

Risk Based Comprehensive and Integrated Swine Surveillance



Paul Sundberg, DVM, PhD

Vice President, Science and Technology

National Pork Board



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Current Surveillance Challenges

- Current funding tied to regulatory disease programs
 - Does not allow flexibility for surveillance in response to changing priorities
 - Makes it a challenge to justify surveillance dollars for current program diseases
 - e.g. PRV
 - Redundancies mean added costs



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VS 2015: The Vision for Veterinary Services

“VS [USDA-APHIS-Veterinary Services] will design and direct comprehensive national animal health surveillance systems capable of finding foreign, emerging and program diseases and of supporting international reporting and trade verification requirements.



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Comprehensive and Integrated Swine Surveillance

A **system** that incorporates:

- Collaborative prioritization
- Defined disease surveillance objectives
- Planned collection and coordinated testing of appropriate surveillance samples
- An infrastructure for collection of surveillance data at multiple risk-based points or “surveillance streams”
- An agreed upon Response Plan
- An IT infrastructure to record and analyze data for appropriate action
- A regular analysis of surveillance needs and tools (planning and evaluation)
- Adequate funding

NOT just a collection of surveillance plans- PRV, Swine Brucellosis, Classical Swine Fever, Vesicular Disease Surveillance, etc.

Adapted from Dr. John Korslund, USDA



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Surveillance Begins Locally but Looks Nationally for the Appropriate Streams

- Sentinel Veterinary Clinics
 - Provides local intelligence and observations
- FSIS condemnation data
 - Broadens the perspective
- Diagnostic lab submissions
 - Focus on clinical disease
- Down the Road
 - Oral fluids vs. serum

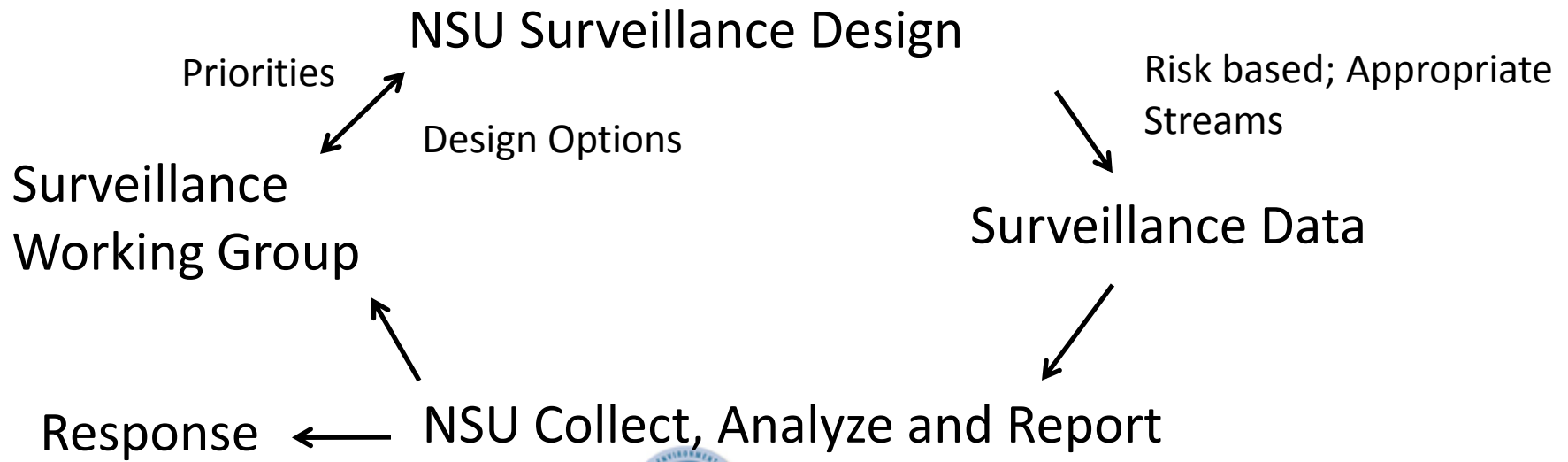


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National Pork Board Swine Surveillance Working Group

- Collaboration of industry, subject matter experts, USDA-NSU, USDA-SHP
- Working Group ranked 27 diseases



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Swine Surveillance Working Group

Disease surveillance priorities:

