Activities of WHO on Zoonoses and Food-borne Diseases in the Asia-Pacific Region

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September 2013
Activities of WHO on Zoonoses
## Zoonoses in the Asia-Pacific Region

<table>
<thead>
<tr>
<th>Endemic</th>
<th>Emerging/reemerging</th>
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<tbody>
<tr>
<td>Anthrax (cattle, sheep, goats)</td>
<td>Avian influenza (H5N1) (poultry)</td>
</tr>
<tr>
<td>Brucellosis (cattle, goats)</td>
<td>Nipah virus encephalitis (bats, pigs)</td>
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<td>Japanese encephalitis (pigs, wading birds)</td>
<td>Leptospirosis (rats, wild mammals)</td>
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<tr>
<td>Rabies (dogs)</td>
<td>Crimean Congo Haemorrhagic Fever (cattle, goats, sheep and hares)</td>
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<td>Kyasanur Forest Disease (porcupines and rodents?)</td>
<td><em>P. Knowlesi</em> malaria (macaques)</td>
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<td>Scrub typhus (rodents)</td>
<td><em>Streptococcus suis</em> infection (pigs)</td>
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<td>Toxoplasmosis (cats, pigs)</td>
<td><em>Trypanosomaequi</em> (horses)</td>
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<tr>
<td>Cysticercosis (pigs)</td>
<td>Canine ehrlichiosis (dogs)</td>
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<td>Cystic echinococcosis (dogs)</td>
<td>Avian influenza (H7N9) (poultry)</td>
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<td>Food-borne trematodes (freshwater fish, crabs, crayfish)</td>
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<tr>
<td>Salmonellosis (poultry, pigs, cattle)</td>
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<tr>
<td>Trichinellosis (pigs)</td>
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</table>
APSED (2010)

- APSED (2010) developed by SEARO and WPRO
- Focuses on bringing together stakeholders who must work together to prevent, detect and control zoonotic diseases
- Collaboration includes data sharing, conducting surveillance and risk assessments jointly, working together on the response, collaboration between laboratories, etc.
- Under APSED (2010) this collaboration is aimed at controlling prioritized zoonotic diseases.
- Importance of collaboration demonstrated by (re-)emergence of avian influenza A(H7N9) and A(H5N1), and MERS-CoV
Zoonoses under APSED (2010)

- **Sharing of surveillance information** to facilitate early warning (surveillance working group, key contacts)
- **Coordinated response** to facilitate rapid investigation and implementation of required control measures (FET(P), joint investigations)
- **Risk-reduction** at human-animal interface
- **Research** to identify and implement evidence-based measures to reduce risk (joint research, ILI sequencing)
FAO-OIE-WHO Collaboration at Regional Level

- At Regional level, FAO, OIE and WHO have established a tripartite coordination mechanism
- Regional workshops to advocate for a One Health approach and to strengthen surveillance, response capacity and cross-border collaboration
  - Collaboration with ASEAN and SAARC Secretariats
- Building trust between different sectors is crucial for achieving close collaboration among multi-sectoral stakeholders in countries
  - Regular consultations and joint trainings
  - Provision of support to priority zoonoses
SEARO Member States

- 11 Countries with approx. 1.6 billion people
SEARO Regional Overview 2013

- All 11 countries have established a coordination mechanism between animal and human health sectors
  - Functionality is influenced by prevalence of some diseases (avian influenza, rabies, anthrax)
- Majority of countries have prioritized zoonotic diseases of national importance and have access to national or international laboratories to confirm priority zoonotic events.
- 9 of 11 countries have systematic and timely collection of zoonosis data
- 7 of 11 countries regularly exchange information between relevant sectors regarding potential/urgent zoonotic risks or events
SEARO Activities 2012-13 to assist Member States

- Development of training modules on recognition, prevention and control of EIDs/zoonoses
- Organization of study tours in various countries
- ‘Hands-on’ training on intra-dermal rabies vaccination (IDRV)
- Shipment and diagnostic support for leptospiroisis
- Support of several workshops in countries
  - One Health workshop in Dhaka, Bangladesh
  - Workshop for highly pathogenic ED surveillance in Jaipur, India
  - IDRV advocacy project in Nay Pyi Taw, Myanmar
  - ‘Training-of-Trainer’ workshop on clinical recognition, case management and control of zoonosis in Naypitaw, Myanmar
SEARO Activities 2012-13 to assist Member States

- Participation of WHO technical staff at 6th Regional Steering Committee Meeting of GF-TADs for Asia and the Pacific and the 3rd Meeting of HPED Steering Committee, 17-19 July 2012, Bangkok
- Providing technical support for rabies control activities in Bhutan and Myanmar
- Coordinating with WHO HQ to supply a regional stockpile with plague rapid diagnostic kits
- Supporting Myanmar to develop guidelines for human rabies prophylaxis and a One Health strategy for prevention and control of priority zoonoses
Challenges in SEARO

