

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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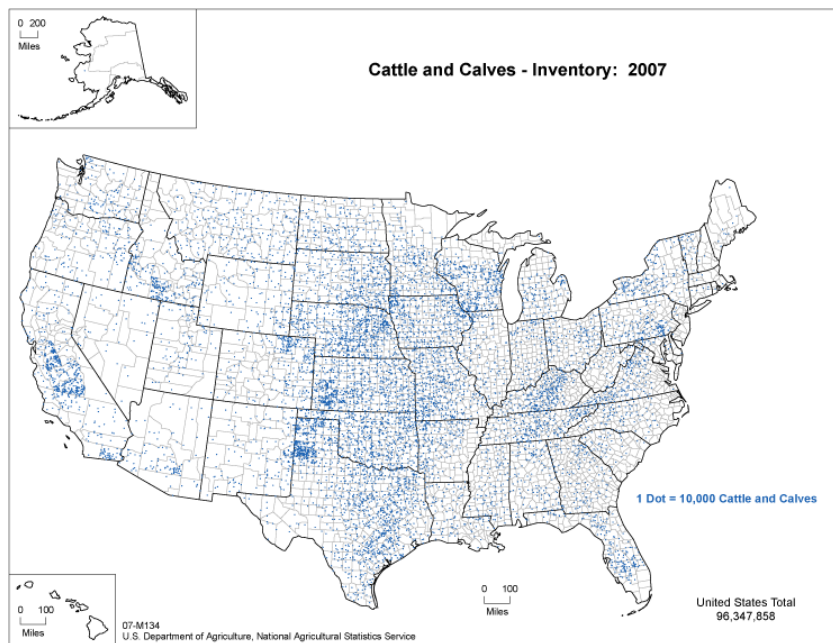
Safeguarding Animal Health



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

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

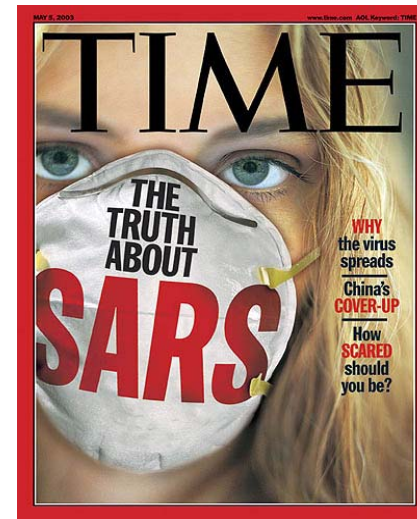


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What's at Risk for People?

- 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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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



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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



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



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?