1. FMD – proof of freedom

- 95% confidence in the detection of 1 case in 1 million pigs in 2 weeks

2. PRV – detection

- 95% confidence in the detection of 1 case in 1 million pigs in 4 weeks

3. CSF – proof of freedom

- 95% confidence in the detection of 1 case in 1 million pigs in 6 weeks

4. Swine Brucellosis - detection

- 95% confidence in the detection of 1 case in 1 million pigs in 4 weeks

5. SIV – detection

6. Trichinae – detection

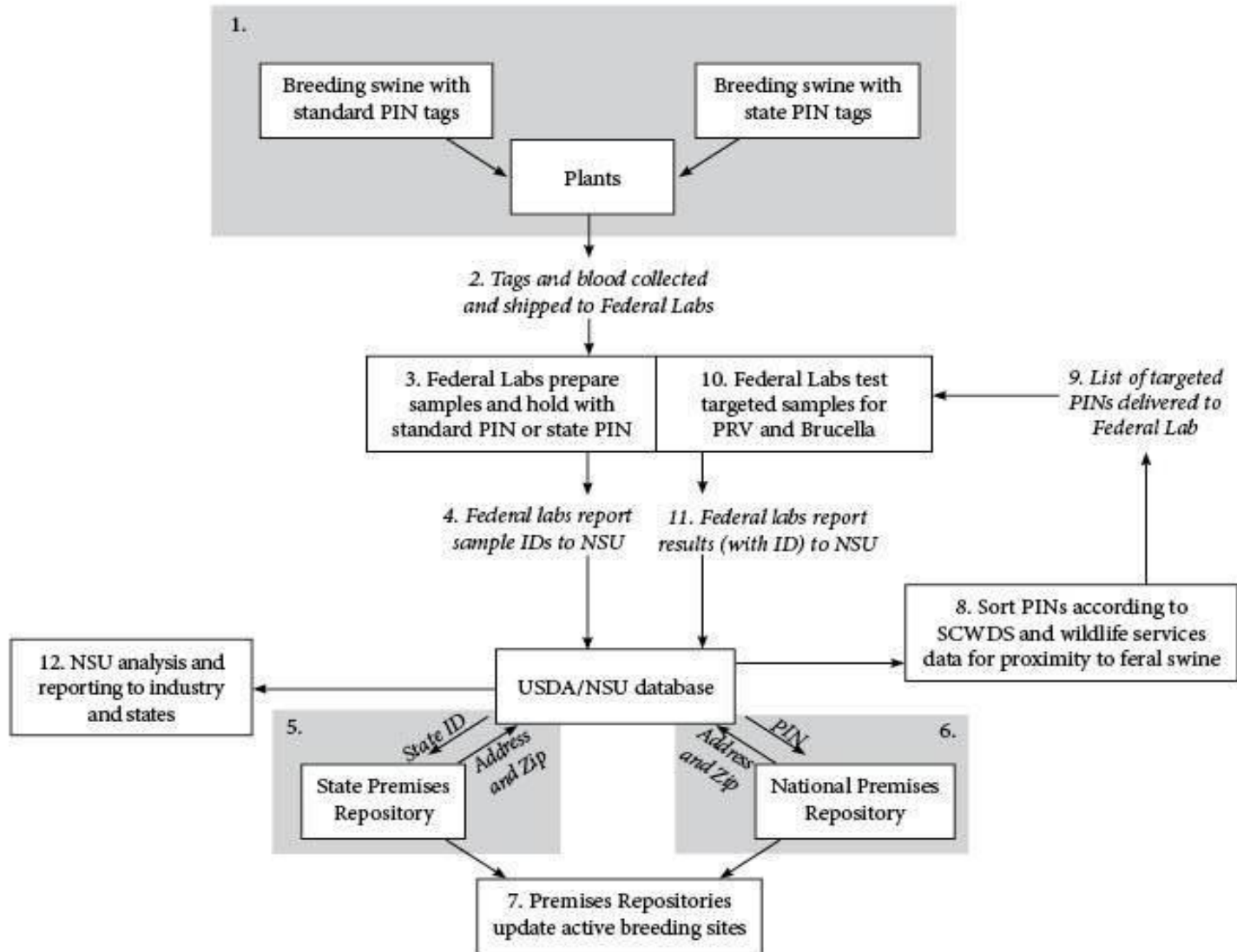
7. Toxoplasma – detection



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Comprehensive Integrated Swine Surveillance 2012 Pilot Project



Industry Support

National Pork Board and National Pork Producers Council

- The National Pork Producers Council / National Pork Board supports the development and implementation of a comprehensive and integrated swine disease surveillance system that addresses animal and public health needs.
- The National Pork Producers Council / National Pork Board calls on all producers to work with their veterinarians and submit appropriate SIV surveillance samples into the USDA SIV surveillance program.

American Veterinary Medical Association

- Submitted by the American Association of Swine Veterinarians during the Winter 2010 House of Delegates meeting
- “Resolved, that the American Veterinary Medical Association (AVMA) supports the development of comprehensive and integrated swine disease surveillance of the US swine herd.”



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Adequate Funding

Funding started with:

- APHIS-VS 2009 Congressional SIV supplemental appropriations through Health and Human Services (\$27 million)

Funding continues with FY2013:

- APHIS has been working . . . to increase the efficiency of animal health surveillance without sacrificing confidence of industry and trading partners . . . targeted surveillance . . . combining surveillance streams . . . one sample is tested for multiple diseases . . .
- Decrease Swine Health Program from \$23 million in 2012 to \$20.3 million in 2013
 - -\$2.6 million (-11%)
 - Modify swine surveillance efforts (-\$2.515 million)



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CISS Stakeholders

- USDA
 - National Surveillance Unit
 - APHIS – Veterinary Services
 - APHIS – Emergency Programs
 - Wildlife Services
 - National Veterinary Services Laboratory
 - National Animal Health Laboratory Network
 - Agricultural Research Service
- HHS
 - Centers for Disease Control
- States
 - State Pork Producer Associations / Pork Producers
 - State Animal Health Officials
 - State Diagnostic Labs
- Packers
- American Association of Swine Veterinarians



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