



## INTRODUCTION

The **One Health** concept is based on the recognition of the connections among environmental, human, and animal health. The purpose of this presentation is to apply the One Health perspective to allied health studies, engendering collaborative efforts within the health professions for the benefit of animals and people. The allied human and veterinary health programs can use One Health as a topic to engage students on a multi-disciplinary level while teaching toward the program's goals.

## BACKGROUND

The idea of the inter-relatedness of human and animal health is nothing new. It is in the past 20 years that we have begun to systematize and expand our study of how environmental change and medical/veterinary disease patterns influence global health. The health of the environment impacts human health in, for example, the effects of deforestation on the spread of invasive species. Animal health affects human health; 70% of all emerging infectious diseases are zoonotic or animal-vectored. The expansion of our understanding of human disease has taught us to look for similar patterns in veterinary medicine, and vice versa.

The Centers for Disease Control, the American Veterinary Medical Association, and the American Medical Association issued statements regarding the value of interdisciplinary research and information-sharing in the early 2000s.

## EXAMPLE TOPICS

Zoonotic diseases, antibiotic resistance, and environmental change are topics that can be applied to classroom studies in biomedical science, clinical laboratory science, nursing, public health, and pre-medical and pre-veterinary medical sciences.

Some “hot topics” that can be inserted throughout the curriculum:

- Emerging diseases such as zika virus
- Anthrax (and other pathogens) as a human and veterinary bioweapon
- The conversion from epidemic to pandemic in the face of environmental change and international travel
- Vaccine development and efficacy in humans and animals.

Veterinary health issues can become human health issues. This wider view enriches classroom discussion, and can lead to an interdisciplinary/interspecies perspective that enriches the student's experiences.

## INTERDISCIPLINARY COURSE AND SEMINAR SAMPLES

- Seminar: Public Health Considerations of Zoonotic Diseases; this would apply to nursing, pre-medical/veterinary medical, health sciences, and health administration students
- Course: “One World, One Health”: Maintaining human health requires an understanding of zoonotic and emerging diseases, food-borne illness, and the effect of environmental change on vectors of disease. This course will use case studies and current events to emphasize the importance of these issues for all health professionals (*sample syllabus available upon request*)

## SERVICE LEARNING (PA, MEDICAL AND VETERINARY STAFF AND STUDENTS IN NICARAGUA)



## CONCLUSIONS

- In addition to serving an important public health role, the One Health concept is a rich area of study and discussion for the allied health professions.
- Working together, we can introduce students to the advantages of interdisciplinary study and provide them with relevant knowledge for their own disciplines.
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