The Farm Foundation’s Symposium on Zoonoses
Understanding the Animal Agriculture
and Human Health Connection

Matching Resources to Specific Diseases
Current and Future

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Safeguarding Animal Health
Outline

• **What’s at risk for agriculture?**
  • APHIS’ rich history of eradicating animal disease for animal and human health benefits
  • New challenges to animal agriculture and VS
  • Future of VS in 2015 and beyond
  • Following a One Health philosophy

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What’s at Risk for Agriculture?

- U.S. agriculture feeds the world
- Protecting the Nation’s herds safeguards the food security of the U.S.
- Today, we must expand our base to include new diseases

- U.S. Livestock and poultry receipts exceed $100 billion per year.
- U.S. has world’s largest fed-cattle industry & is world's largest beef producer
What’s at Risk for People?

- 75% of new human diseases in the past 10 years are of zoonotic origin

- Many of these diseases have the potential to become global problems
Prevention vs Treatment

- Matching resources to risk
- Prevent human infections by controlling disease in animals
- H5N1 HPAI: Most resources for human pandemic preparedness, not the cause: the virus in animals
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Past Successes of Addressing Zoonotic Diseases

• APHIS programs directly impact both animal and human health
  ➢ Programs to eradicate bovine TB (1917) & brucellosis (1934)
  ➢ Then: 20% of humans afflicted with bovine TB

• Today: Both diseases in decline; however
  ➢ 2008: 80 human cases of brucellosis in the U.S.
Addressing Zoonotic Diseases Today

• Changes in human populations & agricultural production provide new challenges

• Trichina Herd Certification Program
  ➢ Voluntary pre-harvest pork safety
Bovine Brucellosis Program

- United States: Class-Free for bovine brucellosis for 12 months
- Significant milestone: In last 5 years, GYA States have lost then regained Class-Free Status
- Success of the program due to our ability to adapt
- Today’s challenge – presence of brucellosis in wildlife in GYA
- Intent: reduce costs, redirect resources to increase wildlife mitigation efforts
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**New challenges to animal agriculture and VS**

- Future of VS in 2015 and beyond
- Following a One Health philosophy
The Changing Agricultural Landscape

- We must adapt to change
- Global travel and trade create pathways for disease
- The volume and complexity of agricultural trade are increasing
- Many new diseases have zoonotic potential
Forces Driving the Need for Change

• Changes in the animal agriculture industry
• Technology
• Emerging diseases & threats beyond disease
• Pre-harvest food safety concerns
• Expansion of international trade
• Tightening fiscal realities
• Agricultural authorities limited to livestock health and productivity
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Adapting Resources to Changing Needs

- VS embarked on an expanded vision for 2015 and beyond.

- Through the VS 2015 Initiative, we will meet changing animal health challenges with a holistic “One Health” approach.
The VS 2015 Initiative

Three key changes are essential:

• Emphasize disease prevention, preparedness, detection, early response

• Provide expertise to assist public health with concerns connected to livestock, wildlife, and companion animal populations

• Expand portfolio on certification services
Strong Partnerships

- State animal health officials
- Agricultural producers & industry groups
- Veterinary organizations
- Emergency management community
- Public health and wildlife agencies & organizations
- International agencies and organizations
- U.S. Government Departments and Agencies

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VS One Health Vision

• Leadership for animal health component of One Health
• VS will help improve global health of:
  - Animals
  - People
  - Ecosystems
  - Society
• Adding society acknowledges economic & political aspects & benefits

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One Health Policies in USDA

• Health science professions, academia, government agencies, NGOs, & animal industries must work together on human, agricultural, and environmental health

• Five USDA agencies involved in avian influenza, pandemic preparedness, and One Health

• Sec. Vilsack created a One Health Multi-Agency Coordination Group and Joint Working Group (co-chaired by APHIS & FSIS) to apply One Health principles at technical level

• Goal: ensure synergy of ideas, reduce redundancy, and improve efficiency
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Following a One Health Philosophy: Collaborating on SIV Surveillance

- APHIS works w/Fed, State, local partners on disease surveillance
- August 2008: CDC & USDA enter into an interagency agreement to study swine influenza virus (SIV)
- CDC provided USDA funding to initiate pilot SIV surveillance
- May 2009: USDA expanded surveillance
- July 2010: USDA revised national SIV surveillance plan
Summary – VS One Health Goals

- Align VS policy, programs, and infrastructure with VS 2015 vision
- Build new collaborations and partnerships and sustain existing relationships
- Spearhead outreach and communication to build credibility, trust, and respect
- Transform VS culture and workforce & build new skills sets
- Apply our unique competencies
Conclusion

• Emerging zoonotic diseases and issues at the human-animal interface highlight the need for One Health

• VS is responding by expanding our engagement in One Health, adapting our resources, and working collaboratively with our partners

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Questions?

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