Enhancing Our Preparedness

Dr. Paul Sundberg, Executive Director
Swine Health Information Center
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www.swinehealth.org
1. Preparedness for a FAD (regulatory disease)

2. Preparedness for another transboundary (non-regulatory) disease
Swine Health Information Center

Mission

Protect and enhance the health of the US swine herd through
• coordinated global disease monitoring,
• targeted research investments that minimize the impact of future disease threats and
• analysis of swine health data
## Preparedness and Response Working Group

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<th>Practitioners</th>
<th>Animal Health Companies</th>
<th>Associations</th>
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<td>▪ Dave Bomgaars</td>
<td>▪ Wayne Chittick, BI</td>
<td>▪ Lisa Becton, NPB</td>
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<td>▪ Marlin Hoogland</td>
<td>▪ Christa Goodell, Idexx</td>
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<td>▪ Conley Nelson, Iowa</td>
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<td>▪ Gene Erickson, NCSU</td>
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<td>▪ Jim Collins, UMN</td>
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<td>▪ Ying Fang, KSU</td>
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<td>Universities</td>
<td>▪ Jane Christopher-Hennings, SDSU</td>
<td>▪ USDA</td>
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<td>▪ Derald Holtkamp, ISU</td>
<td>▪ Sara Ahola, CEAH</td>
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<td>▪ Jeff Zimmerman, ISU</td>
<td>▪ Kelly Lager, ARS</td>
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<td>▪ Sabrina Swenson, NVSL</td>
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*global disease monitoring, targeted research investments and analysis of swine health data*
Monitoring and Analysis Working Group

**Practitioners**
- Joe Connor
- Jer Geiger, Genus PIC
- Steve Henry
- Clayton Johnson
- Gordon Spronk
- Paul Yeske

**Pork Producers**
- Craig Christensen, Iowa
- Jim Niewold, Illinois
- Ray Summerlin, NC

**Universities**
- Dick Hesse, KSU
- Daniel Linhares, ISU
- Rodger Main, ISU
- Bob Morrison, UMN
- Mike Murtaugh, UMN
- Chris Rademacher, ISU
- Stephanie Rossow, UMN
- Albert Rovira, UMN
- Kent Schwartz, ISU
- Fabio Vannucci, UMN

**Associations**
- Lisa Becton, NPB
- Tom Burkgren, AASV
- Dave Pyburn, NPB
- Harry Snelson, AASV
- Liz Wagstrom, NPPC
- Patrick Webb, NPB

**USDA**
- Dana Cole, CEAH
- Michael McIntosh, FADDL

*global disease monitoring, targeted research investments and analysis of swine health data*
Swine Health Information Center

- Screen oral fluid samples
- Duration of shedding in finishing pigs
- Duration of shedding on sow farms
- Sequencing and characterization of the virus
- Diagnostics
  - ELISA for serology
- Efficacy of disinfectants

USDA

- Epi surveys on affected farms
- Koch’s Postulates
  - Historical US
  - Contemporary US
  - Brazilian

**Distribution**

**Manage Movements**

**What’s different?**

**Tools**

**Cleaning up**

**Risk factors**

**Missing something?**

*global disease monitoring, targeted research investments and analysis of swine health data*
2016 Plan of Work

• Preparedness
• Response
• Monitoring
• Analysis
2016 Plan of Work

Preparedness

• Diagnostic development
  – Create the ability to detect high-priority Matrix viruses via PCR or other methods
• Fact sheets (www.swinehealth.org)
• Research
  – Virus rate of inactivation using a shipping model for feed ingredient imports
• Disease entry risk assessment
2016 Plan of Work

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Response

• Rapid response infrastructure plan
  – Swine morbidity/mortality events of unknown etiology
  – Emerging swine disease of known etiology
  – 24 and 72 hour goals
• Emerging disease research
  – PED, Senecavirus A model
• Diagnostics support for emerging disease discovery
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• Continual review of Swine Disease Matrix
  – Reprioritize
  – New additions, including bacterial pathogens
• International swine disease monitoring
  – Develop the network to monitor official and unofficial disease risks and analysis of swine health data
• Disease/biosecurity risk assessment data mining
• Research – feed ingredient surveys
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2016 Plan of Work

Analysis

• VDL swine diagnostic data standardization
  – ISU, KSU, UMN, SDSU
• Swine health monitoring projects
• Swine health data epidemiology analysis projects
2016 Plan of Work

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  – ISU, KSU, UMN, SDSU
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• Swine health data epidemiology analysis projects
Assessing the needs
Funding the projects
Answering the problems

The mission of the Swine Health Information Center is to protect and enhance the health of the United States swine herd through coordinated global disease monitoring, targeted research investments that minimize the impact of future disease threats, and analysis of swine health data.

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