

CEPH Foundational Public Health Competencies

Competency		Example
F1	Apply epidemiological methods to settings and situations in public health practice.	A single setting/situation is insufficient. Must include various study designs (e.g., cohort study) & principles (e.g., incidence, prevalence, etc.).
F2	Select quantitative <u>and</u> qualitative data collection methods appropriate for given public health context.	This competency requires that both a quantitative and qualitative method be "selected." This can be met with one or more products.
F3	Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming, and software, as appropriate.	This competency requires that both a quantitative and qualitative data be analyzed. This can be evident from a data analysis output or as a methods write-up.
F4	Interpret results of data analysis for public health research, policy, or practice.	Students should understand and apply findings from data analysis and draw linkages to how the results may influence decisions.
F5	Compare the organization, structure and function of health care, public health, and regulatory systems across national <u>and</u> international settings.	This competency requires comparison across national AND international settings.
F6	Discuss how structural bias, social inequalities and racism undermine health and create challenges to achieving health equity at organizations, community, <u>and</u> systemic levels.	A 'discussion' of these factors must be evident. It is not enough to include diverse populations or employ culturally competent strategies.
F7	Assess population needs, assets <u>and</u> capacities that affect communities' health.	This does not need to be a formal needs assessment, but should be some type of examination of needs, assets, etc. (e.g., as with a literature review or survey).
F8	Apply awareness of cultural values and practices to the design, implementation, or critique of public health policies or programs.	Must see connection of concepts of culture to the product (e.g., cultural adaptation/tailoring, stakeholder involvement, cultural humility). It must be obvious that culture was considered in developing the product.
F9	Design a population-based policy, program, project, or intervention.	An example of products that could demonstrate this competency are research projects, a program plan, a policy statement, etc.
F10	Explain basic principles <u>and</u> tools of budget <u>and</u> resource management	"Resource management" refers to stewardship (e.g., planning, monitoring, etc.) of resources throughout a project, not simply preparing a budget statement that projects what resources will be required.
F11	Select methods to evaluate public health programs.	"Select" = choose among methods. Students do not have to evaluate but must be able to identify the correct approach

F12	Discuss the policy-making process, including the roles of ethics and evidence.	This competency refers to technical aspects of how public policies are created and adopted, including legislative and/or regulatory roles and processes, ethics in public policy making, and the role of evidence in creating policy.
F13	Propose strategies to identify stakeholders <u>and</u> build coalitions <u>and</u> partnerships for influencing public health outcomes.	
F14	Advocate for political, social, or economic policies and programs that will improve health in diverse populations.	This competency refers to the ability to influence policy and/or decision making, such as through stakeholder mobilization, educating policy makers, etc. Ability to argue in support of (or in opposition to) a position, as in a standard debate, is not sufficient. Students must produce a product that would be part of an advocacy campaign or effort (e.g., legislative testimony, fact sheets, advocacy strategy outline, etc.).
F15	Evaluate policies for their impact on public health <u>and</u> health equity.	
F16	Apply leadership and/or management principles to address a relevant issue.	Principles may include creating a vision, empowering others, fostering collaboration, or guiding decision making.
F17	Apply negotiation <u>and</u> mediation skills to address organization or community challenges.	"Negotiation and mediation," in this competency, refers to the set of skills needed when a common solution is required among parties with conflicting interests and/or different desired outcomes. Effective communication within a work group or team is more closely related to competency. Must involve more than just persuasive communication.
F18	Select communication strategies for different audience <u>and</u> sectors.	
F19	Communicate audience-appropriate (i.e., non-academic, non-peer audience) public health content, both in writing <u>and</u> through oral presentation.	Note that academic or scientific products are not acceptable. Both the oral and written component must be met. One product may be sufficient if it has written and oral components (e.g., a PowerPoint presentation with voiceover), otherwise multiple products are needed to demonstrate this competency.
F20	Describe the importance of cultural competence in communicating public health content.	This competency requires the product include a <i>description</i> of the importance
F21	Integrate perspectives from other sectors and/or professions to promote and advance population health.	The competency requires direct engagement with individual(s) from another sector (in-person or online). Note: the engagement with, and integration of perspectives from, other sectors must be apparent in the product itself (e.g., as through written narrative, introduction of a team in a presentation, etc.). This can be a difficult competency to demonstrate
F22	Apply a systems thinking tool to visually represent a public health issue in a format other than a standard narrative.	For examples: causal loop diagram, systems archetypes, network analyses, concept maps. (Logic models and evidence tables are not sufficient to meet this competency.)

Concentration Specific Competencies		
Competency		Description
Biostatistics	B1	Apply standard probability distributions to public health outcomes.
	B2	Apply and interpret common statistical descriptive and inferential methods, including confidence intervals and hypothesis tests in one-sample, two-sample, and multivariable regression settings.
	B3	Build and interpret appropriate multivariate regression models to analyze public health data.
	B4	Develop practical skills in using statistical software packages for data management and analysis of public health data.
	B5	Develop written reports based on statistical analyses.
Environmental Health	EH1	Examine the direct and indirect human and ecological health effects of major environmental agents.
	EH2	Develop a quantitative risk assessment framework for environmental hazards.
	EH3	Apply knowledge of environmental legislation to case studies to determine jurisdiction and approach.
	EH4	Apply approaches for assessing environmental exposures, including exposure assessment design and methods.
	EH5	Demonstrate cultural sensitivity and appropriate communication when engaged in public health practice and research.
Epidemiology	E1	Assess potential confounders in epidemiology studies.
	E2	Evaluate interaction, effect modification, and mediation in epidemiology studies.
	E3	Evaluate the multifactorial etiology and pathophysiology of chronic diseases.
	E4	Apply criteria for identification, prevention, and control of infectious agents.
	E5	Manage, analyze and interpret large-scale epidemiologic data.
Population Health Management	PHM1	Integrate systems thinking theory to incorporate multiple stakeholders at state and local levels to address a public health issue.
	PHM2	Create an evaluation plan for a public health initiative.
	PHM3	Apply principles and theory of budget preparation, managerial accounting, and financial management to organizations in the health sector.
	PHM4	Develop a survey instrument that validly examines public health research questions and produces data that addresses health implications and their relationship to policy and contexts.
	PHM5	Conduct an economic analysis of a major health policy issue.
Social and Behavioral Sciences	SBS1	Evaluate public health social and behavioral science research so that research decisions, strengths and limitations are addressed.
	SBS2	Integrate social and behavioral science theories and concepts in the development of interventions/solutions to public health problems.
	SBS3	Design and conduct a community needs assessment.
	SBS4	Design, implement and evaluate a public health intervention
	SBS5	Design and develop effective communication products that convey health information to diverse audiences that increase recipients' knowledge and positively impact attitudes, beliefs, and behaviors.