One Health Regional Activities

FAO-APHCA/OIE/USDA Regional Workshop on Prevention and Control of Neglected Zoonoses in Asia

Obihiro, Japan, 15-16 July 2015
Dr Yooni Oh, OIR RRAP
ZOONOTIC POTENTIAL OF ANIMAL PATHOGENS

- 60% of human pathogens are zoonotic
- 75% of emerging diseases are zoonotic
- 80% of agents having a potential bioterrorist use are zoonotic pathogens
- Over the last 10 years, the World Bank estimates cost to health and livestock sectors $20 billion
- Risk continues to increase
FACTORS OF EMERGENCE AND RE-EMERGENCE

- International travel and commerce (77%)
- Globalisation of agriculture and trade (70%)
- Microbial adaptation (66%)
- Climate and weather change (57%)
- Changing ecosystems (49%)
- Changing host susceptibility (43%)
- Poverty (38%)
- Economic development (32%)
- Technology (20%)
- Intent to harm (18%)

(Source: Dr Lonnie King, CDC)
2014 REPORTED EVENTS IN ASIA PACIFIC, By AGENT TYPE

Fig 1. Distribution of reported zoonotic events in 2014, by agent type

Viral zoonoses
29 events (41%)

Bacterial zoonoses
29 events (41%)

Parasitic zoonoses
13 events (18%)

Avian influenza, CCHF, Japanese encephalitis, MERS-CoV, Nipah virus, rabies, TBE

Anthrax, brucellosis, leptospirosis, E. coli, Lyme disease, plague, S. suis, TBR, tuberculosis

Anisakiasis, cysticercosis, echinococciosis, schistosomiasis, toxoplasmosis, trichinellosis
2014 REPORTED EVENTS IN ASIA PACIFIC, By AGENT TYPE

<table>
<thead>
<tr>
<th>Zoonosis</th>
<th>Reported in:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rabies*</td>
<td>12 countries</td>
</tr>
<tr>
<td>Avian influenza</td>
<td>10 countries</td>
</tr>
<tr>
<td>Anthrax</td>
<td>7 countries</td>
</tr>
<tr>
<td>Leptospirosis</td>
<td>6 countries</td>
</tr>
<tr>
<td>Brucellosis</td>
<td>5 countries</td>
</tr>
<tr>
<td>Japanese encephalitis</td>
<td>2 countries</td>
</tr>
<tr>
<td>Echinococciosis*</td>
<td>2 countries</td>
</tr>
<tr>
<td>Cysticercosis*</td>
<td>2 countries</td>
</tr>
<tr>
<td>Schistosomiasis*</td>
<td>2 countries</td>
</tr>
<tr>
<td>Streptococcus suis</td>
<td>2 countries</td>
</tr>
<tr>
<td>Toxoplasmosis</td>
<td>2 countries</td>
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<tr>
<td>Tuberculosis</td>
<td>2 countries</td>
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</tbody>
</table>

* Classified as Neglected Tropical Diseases by WHO
This gave rise to the concept of **ONE HEALTH** and its vision of having a collaborative multidisciplinary work on the health of humans, animals, and ecosystems reducing the risk of diseases at the interfaces between them.
THE FAO-OIE-WHO Tripartite

• Recognising the value of cross-sectoral coordination in addressing complex health threats, the **FAO, OIE and WHO** have formed a **TRIPARTITE collaboration**

  ▪ This FAO-OIE-WHO Tripartite has since applied “One Health” approaches by combining their respective expertise to reduce the risks to health at the human-animal-ecosystems interface
THE FAO-OIE-WHO Tripartite

• Published a joint concept note containing objectives and responsibilities under the Tripartite collaboration

• With a shared vision of a world capable of preventing, detecting, containing, eliminating and responding to animal and public health risks attributable to zoonoses and animal diseases through multi-sectoral cooperation and strong partnerships
THE FAO-OIE-WHO Tripartite

• Held a High-Level Technical Meeting to Address Health Risks at the Human-Animal-Ecosystems Interface

• This meeting agreed to a set of key elements for effective national cross-sectoral collaboration

• Also identified “flagship” topics:
  - Zoonotic influenza
  - Antimicrobial resistance (AMR)
  - Rabies
THE FAO-OIE-WHO Tripartite

GLOBAL/REGIONAL

• Strengthening national human and animal health systems towards operationalization of their coordination

  • Training and capacity building on surveillance, early detection and rapid response

  • Strengthening of national human and animal health services through IHR (WHO) and PVS (OIE)
THE FAO-OIE-WHO Tripartite

