National Veterinary Services Laboratories Avian Influenza Activities Report – FY 2009

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Safeguarding Animal Health

National Reference Laboratory

- Foreign poultry disease testing
- Confirmation of all AI infections
    - Virus identification, characterization, sequencing
    - Antibody subtyping
- Live bird market surveillance
- Import/export testing

Safeguarding Animal Health

National Reference Laboratory

- Reagent production
  - Reference reagents (in-house, research use)
  - AGID antigen, enhancement serum
    - Domestic – 14,000 units (1.6 million tests)
    - International – 383 units (46,000 tests)
- Validation of official diagnostic assays, including new pandemic H1N1 assays

Safeguarding Animal Health

National Reference Laboratory

- Provide annual proficiency tests to National Animal Health Laboratory Network (NAHLN)
  - AI: 243 diagnosticians (55 labs)
- Characterization of H2N3 viruses from poultry and pigs
  - HA and NA genes similar but internal genes consistent with contemporary avian and swine viruses, respectively

Safeguarding Animal Health

International Reference Laboratory

- Provide diagnostic assistance to OIE member countries
  - Dominican Republic
  - Chile
    - Wild bird isolate subtyping
    - H1N1 detection in turkeys

International Reference Laboratory

- Developing a North American Animal Health Laboratory Network (NAAHLN)
  - Mexico
  - Canada
  - United States

- Harmonization of AI diagnostic testing

Safeguarding Animal Health

Twining Project - Brazil

- Training of Brazilian scientists at the NVSL
- In-country training seminar/review at Lanagro-SP

Safeguarding Animal Health

Wild Bird Surveillance for HPAI H5N1 – FY 2008

- >80,000 samples tested; all 50 states
- Screening by rRT-PCR at NAHLN labs
- Presumptive H5 positives submitted to NVSL for confirmation, virus isolation, virus characterization
- **No HPAI H5N1 detected**

Safeguarding Animal Health

Thank You for Your Attention!

USDA National Centers for Animal Health (NCAH) Ames, Iowa