Update: National Animal Health Laboratory Network

USAHA Foreign and Emerging Diseases Committee Meeting

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Safeguarding Animal Health
Overview of Today’s Presentation

- History
- 2012 preparedness activities
- Looking forward
The original 12 NAHLN laboratories

Happy 10th anniversary NAHLN!

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Approved Laboratories

- Newcastle Disease (ND)/Avian Influenza (Al)
- Bovine Spongiform Encephalopathy (BSE)
- Scrapie/Chronic Wasting Disease (CWD)
- Classical Swine Fever (CSF)/Foot and Mouth Disease (FMD)
- Pseudorabies Virus (PRV)
- Swine Influenza (SIV)
- Vesicular Stomatitis (VS)

National Veterinary Services Laboratories

*For specified agents, not all laboratories are currently participating in surveillance testing.

October 2012
Founding Principles and Quality Requirements

- Quality standards
- Competency of laboratory personnel
- Standardized protocols, equipment and reference materials
- Adequate biosafety/biosecurity
- Secure electronic communications and reporting
- Assessment of preparedness through scenario testing
2012 NAHLN Preparedness Activities

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NAHLN Sponsored Trainings

Investigation and communication during a potential FAD or EDI investigation

• May 2012 – VS Memo 580.4 Training provided to NAHLN laboratory representatives as a review that included table top scenario-based exercises

Quality Management System Trainings

• June 2012 – Training provided to an Iraqi scientist as part of a scientific exchange and international capacity building project

• July 2012 – Training provided to NAHLN laboratories and representatives from India, Iraq, Kazakhstan, Kenya, Russia, Tajikistan, Tanzania, Uganda, Ukraine and Pakistan

• September 2012 – AAVLD NAHLN QMS training
NAHLN Diagnostic Development and Validation projects

• Collaborative projects with FADDL and NAHLN laboratories:
  ➢ FMD Penside: Negative Cohort study—completed in January 2012
  ➢ FMD Serology: Negative Cohort study – Fall 2012

• Collaborative projects between FADDL, NAHLN laboratories and FAZD include:
  ➢ FMD PCR in Milk: Inter-laboratory Comparison study—completed in Spring 2012
  ➢ FMD PCR in Milk: Negative Cohort study – Currently underway
  ➢ FMD Penside Negative Cohort study– Winter 2012

• Developing processes and policy for deployment of CSF and FMD ELISAs to NAHLN labs for preparedness

• Developed processes for implementing studies
  ➢ Communication with the stakeholders
  ➢ Approval by each participating State’s SAHO
DHS sponsored series of Agricultural Screening Tools (AST) workshops

• AST III– October 2011
  ➢ Many NAHLN stakeholders participated in the AST III
  ➢ Gathered input on lab-related concept of operations-- specifically use of diagnostic assays during an outbreak, laboratory operations; and prioritization of samples and reagents.

• AST IV– May 2012
  ➢ NAHLN Coordinating Council and other stakeholders to review laboratory related policies and provide input related to and procedures discussed in AST III.
Update on Lab Capacity Estimation Model

- Collaboration between NAHLN/FAZD/AAVLD
- Software tool for evaluating/monitoring NAHLN capacity
  - Allows for labs to define their specific processes and identify their rate limiting steps
  - Allows for estimation of network capacity and sample allocation during an outbreak
Update on Lab Capacity Estimation Model

- Released to all NAHLN labs in June 2012; ongoing training and support
- Used in web-based exercises
- Providing ongoing system enhancements and defect fixes
Web-based exercises

• Program to leverage and integrate existing tools for enhancing preparedness by regularly practicing outbreak response

• Several pilot exercises have been conducted in 2012
  - Input from those informing next steps to best train/prepare labs for exercises
  - Creating a pre-exercise checklist
  - Pre-exercise LCEM modules

• Plan to include additional labs in next exercises
NAHLN Portal: secure mechanism for NAHLN laboratories to share information

- Active modules:
  - Laboratory Directory including funding mechanisms and USDA equipment inventory
  - Collaboration capability through workgroups and webinars

- Next modules for release:
  - SOPs
  - PT
  - Assay performance
Looking Forward

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NAHNLN Strategic Planning
Concept Paper

• September 2011 – Coordinating Council meeting
  - Discuss results and develop concept paper to be shared at USAHA/AAVLD

• May 2012 - Coordinating Council Meeting
  - Further discussion of the NAHNLN concept paper
  - Subgroup from Coordinating Council volunteered to expand document

• September 2012
  - Edits collated
  - Met with WERC Staff
  - Developed work plan and memo

• October 2012
  - Submit completed documents to WERC
  - Gather stakeholder input prior to posting in Federal Register
Lab Capacity Estimation Model

- Phase 2 activities include:
  - Integration with NAHLN portal (ongoing)
  - Incorporate limited budget and accounting capabilities
  - Incorporate monitoring of consumable laboratory supplies and reagents
  - Utilize the national capacity estimates in ICLN exercises
  - On-going support and training
  - Expansion of use in laboratories through training and use in web-based exercises
2013 NAHLN Activities

• Web based exercises
  ➢ Leverage NAHLN Portal and LCEM

• Diagnostic assay development
  ➢ Prioritized based on gaps

• Training
  ➢ QMS
  ➢ Preparedness

• Policies
  ➢ Drafted and vetted
Questions?

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