GLOBAL/REGIONAL

• Support through existing platforms:
  
  • **Early notification** through IHR (WHO), World Animal Health Information System (OIE), INFOSAN (FAO and WHO)
  
  • **Early warning** through the development of Global Early Warning System or GLEWS (FAO-OIE-WHO)
  
  • **Sharing of information** through collaboration between WHO and OFFLU (OIE/FAO global network of expertise on animal influenza)
THE FAO-OIE-WHO Tripartite

GLOBAL/REGIONAL

• Shared risk assessments and risk communication
  [joint risk assessment on H7N9]

• Sharing of information
  [guidance documents, benchmark document]

• Joint collaboration on specific diseases
  • Rabies – FAO-OIE-WHO are working together to raise global awareness and commitment towards rabies elimination
ONE HEALTH in ASIA (examples)
ONE HEALTH in ASIA

The Tripartite continues to translate the One Health concept into a new and fundamental paradigm at regional and national levels.
Tripartite (FAO-OIE-WHO) Collaboration at Regional Level

- Joint activities under:
  - EUHPED and IDENTIFY
  - Support joint coordination at regional and country levels
  - Laboratory aspect
  - Training (field epidemiology training program at regional and country levels)
  - National OH events
  - Disease specific activities
Establishment of ASEAN Collaborating Center on Animal Health and Zoonoses (ACCAHZ)

Regional coordination mechanism on matters related to animal health and zoonoses

Pre 2008
- SEAFMD Transition
- HPAI
- Recognition of the need for an RCM

2008 - 2009
- Conduct a study on Strengthening ASEAN Regional Coordination on AH and Zoonoses

2010
- Agree on the proposed establishment of an RCM
- Establishment of an ad hoc taskforce & TOR
- Ad hoc TF TOR endorsed and supported its implementation by SOM-AMAF 32nd.

2011 – 2012
- SOM-33rd AMAF endorsed the proposal and implementation of preparatory plan
- ACCAHZ Preparatory Committee established
- Develop the Framework of the Establishment and Financing Agreement
India: Best Practice for HPAI Surveillance

How do we ......

Communicate with our Communities?

Work with Forest Dept?

Engage Public Health?

Find it Fast?

In Order To:

and Stop it Spreading?
Veterinary services engaging communities and farmers using participatory approaches in Indonesia
One Health: Enhanced coordination of control efforts, capacity building, awareness raising and rapid outbreak response to control rabies in Bali, Indonesia

Both human and animal rabies cases on Bali have decreased by over 90% since their peak in 2010.
4WL; Indonesia, Vietnam, Bangladesh

Four-way linking for assessing health risks for influenza H5N1 at the human-animal interface
Biosecurity Improvement in Oudomxay Province, Lao PDR
Zoonosis Collaboration in the Philippines (Human Health, Animal Health, Environment)

Philippine Interagency Collaboration on Zoonosis (PHICZ)
Thailand: Adaption of One Health at Country Level

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Central level
FETP (MD&DVM)

Local level
SRRT (Public Health/Animal Health/Environmental Health/Laboratory)

Community level
Public Health Volunteer + Animal Health Volunteers + Wildlife Park Rangers + Environmental Scientist + Naturalists

“One Health” Concept
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Wildlife Experts
Environmentalists
Animal and Wildlife Professionals
ONE HEALTH in ASIA

Status of OH Coordination mechanism in Asia-Pacific Countries (n=19)

Source: Asia Pacific Workshop on Multisectoral Collaboration for the Prevention and Control of Zoonoses Nov 2013 (FAO-OIE-WHO)
ONE HEALTH in ASIA

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ONE HEALTH in ASIA

Status of OH Coordination mechanism in Asia-Pacific Countries (n=19)

Received funding

- Yes: 69%
- No: 31%

Countries with National OH Mechanism

- Yes: 84%
- No: 16%

Source: Asia Pacific Workshop on Multisectoral Collaboration for the Prevention and Control of Zoonoses Nov 2013 (FAO-OIE-WHO)
WAYS FORWARD

• **Multi-sectoral collaboration** is needed in addressing complex health threats

• The last few years have seen this collaboration progress at the **global, regional, and national levels**, however, gaps still remain.

• Continued work is needed to further **harmonise coordination** and **synergise the strengths** between and across sectors, organisations and public-private groups
The FAO-OIE-WHO Tripartite will continue to pursue its shared vision of a world capable of preventing, detecting, containing, eliminating and responding to animal and public health risks attributable to zoonoses and animal diseases through multi-sectoral cooperation and strong partnerships.
THANK YOU FOR YOUR ATTENTION.