• Veterinary public health services are inadequate in many South-East Asian countries
  • Continuous and close collaboration with several sectors esp. veterinary services required
• Zoonoses remain largely unregulated
• Zoonoses attracts attention of national authorities only when major outbreaks occur
• Sustainable funding support remains difficult
• Much more work needs to be done in establishing infrastructure in some Member States.
• Research on zoonotic diseases not given sufficient priority
Next Steps in SEARO

• Additional support for world rabies events will be provided.
• Country-level training on the prevention and control of EIDs/zoonoses has been supported or planned in Bangladesh, Bhutan, India, Maldives, Myanmar, Sri Lanka and Timor Leste
• Preparations for the possible spread of avian influenza A(H7N9) in collaboration with animal health colleagues
WPRO Member States

- 26 Member States with approx. 1.8 billion people
In 25 of 26 Member States coordination mechanisms between human and animal health sectors for zoonotic diseases control were developed:

- Strengthened and expanded to build disease- or activity-specific coordination
- Mechanisms used in responses to disease outbreaks
  - Leptospirosis in The Philippines in August 2012
  - Avian influenza A(H5N1) in Cambodia in first half of 2013
  - Avian influenza A(H7N9) in China on April-May, 2013
WPRO Activities 2012-13 to assist Member States

- 3rd Regional Workshop on Multi-Sectoral Collaboration on Zoonoses Prevention and Control, 26-28 Nov. 2012 in Bali
  - Organized by OIE in collaboration with FAO and WHO
  - Participants included multidisciplinary groups, ASEAN, SAARC and health officials from 19 Asia Pacific countries
  - Review of progress in establishment of a functional coordination mechanism for prevention and control of zoonoses at country and regional levels
  - Sharing of good practices in controlling important zoonoses
Challenges in WPRO

In some Member States:

• Further development of a comprehensive coordination mechanism both at local and national level is required

• Multi-sectoral coordination beyond animal and human sectors needed
  • Environment and wildlife sectors

• Vital field data in each sector not fully shared among human and animal sectors
  • Could have contributed to implementing risk reduction
Next Steps in WPRO

• Continue to encourage the development and expansion of close and sustainable collaboration among human and animal health sectors both at national and regional levels.
  • Outbreak response, surveillance, information sharing, and risk reduction action to emerging and re-emerging zoonotic threats

• WHO in collaboration with FAO and OIE will organize the next Asia Pacific Workshop on Multi-sectoral Collaboration for Zoonoses Prevention and Control
  • Scheduled for November 2013
Activities of WHO on Food-borne Diseases

- International Network of Food Safety Authorities
- Global Food-borne Infection Network
INFOSAN

- Joint initiative between WHO and FAO
- 181 Member States

A global network of national food safety authorities that...
- Promotes the exchange of important food safety information globally
- Responds to international food safety events
- Helps countries strengthen their capacity to manage food safety risks with a goal of preventing foodborne disease
- Support capacity building on the reporting of international food safety events to the global community in collaboration with the WHO Global Foodborne Infections Network
• A network of professionals and institutions working in veterinary, food and public health disciplines committed to enhancing capacity of countries to conduct integrated surveillance of foodborne and other enteric infections
• GFN is an example of multi-sectoral and multi-institution collaboration working within the IHR framework to build capacity.
• Collaboration between WHO (facilitating organization) and FAO and OIE (affiliated organizations)
Evolution of WHO GSS ➤ GFN

Single pathogen programme ➤ multi-issue platform

Bench-top training on *Salmonella*

First *S. typhi* demonstration

Name change to reflect broader scope

2nd Five-year strategic plan

00 01 02 03 04 05 06 07 08 09 10

A fully functional network using the capacity built

Introducing *Campylobacter*

Introducing *E. coli*

Introducing *V. cholerae* & *Brucella*

Introducing MRSA

3rd Five-year strategic plan

World Health Organization
GFN influences capacity building through the following core activities:

- **Training**: Blended delivery mode (face-to-face & e-learning) based on country and participant needs
- **Mentoring**: Provide standardized tools and protocols, reference testing services, post-training implementation projects, and the External Quality Assurance System (EQAS)
- **Targeted communications**: Focused strategic and political communications to Member States and relevant stakeholders to support GFN’s main goal and sustainability
Acknowledgements

• Dr. Gongal Gyanendra, Zoonotic Diseases, SEARO

• Dr. Chin-kei Lee, Emerging Diseases Surveillance and Response, WPRO
Thank you