CVM’s
Veterinary Laboratory Response Network
What’s happened in 2011

Renate Reimschuessel, VMD, PhD
OR Organizational Chart

Office of Research

Director
David White, M.S., Ph.D

Deputy Director
Patrick McDermott, Ph.D.

- National Antimicrobial Resistance Monitoring System (NARMS)
  - Director
  Patrick McDermott, Ph.D.

- Division of Residue Chemistry
  - Director
  Phil Kijak, Ph.D

- Division of Animal and Food Microbiology
  - Director
  Mark Rasmussen, Ph.D

- Division of Applied Veterinary Medical Research
  - Director
  Jeffrey Ward, D.V.M.
  Ph.D.

- Veterinary Laboratory Response Network (Vet-LRN)
  - Director
  Renate Reimschuessel, V.M.D., Ph.D.
To promote human and animal health by collaborating with veterinary diagnostic laboratories to provide scientific information, to build laboratory capacity and to train scientists investigating CVM regulated products (animal feeds/animal drugs)
Need a system to help investigate potential pet/livestock food/medicine related disease

- CVM is developing a new network similar to the FERN system (smaller)
Why do we need Vet-LRN?

• To diagnose feed or drug adverse events in matrices not commonly encountered in food testing laboratories

  • eg. Non-typical animal feed

  • eg. Animal dies, but none of the feed is available for testing
    – need to test tissues/blood
Food labs are used to food Feeder fish
Food labs are used to food
Food labs are not used to some foods for animals:
Food labs are not used to diagnostic samples:
Vet-LRN

Works with other networks but Vet-LRN needs to be at CVM

1 Program Director
  Writes RFA’s
  Interacts with the labs on CVM projects
  Receives data from the projects
  Writes reports

1 Support Scientist
  Assists in these projects
  Conducts in-house investigations
  microbiology/chemistry
Vet-LRN

1 Liaison with OSC
   Monitors incoming complaints
   Interacts with emergency response groups
   Assists in response study coordination

1 Contract chemist
   Responsible for setting up new laboratory equipment dedicated to Vet-LRN
   Developing validation and proficiency protocols
   Conducting in-house testing

These are all tasks that cannot be done by outside networks
How do we decide what we need to investigate?

- Discussions with Office of Surveillance and Compliance
- Discussions with consumer complaint coordinators
- Discussions with veterinary laboratories
- Discussions with clinicians

Coordinate with other FDA groups
- Animal Feed Safety System, EOPS, ORA, CORE
- PetNet
Pet Event Tracking Network (PETNet)

- Launched on August 1 by the Partnership for Food Protection and FDA
- PETNet is a secure, web based information exchange system that will allow FDA and Federal and State Agencies to share initial information about pet-food related incidents, such as:
  - illness associated with the consumption of pet food
  - pet food product defects.
- Voluntary information exchange, surveillance and alert system is designed to provide a real-time mechanism for sharing information
PETNet - cont

- Only accessible to members, who are Federal, State, and Territorial government officials responsible for the regulation of pet food products and the investigation of disease outbreaks in companion animals.

- Intent of PETNet is to increase efficient communication between Federal and State agencies for identifying and potentially responding to concerns associated with pet food.

- For more information: [http://www.fda.gov/AnimalVeterinary/NewsEvents/CVMUpdates/ucm266207.htm](http://www.fda.gov/AnimalVeterinary/NewsEvents/CVMUpdates/ucm266207.htm)
2011 Projects - Chemistry

- Optimize MS-LC melamine and cyanuric acid method in pig muscle, liver, kidney and urine.

- Goal – increase proficiency and capacity

- 3 FERN USDA laboratories
  - Arizona State Public Health Laboratory
  - New Hampshire Public Health Laboratory
  - Washington State Public Health Laboratory
2011 Projects- Micro

- Evaluate pet feeds for bacterial pathogens
  - Salmonella
  - Listeria
  - E. coli 0157H7
  - generic E. coli

- Goal – increase proficiency and capacity

- 6 FERN FDA laboratories
  - FL Dept of Agriculture and Consumer Services
  - MI Dept of Agriculture
  - MN Dept of Agriculture
  - NC Dept of Agriculture
  - OH Dept of Agriculture
  - WA Dept of Agriculture
Stakeholder Meeting March 2011

Met with Veterinary Diagnostic Laboratories to:

- Develop contacts with CVM
- Describe capabilities
- Describe needs
Who was at the stakeholder meeting?

Vet-LRN

15 AAVLD (5)

10 FERN (2)

21 NAHLN (6)
Vet-LRN's Website
http://www.fda.gov/AnimalVeterinary/ScienceResearch/ucm247334.htm
CVM Vet-LRN RFA

- Evaluation of Salmonella in Symptomatic and Asymptomatic Pets

   a Vet-LRN Program Cooperative Agreement

- Goal – gain further insight into the frequency of Salmonella infected companion animals increase proficiency and capacity

- 11 Laboratories will develop standardized protocol for methods and patient selection

- 1100 symptomatic and 1100 asymptomatic fecal samples will be analyzed
Vet-LRN Cases

- Cat with renal crystals
- Potential Salmonella in a Cat (eating recalled product)
- Potential Salmonella in a Dog (eating potentially recalled product)

- Death in Guinea Pigs (possibly feed related)
  Investigated using a Vet-LRN laboratory
Diagnostic Laboratory Feed contamination database

- Last information from diagnostic laboratories compiled up through 2006

- Only listed chemicals

- Current DB will request info on microbial and chemical events
Proficiency testing

- Collaboration with the Moffett Center to administer 4 PT tests during FY 2012

- Salmonella + 3 chemicals (TBD)

- To support proficiency testing requirements of accrediting organizations
Plans

• Work with AAVLD to develop a proficiency (round robin) program which will fulfill needs of both Vet-LRN and AAVLD

• Provide new instruments to Vet-LRN labs to speed up certain chemical or microbial tests.

• Provide training on new instruments
Goals

• Enhance communication between CVM and Veterinary Diagnostic Laboratories
  Stakeholder meeting, monthly updates

• Provide scientific information to CVM
  Salmonella RFA, FERN Collaborations

• Build Laboratory Capacity
  Developed network
  Proficiency testing to begin soon