The National Companion Animal Surveillance Program: a Partnership of Banfield the Pet Hospital and Purdue Universlty for Public Health preparedness

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Session: Oral
Date/Time: Tuesday, April 24; 11-12PM

Significant resources were invested following events on September11 to develop syndromic surveillance to alert public health officials to unusual events indicative of acts of terrorism or emerging infections more rapidly than would otherwise be possible through traditional passive disease reporting. Syndromic surveillance using companion animals, however, has not been a priority for federal agencies, despite the presence of an estimated 150 million dogs, cats, and other pets living in more than one third of all homes and most emerging human infectious diseases being zoonotic. With finding from the Centers for Disease Control and Prevention, a National Companion Animal Surveillance Program (NCASP) was developed at Purdue University using electronic medical records of 80,000 pets that visit >550 Banfield Pet hospitals weekly in 44 states. The goal of NCASP is to rapidly detect and respond to natural and man-made biological, chemical, and physical threats. Syndromic surveillance in pets using constellations of clinical signs and laboratory findings are used by NCASP lo measure the frequency, location, and risk factors, for both endemic and epidemic health-related conditions, and to characterize adverse reactions to veterinary drugs and vaccines. Once a potential threat is encountered, an alert is raised. Banfield veterinarians then collect appropriate owner information and biological specimens to facilitate identification of causal mechanisms and to monitor effectiveness of remediation efforts. Protocols are being developed to share information with the Department of Homeland Security and public health agencies. Examples will be presented of how NCASP was used to study the health implications of Hurricane Katrina, a chemical spill in Georgia, other public health emergencies, and for conducting post-marketing surveillance of the safety and effectiveness of heatworm preventive drugs and rabies vaccine.

Biography:

Dr. Glickman is Professor of Epidemiology and Environmental Medicine at the Purdue University School of Veterinary Medicine and Senior Director of Clinical Research at DataSavant. He currently chairs the Section of Epidemiology in the veterinary school. In addition to a degree in veterinary medicine, he has doctoral degrees in epidemiology and master's degrees in physiology and public health. He is board certified by the American College of Epidemiology. He has published >250 journal articles, book chapters, and monographs. Dr. Glickman has received >10 million dollars in grants and contracts from federal agencies including the National Institutes of Health, the Centers for Disease Control and Prevention, the Food and Drug Administration, the U.S. Department of Education, and the U.S. Department of Agriculture, private foundations, and industry. Honors include an Award of Recognition for Excellence in Research and Teaching from the Teachers of Veterinary Preventive Medicine and Public Health, the Pfizer Award for Research Excellence, the Ralston Purina Small Animal Research Award, an award from the University of Pittsburgh Graduate School of Public Health as one of 50 major contributors to public health, an Alumni Award of Merit from the University of Pennsylvania School of Veterinary Medicine for Advancing Animal Health, the AKC Award for Excellence in Canine Research, and a Student Government award for Excellence in Teaching. He has trained 20 graduate students in epidemiology, international health, and environmental medicine. He served as Chairman of the National Academy of Sciences committee that authored *Animals as Sentinels of Environmental Health Hazards*. Dr. Glickman directed the largest prospective companion animal health study to date involving 2000 pet dogs that were followed for five years to identify causes of gastric torsion and death. In 2004 with a 1.2 million dollar grant from the Centers for Disease Control and Prevention, he created the National Companion Animal Surveillance Program at Purdue University to utilize electronic medical records from >550 Banfield veterinary hospitals in 44 states and laboratory reports from Antech Diagnostics to 18,000 veterinary hospitals in the US, to detect acts of bioterrorism, monitor emerging and zoonotic diseases, study the effects of toxic chemicals in the environment, evaluate impacts of natural disasters, and characterize the safety of veterinary vaccines and pharmaceuticals. He is an advocate for the practice and teaching of evidence-based veterinary preventive medicine and public health. In April, 2006, Dr. Glickman was awarded the Purdue University School of Veterinary Medicine Inaugural Prize for Sustained Excellence in Research.