Laboratory Networking

Regional Seminar for OIE National Focal Points for Veterinary Laboratories
Jeju, Republic of Korea, 5-7 April 2016
Presentation Overview

- Why should laboratories network?
- International Networks
- Regional Networks
- National Networks
- Conclusions
Why Laboratories?

- Infectious diseases transmitted irrespective of national boundaries.
- Regional and international collaborations for responses are moving towards development of regional networks of laboratories.
- Laboratory testing provides the objective, scientific data on which surveillance, diagnosis and control can be based.
Why Network?
Some Benefits of Networking

- Sharing of knowledge and expertise
- Building of trust and relationships
- Access to and coordination of trainings
- Improved procurement
- Surge capacity
- Harmonisation of procedures
Some examples of Laboratory Networks

- International
- Regional
- National
International Networks – Disease specific

OIE/FAO

Foot-and-Mouth Disease Reference Laboratories Network

…and others!
International Networks – Disease specific

Network of Expertise

• Established jointly in 2005 by OIE and FAO to support and coordinate global efforts to prevent, detect and control important influenzas in animals

• Exchange scientific data and biological materials

• Offer technical advice, training and veterinary expertise to Member Countries

• Collaborate with WHO

• Highlight influenza research needs
International Networks – Disease specific

International mobilization

1. Shared commitment WHO/OIE/FAO- priority within the framework of the joint “One Health”

2. Global Alliance for Rabies Control

3. The OIE network of rabies experts -:
   - centers of expertise and standardisation of diagnostic methods.
   - provide a technical and scientific expertise, form opinions regarding the monitoring and control
   - propose scientific and technical training
   - coordinate scientific and technical studies in collaboration with other laboratories and organizations.
International Networks

✓ OIE Twinning - A valuable concept for regional development of diagnostic capacity

- Transferring scientific expertise, knowledge and skills; building the capacity in a particular disease area.
- Ensuring that the candidate laboratory can improve compliance with OIE guidelines and standards.
- Providing a more even world-wide geographical distribution of expertise needed for disease prevention, surveillance and control, OIE want to expand the number and location of OIE Reference Laboratories.

Projects underway
Regional Networks

SEACFMD Laboratory Network (LabNet)

- Pirbright FMD Lab, UK
- Lanzhou FMD Lab, PRC
- Thailand RRL
  - Cambodia
  - Vietnam
  - Indonesia
  - Philippines
  - Lao PDR
  - Malaysia
  - Myanmar
Regional Networks

SEACFMD Laboratory Network (LabNet)

Role of LabNet

• Rapid diagnosis of FMD viruses
  • Early detection and confirmation of FMD virus serotypes
  • Use of appropriate vaccine strain

• Facilitate sending of field isolates to Ref. Labs.

• Strengthen surveillance
  • Molecular epidemiology
  • Mapping on the evolution of FMDV serotypes

• Monitoring vaccine efficacy
Regional Networks

SEACFMD Laboratory Network (LabNet)

Role of LabNet

- Capacity building on FMD diagnosis
  - Exchange visits of experts
  - Regular training programs
- Harmonization of diagnostic protocols
- Quality assurance system
- Facilitate research activities
  - Prioritize areas for research (e.g. role of carrier)
  - Joint research studies
  - Develop proposals for possible funding
SEACFMD LabNet/EpiNet Meeting

6th Meeting
Thailand, 2011

7th Meeting
China, 2012

8th Meeting
Thailand, 2013

9th Meeting
Vietnam, 2014

10th Meeting
Myanmar, 2015
Regional Networks

- ASEAN Laboratory Directors’ Forum (ALDF)
- Regional Animal Health Laboratory Technical Advisory Group (Lab-TAG)
National Laboratory Networks
Laboratories are a cross-cutting function.
Laboratories are a cross-cutting function
Distribution of laboratories and competencies

- Geography
- Political constraints
- Depends on size
- Units may be distributed differently:
  - Several specialist laboratories
  - A central service or local service of a larger laboratory, regardless of whether it is a veterinary laboratory
  - A single activity in a technical unit of a laboratory
- These options are not mutually exclusive, nor is the list exhaustive
Functional and technical distribution in the national network
Range of options for positioning the veterinary laboratory function in relation to Veterinary Services

- **Veterinary Services**
  - Laboratory dedicated solely to Veterinary Services: x%
  - Veterinary Services share Laboratory services: x%

- **Private Laboratories**: y%
- **International/Reference Laboratories**: z%

- **Other**
  - **Govt. Depts.**
  - Private Laboratories: y%
  - International/Reference Laboratories: z%

- **Public Laboratory Facilities**: x%
  - Private Laboratories: y%
  - International/Reference Laboratories: z%
National Laboratory Network structure impacts how we work together!
A reminder of the benefits of Laboratory Networking

- Sharing of knowledge and expertise
- Building of trust and relationships
- Access to and coordination of trainings
- Improved procurement
- Surge capacity
- Harmonisation of procedures
ToRs for OIE National Focal Points for Veterinary Laboratories (VLs)

1. Establish national network of laboratory experts
2. Establish dialogue with Competent Authorities
3. Determine capacity-building needs
4. Compile responses to OIE requests
5. Organise in-country consultations on OIE drafts
6. Prepare comments for the Delegate
7. Maintain contacts at the regional level (FPs / RLs)
8. Collaborate with OIE Reference Centres
9. Prepare proposals for Laboratory Twinning
1. to establish a network of experts in the country on veterinary laboratory issues and/or to communicate with existing networks
ToRs for OIE National Focal Points for VLs

7. to maintain contact with the other OIE national focal points (FPs) for veterinary laboratories that belong to regional networks and with experts of OIE Reference Laboratories (RLs) present in the region
ToRs for OIE National Focal Points for VLs

8. to collaborate with OIE Reference Centres worldwide
Thank you for your attention!