

13-02

STATEMENT OF POLICY

Applied Epidemiologist Competencies

Policy

The National Association of County and City Health Officials (NACCHO) strongly supports incorporating Applied Epidemiologist Competencies (AECs), into both the academic curricula used by schools of public health to train epidemiologists and particularly by governmental health departments for use in position and hiring descriptions and capacity assessments. The AECs, revised as of 2023 to align with the 2021 Core Competencies for Public Health Professionals, define the role of an epidemiologist and serve as a resource for workforce development activities.

Justification

The AECs were first developed in 2008 by the Council of State and Territorial Epidemiologists (CSTE), with input from the Centers for Disease Control and Prevention (CDC), and representatives from industry, academia, non-profit, and local and state public health agencies. The 2023 revisions ensure that the competencies will be useful to the field as it continues to evolve.¹

Revisions to the AECs include: changing from checklist format to a tier-based format with a focus on various skill levels (foundational, intermediate, practiced, and advanced); identifying domains as part of the technical core, i.e. essential to the science of epidemiology, or part of leadership and management, and thus essential to overall public health practice; and incorporating diversity, equity, inclusion, and accessibility (DEIA) principles throughout rather than as a separate domain.¹ As with the initial iteration of the AECs, NACCHO strongly supports adoption of the revised competencies by academia and governmental public health.

The revised competencies should guide schools of public health in the design of applied epidemiology curriculum and the development of internship programs and other professional



development activities. While the Association of Schools of Public Health does list competencies that students in master's level programs should attain during their training,² these competencies do not adequately reflect the circumstances or skill level required in applied epidemiology practice. Epidemiology educational program competencies should reflect both foundational and intermediate skills incorporated in the AECs and include technical, leadership, and management competencies.

Incorporation of the revised AECs into master's of level curricula and use by governmental public health agencies will provide coordination between those who teach public health professionals and those who hire them. This coincides with the initiative to create academic health department (AHD) partnerships, led by the Public Health Foundation (PHF). The AECs provide more specificity in epidemiology skills, while the PHF competencies are broad based for all public health disciplines. AHD partnerships help to strengthen the links between public health practice and academia and to lessen the separation between the education of public health professionals and the practice of public health.³ As local health departments are entering formal partnerships with academic institutions to enhance public health education, training, and research, it is vital for universities and AHDs to utilize the revised AECs in developing epidemiology-specific projects and internship programs within the larger partnerships. These allow students to complete internships or practicums that will prepare them for future epidemiology jobs.

Governmental public health agencies should adapt the revised AECs into their hiring, internship programs, performance management, and employee retention practices. The revised AECs contain evaluation tools to assist professionals and supervisors in assessing skill levels, identifying areas for improvement, conducting performance reviews, and planning for professional development. Additional resources provided by CSTE can assist agencies in adapting the revised AECs which includes worksheets for creating job descriptions, training plans and career portfolios; a crosswalk with the CEPH accreditation standards and interview questions for the four tiers of epidemiologists.

References

1. Council for State and Territorial Epidemiologists. (2023). 2023 Applied Epidemiology Competencies. Atlanta, Georgia. Retrieved February 6, 2024 from <https://www.cste.org/group/CSTECDAEC>
2. Association of Schools of Public Health. (2006). ASPH Education Committee. Master's Degree in Public Health Core Competency Development Project, Version 2.3. Retrieved May 2, 2012, from <http://www.asph.org/userfiles/Version2.3.pdf>.
3. Public Health Foundation. Academic Health Department Partnerships. Washington, DC. Retrieved February 6, 2024 from [Academic Health Department Partnerships \(phf.org\)](http://AcademicHealthDepartmentPartnerships(phf.org))

Record of Action

*Proposed by Epidemiology Workgroup with Workforce and Leadership Development Committee
Approved by NACCHO Board of Directors February 27, 2013*

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