One Health

Strengthening Response Capacities to Emerging Diseases

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Outline

1. Why One Health and Emerging Diseases are important
2. Problem and its major causes
3. Alternative solutions and time incremental approach to address problem
4. How force field analysis is used to understand perspectives of stakeholders
5. Use of Potter model for systematic capacity building
How important Emerging Diseases are currently

• Over 70% of emerging infectious diseases are zoonoses
• Avian and swine influenza now in the forefront of global health problems
• Joint efforts called for e.g. virus surveillance
• These problems have already threatened human health with high burdens of disease, food security and the global economy
Emerging and Reemerging infections - 70% vector-borne or zoonotic

Source: http://www.onehealthinitiative.com/
SARS as a ZOONOSES
Addressed in the context of One Health

A possible cycle for SARS CoV transmission from animals to humans
Problem tree analysis

Effects

- Poor response to a pandemic of animal origin
  - Slow response to EID outbreaks
  - Overlap in program activities
  - Unprepared for emergence of zoonoses

Focal Problem

- Zoonoses control divided among health, agriculture & environment sectors
  - Silo of systems for managing a cross-cutting problem

Causes

- Separate Departments & Separate Secretaries
- Discipline-specific approaches & systems
Systematic Capacity Building

Performance capacity
- requires

Personal capacity
- requires

Workload capacity with Supervisory capacity
- requires

Facility capacity with Support service capacity
- requires

Structural capacity
- Systems capacity
- Role capacity

post-graduate course on One Health Systems Management

National One Health Commission/Authority

Potter & Borough. Systematic capacity building, Health Policy & Planning 2004
Complexity / Time Dimension of Capacity Building

- Tools
- Skills
- Staff & Facilities
- Structure, Systems & Roles

Easier & more technical

Harder & more socio-cultural & political

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National One Health Commission

Potter & Borough. Systematic capacity building, Health Policy & Planning 2004
One Health Solution

Aims to integrate multiple disciplines at all levels towards maintaining the resilience of the health of people, animal populations and the environment within a healthy ecosystem.
The many stakeholders

Department of Health
• National Center for Disease Control & Prevention
• National Epidemiology Center
• Research Institute for Tropical Medicine

Department of Agriculture
• Bureau of Animal Industry
• Philippine Animal Health Center
• Animal Welfare Unit

Department of Education
• Health Division
• Academe – Veterinary & Medical Schools

Department of Interior and Local Government

Department of Environment & Natural Resources

Veterinary and Medical Professional Associations

National Academy of Science & Technology
For change
- Preparedness for emerging diseases of animal origin
- Central leadership, shared resources, multidisciplinary action teams
- Build on existing structures, synergies, institutions

Against change
- Turf issues, unwilling to give up leadership
- Investment on new office, new staff
- Longer time needed to build One Health mindset
Key Outcomes

• Unified effective One Health System management of zoonoses

• Creation of a critical mass of professionals with knowledge and skills to manage and respond appropriately and effectively to zoonoses problems especially highly pathogenic emerging zoonoses
Way Forward

• Plan to propose a project to an international aid agency with my home institute, ANU and DAFF to take stock of the relevant state of affairs and
• show proof of concept of the One Health Management Office in the Philippines
In conclusion

**ONE HEALTH**

highlights the science of multisectoral integration and its relevance to rapid and effective response to emerging diseases of animal origin