

One Health Educational Framework for Health Professional Students

The One Health Educational Framework for Health Professional Students provides a structure for the education of all health professions students to understand the relationship between human health, animal health, and ecosystem health.

Framework Components

Microbiologic Influences On Health and Disease

- Internal exposure e.g. microbiome and potential impact on health and disease
- Antimicrobial resistance and mechanisms by which antimicrobial resistance occurs
- Emergence of new diseases and mechanisms by which previously unknown diseases occur by crossing species boundaries, such as HIV/AIDS, SARS, Ebola virus
- Long standing and re-emergent diseases, such as West Nile virus, rabies virus, animal origin novel influenza viruses, Dengue fever, Chikungunya viruses, zoonotic tuberculosis

Environmental Health

- External exposures including air, food, and water, and the influence of the built and natural environment on health and disease impact of humans on the ecosystem and the potential to produce disease as well as control disease
- Globalization and its impacts on health and disease
- Long term ecosystem changes including climate change and impacts on weather
- patterns and vector epidemiology, ocean and habitat alterations, deforestation, and desertification

Human-Animal Interaction

- Animal assisted therapy and service animals
 - Health benefits associated with interaction with animals
 - Animal-centered industries
-

For each component of the framework, health professions students should have the necessary knowledge to describe and the necessary skills to analyze the following.

- Mechanisms for potential production of human and/or animal disease
- The options for prevention to avoid occurrence of animal and human diseases
- The options for early detection and actions to avoid spread of animal and human diseases
- The options to address health problems once disease is established in a population including interprofessional actions involving the health care and public health systems
- Impact on human health and responses to illness
- Areas for ongoing study and potential application of One Health principles

The One Health Interprofessional Education Initiative seeks to integrate One Health concepts into the degree programs of health professions students. To accomplish this goal, the Association of American Veterinary Medical Colleges (AAVMC) convened a Working Group in collaboration with the Association for Prevention Teaching and Research (APTR) and the Healthy People Curriculum Task Force (HPCTF). [15 case studies were selected for publication.](#)