamburg.de/MPH-prgrmstruc-14.12.pdf>.

¹⁶ Europubhealth, “French School of Public Health,” Available at: <http://www.europubhealth.org/us/partenaire/index.php?Mode=Detail&IdPartenaire=4>. Europubhealth, “Most Frequently Asked Questions,” Available at: <http://www.europubhealth.org/us/partenaire/index.php?Mode=Detail&IdPartenaire=4>.

¹⁷ EHESP, Ecole des Hautes Etudes en Sante Publique, “The School, Mission and Values,” Available at: http://www.ehesp.fr/info/ecoole/missions/?lang_pref=en.

¹⁸ Rotem, A., Hine, B., Hodgkinson, A., “Linking public health education and practice: the Australian experience,: *Asia – Pacific Journal of Public Health*, 1998. 10(1): 17-20.

¹⁹ Victorian Consortium for Public Health, “Information for Future Students,” Available at: <http://www.publichealth.vic.edu.au/future/#structure>.

²⁰ State Government of Victoria, Australia, Department of Human Services, “Victorian Public Health Training Scheme,” Available at: <http://hnb.dhs.vic.gov.au/PHB/vphtb/vphtb.nsf/HeadingPagesDisplay/The+Training+Scheme?OpenDocument>.

²¹ Lim, MK, Seow, A, Wilder-Smith-A, “Commentary: Graduate Public Health Education – Singapore’s Contribution to Strengthening Capacity in the Region and Beyond,” *Annals Academy of Medicine Singapore*, December 2008, 37 (12): 1046 – 1050. Available at: <http://www.annals.edu.sg/pdf/37VolNo12Dec2008/V37N12p1046.pdf>.

²² Lim MK, et. al., 2008. National University of Singapore, Department of Epidemiology and Public Health, “Master of Public Health Program,” Available at: <http://www.med.nus.edu.sg/cof/MPH/index.html>.

²³ Jain, SC, “Education and training-capacity building,” *Journal of Health and Population in Developing Countries*, 2000, 3: 39 – 42.