

Web-based Veterinary Curriculum in the Appropriate Use of Antibiotics**Presenter:** Paul Bartlett, Michigan State University**Co-Presenters:** J. Averill, T. Bernardo and R. Malinowski, Michigan State University**Co-Authors:** B. Hartman, and C. Bonner, Centers for Disease Control and Prevention**Session:** Oral**Date/Time:** Monday, April 23; 4-5PM

An educational, research and service program called "Get Smart: Know When Antibiotics Work on the Farm" has been launched by the Centers for Disease Control and Prevention. One activity area is to partner with colleges of veterinary medicine to develop a web-based curriculum to teach students about the public health impact of antimicrobial resistance (AR) and the veterinarian's responsibility to curb unnecessary and wasteful use of antimicrobial agents. The instructional modules acquaint the learner with the importance and nature of the developing AR problem, and present methods for making prudent, evidence-based decisions regarding antimicrobial usage. The program is primarily intended for use by veterinary students throughout the United States, but will be freely available to the international public. The interactive program uses audio, video, and animation to make the presentation varied and entertaining. The introductory module teaches the basic principles and mechanisms of AR through an outbreak investigation scenario. Subsequent modules are specific to international issues and the major food animal species. Emphasis is placed on those treatment situations where epidemiologic evidence indicates that antimicrobial agents are often used unnecessarily, or when alternative treatment techniques or preventive medicine procedures may be more efficacious and economical. For example, the use of historic regional antibiogram information (regarding rates of AR) can aid in deciding if antibiotic use is warranted, and can also be used to select an antibiotic therapy with a low risk of fostering AR among zoonotic pathogens or other bacteria that might pass AR genes to human pathogens.

Biography:

Paul Bartlett, MPH, DVM, PhD is a diplomat in the American College of Veterinary Preventive Medicine and the ACVPM – Epidemiology Specialty. He is an alumnus of the CDC's Epidemic Intelligence Service, Class of 1979. He is a professor at the College of Veterinary Medicine at Michigan State University, where most of his work is at the National Food Safety and Toxicology Center. Dr. Bartlett teaches epidemiology, public health and food safety to the veterinary students. His teaching in the food safety master's degree program includes courses in pre-harvest food safety, food safety and defense, food safety research methods, food safety epidemiology and food safety disease control. Current research projects include foodborne disease outbreak investigation, disease surveillance software, norovirus epidemiology and antimicrobial resistance.
