Updates:

Food Emergency Response Network and Integrated Consortium of Laboratory Networks

Emilio Esteban, DVM, MPVM, MBA, PhD
Laboratory Director
USDA, FSIS, OPHS, WL
May 11, 2005
Secretaries of Interior, Agriculture, Health and Human Services, and Administrator of EPA … shall build on and expand current monitoring and surveillance to:

- Develop robust, comprehensive, and fully coordinated surveillance and monitoring systems, including international information, for animal disease, plant disease, wildlife disease, food, public health, and water quality that provides early detection and awareness of disease, pest, or poisonous agents;

- Develop nationwide laboratory networks for food, veterinary, plant health, and water quality that integrate existing Federal and State laboratory resources, are interconnected, and utilize standardized diagnostic protocols and procedures.
Food Emergency Response Network (FERN)

U.S. Department of Agriculture/FSIS
U.S. Food and Drug Administration
FERN Mission

Mission - Integrate the nation’s food-testing laboratories for the detection of threat agents in food at the local, state, and federal levels.

Scope – chemical, biological, radiological disciplines involving full range of food commodities
FERN Objectives

- **Prevention** – federal/state sampling programs
- **Preparedness** – strengthening lab capabilities/capacities
- **Response** – surge capacity
- **Recovery** – provide assurance to the consumer
FSIS/FERN Reorganization

- Biol. Threat Analysis Branch
- BSL-3 high containment lab
- Regional Coordination Center Personnel
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- Regional Coordination Center Personnel
- FERN Division Office
- FERN Program Support Branch
FERN National Program Office (FERN NPO)

- Co-located in Rockville, MD and Athens, GA
- Responsible for day to day operation of FERN
- Manage and coordinate FERN Support Programs
- Coordinate the national emergency response
- Coordinate Regional Coordination Center (RCC) activities
Regional Coordination

FERN NPO has held 3 Regional Meetings and 2 are planned for 2005.

Purpose:
- Establish operational/communication guidelines within each FERN regional hub
- Communicate FERN objective, policies and current activities
- Enhance collaboration between FERN laboratories within a region
- Provide an opportunity for individual regions to tailor response plans
Regional Coordination Centers (RCCs)

- Five RCCs are located through the U.S. and are staffed by FDA and USDA.
- Ensure adequate screening, confirmatory and forensic capacity within the region.
- Identify needs of the region and convey those needs to the NPO.
- Coordinate regional response of laboratories during an emergency.
FERN Members

99 Laboratories representing 44 States and Puerto Rico have satisfactorily completed FERN Laboratory Qualification Checklists.

26 Federal (FDA, USDA FSIS,APHIS, AMS, DOE, DHS, CBP, DOD);
68 State/territory
5 Local
- 28 Public Health
- 21 Agricultural
- 5 Environmental
- 6 Veterinary Diagnostic
- 5 Other
- Disciplines – 69 Chemical; 73 Microbiological; 26 Radiological
FERN Organizational Structure

Co-Chairs

Steering Committee

National Program Office

FERN Support Programs

Northeast Regional Coordination Center
Southeast Regional Coordination Center
Central Regional Coordination Center
Southwest Regional Coordination Center
Pacific Regional Coordination Center
FERN Support Programs

- Laboratory Outreach
- Method Development/Validation
- Training
- Proficiency Testing
- Monitoring
- Electronic communications
Methods Development/Validation

- Standard Operating Procedure for FERN Methods Evaluation has been established and has been posted on eLEXNET.
  - Process ensures methods will provide consistent repeatable results in food matrices
  - Collaborative efforts will provide effective means to evaluate potential FERN Methods.
  - FERN Methods shared with LRN.
Training

- Developed a training plan which includes both web-based and face-to-face training on methods.

- Recent training done by FERN includes:
  - Real time PCR training – August 2004 (35 Federal, State and Local participants)
  - *B. anthracis* and *Salmonella* training – Aug 2004 (13 Federal and state participants)
Proficiency Testing

- Standard Operating Procedures developed by FERN sub-committee.
  - Process ensures participating laboratories can demonstrate ability to successfully conduct the analysis of CT samples.

Microbiological PT sample for *Bacillus anthracis* issued November 29, 2004. *This was a joint PT sample with LRN involving 66 laboratories.*

Radiological PT sample for Cesium issued December 6, 2004 to 25 laboratories.

Chemical PT sample for Colchicine was issued February 14, 2005 to 35 chemistry laboratories with LC/MS capabilities.
April 2004, 18 Federal and State laboratories received samples for Microbiological and Chemical analyses.
- Practiced coordination and communication protocols
- Evaluated sample preparation, transportation, receipt, and timeframes.
- Method identification
- Data entry in to eLEXNET

September 8, 2004 with 40 participating Federal and State laboratories.
- Assessed the effectiveness and capabilities of the FERN Chem/Micro and Rad laboratories
The data capture and exchange mechanism for the FERN is the Electronic Laboratory Exchange Network (eLEXNET).

**FERN Uses eLEXNET for Collaboration & Data Sharing:**
- FERN National Program Office shares current information, meeting minutes, documentation, and guidance information
- FERN Subcommittees conduct discussions, disseminate information, and develop documentation
- FERN Methods Repository on eLEXNET
- Participants can review information on samples that have been submitted by eLEXNET’s participating laboratories
- FERN Surveillance Assignments: FERN related data can be captured and reported independently
FSIS Cooperative Agreement

Summary of important information from the announcement: Announcement Date: April 20, 2005
Proposal Submittal Due Date: June 20, 2005
FERN Funding is Area 5 in the announcement
Funding is to support FERN Microbiological testing capacities

http://www.access.gpo.gov/su_docs/aces/fr-docs/fr-cont.html

Submit Proposals to:
Wayne Ziemer
Staff Officer
FSIS, FERN
950 College Station Road
Athens, GA 30605
706-546-3591 (ph)
706-546-3518 (fax)
wayne.ziemer@fsis.usda.gov

For Further Information Contact:
Frankie J. Beacorn
Staff Officer
USDA, FSIS, OPHS, Food Emergency Response Network Division Biological Food Security and Emergency Branch
950 College Station Rd. Athens, GA 30605
Phone: 706 546 3578
Fax: 706 546 3518
Frankie.beacorn@fsis.usda.gov
FERN’s Integration with Other Networks

- Plants: NPDN
- Food: FERN
- Animal: NAHLN
- Environmental: eLRN
- Human Health: LRN
Laboratory Networks

- Food Emergency Response Network
- Laboratory Response Network
- National Animal Health Laboratory Network
- National Plant Diagnostic Network
- Environmental Network (proposed)