

One Health as a Platform to teach Public Health Competencies: A Cross-Walk Analysis A. Paige Adams, DVM, PhD¹ and Ellyn R. Mulcahy, PhD, MPH²



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Background: Public health competencies are addressed internationally for education by the public health foundational competencies for the Council on Education for Public Health (**CEPH**)¹, and for public health practice by the Foundational Public Health Services (**FPHS**) Model capabilities².

Methods: To better incorporate One Health into public health curricula and provide competency based-skills, we conducted a cross-walk analysis of One Health and public health competencies. K-State specific One Health competencies addressing **Environmental and ecological influences**, **Disease surveillance and quantitative methods**, and **Disease vectors** were mapped to CEPH public health foundational competencies and to FPHS Model capabilities. We evaluated each One Health competency and labeled each as either 'Yes' or 'No', for mapping or not mapping, to each competency area based on course topics and activities used for assessment. We calculated the extent of mapping (relative percentage, or a scale 1-10) of each One Health competency to each CEPH competency or FPHS capability. We used these data to generate radar plots to demonstrate curricular coverage of the competencies.

Results: Cross-walk analyses identified areas of overlapping public health core competencies and capabilities, as well as gaps with less or no coverage. One Health competencies mapped to thirteen CEPH competencies and five FPHS capabilities. Within each competency and capability, there was mapping coverage for each One Health competency. One Health competencies did not map to nine competencies and one capability (see slide 2 for results).

Conclusions: The goals for this project were to examine the One Health curricula using a cross-walk analysis, and to identify gaps and overlapping content areas for One Health knowledge to support education and career preparation.

eferences:

- 1. https://media.ceph.org/documents/D2_guidance.pdf
- 2. https://phnci.org/uploads/resource-files/FPHS-Factsheet-November-2018.pdf



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Results At a Glance: How to view these radar plots? Compare how much area is colored in (One Health) to how much area is not (Public Health) to estimate coverage of competencies and capabilities!

Fig. 1 Mapping to FPHS Public Health Foundational Categories (% coverage, within each capability).

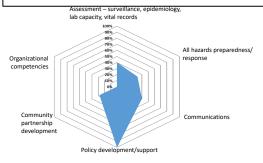
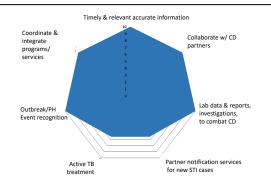


Fig. 4 Mapping to FPHS competencies² in communicable diseases (CD, mapped competencies, scale 1-10).



References:

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Fig. 2 Mapping to FPHS competencies² in chronic disease and injury prevention (CDIP) (mapped competencies, scale 1-10).

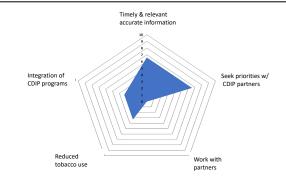


Fig. 5 Mapping to FPHS competencies² in maternal, child, and family health (MCFH, # mapped competencies, scale 1-10; - - is disease vectors).

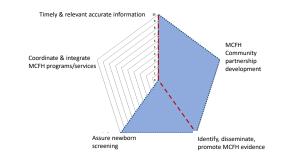


Fig. 3 Mapping to FPHS competencies² in environmental public health (EPH, mapped competencies, scale 1-10).

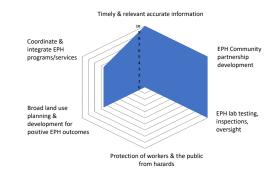


Fig. 6 Mapping to CEPH foundational competency areas 1 based on One Health competencies depicted as Environmental and ecological influences, Disease surveillance and quantitative methods, and Disease vectors.

