# Animal Disease Information and Prevention Materials Developed by the Center for Food Security and Public Health

# A.S. Leaflet R2178

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## **Summary and Implications**

The Center for Food Security and Public Health (CFSPH) has created a comprehensive set of PowerPoints, technical fact sheets, and annotated disease images on important foreign, exotic and emerging diseases. Educational information on zoonotic diseases is also available and is delivered in easy to read fact sheets designed for a general public audience. In addition, the CFSPH has developed information on biological risk management for beef and dairy farmers and ranchers and biological risk management materials for veterinarians to use to enhance disease prevention on beef, dairy or equine facilities, and in the veterinary clinic. All of this information is available on the CFSPH website at <u>www.cfsph.iastate.edu</u>.

#### Introduction

The Centers for Disease Control and Prevention provided a three year grant (July 2002 – June 2005) for almost \$3 million to establish the Center for Food Security and Public Health (CFSPH) at the Iowa State University College of Veterinary Medicine. The CFSPH is a CDC Center for Public Health Preparedness and is the only Center to focus on veterinary medicine and zoonotic diseases. The mission of the CFSPH is to increase national preparedness for accidental or intentional introduction of disease agents which threaten food security or public health. We work to increase awareness of bioterrorism, agroterrorism and foreign animal diseases, provide tools on biological risk management, and assist local and state governments to prepare for animal emergencies.

### **Materials and Methods**

The CFPSH initially focused on increasing awareness of bioterrorism, agroterrorism and foreign animal diseases among veterinarians, farmers, medical personnel as well as the general public. A comprehensive set of 118 fact sheets, 60 PowerPoint presentations, annotated images of disease, and handouts on bioterrorism and agroterrorism agents were developed. These resources are available on the CFPSH website (<u>www.cfsph.iastate.edu</u>) which receives approximately 20,000 hits each month. The CFSPH organized five national day-long Train the Trainer sessions for veterinarians. The 346 participants have given presentations on bioterrorism and agroterrorism to over 35,000 individuals across the U.S.

The CFSPH developed and distributed 118,000 copies of a wall chart on the CDC Category A, B, and C agents and high consequence livestock pathogens and their effects on humans and animals. A textbook developed by the CFSPH entitled *Emerging and Exotic Diseases of Animals* was distributed to all graduating veterinary students in the US in 2006 and will be distributed to the class of 2007. The CFSPH also developed 62 condensed fact sheets on important zoonotic diseases for general public audiences (available on the CFSPH website). The fact sheets can be used by veterinary and medical professionals and youth agricultural groups to raise disease awareness and increase prevention practices.

Next, the CFSPH worked on developing biological risk management materials with the goal of providing tools that individuals can use to better protect animals (and humans in the case of zoonotic diseases) from infectious diseases. Increasing on-farm biosecurity reduces the transmission and potential impacts of endemic and foreign animal diseases which threaten food security and public health.

The first set of tools were designed for veterinarians, focused on the route of transmission of disease, and provided practical disease management strategies to use with clients on the farm and in the clinic. The tools were developed for use in beef, dairy or equine operations, or in stationary or mobile veterinary clinics. Veterinarians can use these tools to create a biological risk management assessment question set based on the type of farm being evaluated, conduct a walk through assessment on the farm, enter the results into the database, and a report of the most vulnerable routes of disease transmission is generated, along with recommendations to enhance biological risk management. The CFSPH provided training for veterinarians on using these tools at national meetings in 2005 and 2006. More information is available at www.cfsph.iastate.edu/brm.

The second set of tools, designed for use by beef and dairy producers was completed in July 2006. This project was funded by the USDA Risk Management Agency and is being distributed primarily through the Cooperative Extension Service. Extension specialists and other educators can use the materials to help beef and dairy producers to decrease the risk of introduction and spread of disease and to enhance profitability of their operations. The materials are available in Spanish and English and focus on the routes of disease transmission (aerosol, oral, direct contact, fomites, and vectors). The materials are also available at www.cfsph.iastate.edu/brm. In 2005, the CFSPH began working with several states to provide training and training materials for veterinary emergency response teams. The CFSPH also works with the USDA Animal and Plant Health Inspection Service, and other agencies and associations to develop educational materials related to foreign and emerging animal diseases. The CFSPH has free continuing education courses for veterinarians and animal emergency response team members on the CFSPH website at <u>www.cfsph.iastate.edu/ce</u>. The CFSPH also provided support for 15 veterinarians to earn a Master of Public Health degree from the University of Iowa, College of Public Health while working for the CFSPH. Three of these individuals were selected for the Epidemic Intelligence Service Class of 2006.

## **Results and Discussion**

The CFSPH would like to continue to distribute educational materials on foreign, emerging and exotic animal diseases and encourages interested individuals to visit the website at <u>http://www.cfsph.iastate.edu</u>.