Emerging and Foreign Animal Diseases—Roles for Swine Practitioners

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Recent Emerging Swine Diseases

- Porcine Reproductive and Respiratory Syndrome
- Postweaning Multi-systemic Wasting Syndrome
- Porcine Dermatitis and Nephropathy Syndrome
- Menangle Virus
- Nipah Virus
- H3N2 Swine Influenza
Recent Foreign Animal Disease Outbreaks

- Haiti - Hog Cholera, August 1996
- Netherlands - Hog Cholera, February 1997
- Taiwan - Foot-and-Mouth Disease, March 1997
- Dominican Republic - Hog Cholera, August 1997
Increasing Risk of a FAD

- International Visitors
- U.S. Producer/Veterinarian Travel
- Increase in Imports
- Illegal Importation of Products and Animals
- Bioterrorism
Bioterrorism

Animal biological warfare agents are considered by some experts to be more predictable than human agents in producing widespread epidemics accompanied by devastating economic losses.
Rapid Spread in U.S.

- Multi-state Production
- Genetic Sourcing/Practices
Government Efforts

Animal and Plant Health Inspection Service (APHIS)
- Veterinary Services (VS)
  - Prevent entry of agents and pests
  - Evaluate risks
  - Provide FAD training and information
  - Conduct surveillance
  - Provide diagnostic support
  - Respond to potential FAD
    » READEO

- Plant Protection and Quarantine (PPQ)

- International Services (IS)

Agricultural Research Service (ARS)
- Plum Island Animal Disease Center
Biosecurity: It's Top Priority on Plum Island
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Swine Futures Project

- Examine current VS swine-related services and resources
- Examine pork industry future trends
- Evaluate industry change implications for VS services over next decade
- Develop VS restructuring recommendations to begin meeting service objectives
Swine Futures Project Team

- Dr. Eric Bush, USDA, APHIS, VS
- Dr. Beth Lautner, National Pork Producers Council
- Dr. Jim McKean, Iowa State University
- Dr. Larry Miller, USDA, APHIS, VS
Emphasis Areas

- Quality assurance
- Surveillance
- Emerging animal issue detection / response
EAI Detection and Response Recommendations

- Establish a system for the rapid detection of EAI.

- Develop a collaborative process to appropriately respond to EAI.
Emerging Disease Detection

- Laboratory-based Surveillance
- Practitioner-based Surveillance
- Internet
- State-based Surveillance
- International Surveillance
- Networking with Extension, Military, Other Agencies, etc.
Emerging Disease Response

- No Response
- Education
- Research
- Field Investigative Studies
- Certification Programs
- Interim Control Measures
Industry Efforts

- Animal Agriculture Coalition – National Animal Health Emergency Management Steering Committee
  - AAC
  - AVMA
  - APHIS
  - State Veterinarians
Emergency Management

- Prevention
- Preparedness
- Response
- Recovery
Prevention - Producers/Practitioners

- Provide input in development of import policies
- Pass on information on health status of other countries
- Develop priorities for research
- Solicit funding for activities of State and Federal animal health officials
Preparedness - Producers/Practitioners

- Encourage reporting of suspicious events
- Participate in test exercises
- Disseminate educational information
Response - Producers/Practitioners

- Active participants in decisions on quarantine zones, disposal methods, and use of vaccines

- Distribute information on outbreak situation

- Encourage reporting
Recovery - Producers/Practitioners

- Assure availability of indemnity funds

- Provide feedback to improve future responses
Role of Practitioners

- Take advantage of educational opportunities.
  - CD ROMS
  - AASP Foreign Animal Disease Committee
  - Joint AASP/NPPC Biosecurity Working Group
  - FAD Videos

- Keep FAD or emerging diseases in diagnostic differentials.
Role of Practitioners (cont.)

- Work in your state to ensure adequate planning for FAD and emerging diseases.
  - State Self-Assessment Survey
  - Standards for State Animal Health Emergency Management Systems

- Educate public and Congress on importance of investing in FAD and emerging disease prevention and response capabilities.
Practitioners are the front line defense.