The recent global spread of H5Nx influenza viruses and implications for animal and human health

The United Nations Theme Group on Health (UNTGH) working group on diseases at the human-animal interface held a meeting on 6 May 2015. It was attended by representatives from the Chinese Center for Disease Control and Prevention (China CDC), China Animal Health and Epidemiology Center (CAHEC), US CDC, international embassies in China, World Health Organization (WHO) and FAO. The main topic of the meeting was the implications for animal and human health of the recent global spread of H5Nx influenza viruses.

Experts from Germany, United States Department of Agriculture (USDA), and Canada reviewed the recent outbreaks of Highly Pathogenic Avian Influenza in their countries and described the emergency responses and relevant measures carried out. Dr Zhou Lei, Epidemiologist from China CDC gave an overview of human infections with avian influenza in China. She highlighted that the best way to deal with human infection of avian influenza is to apply one health approaches.

There was active discussion on a range of topics. These included surveillance in humans and poultry, the role of wild birds in the transmission of influenza viruses, different ideas on the way influenza viruses spread from Asia to Europe and the role of vaccination. Other issues were how to prevent the evolution, emergence and spread of influenza viruses in future and the importance of using one health approaches to deal with influenza viruses with zoonotic potential.

Joint-training on epidemiology and zoonosis control for western provinces held in Xining

Zoonosis control is one of the major public challenges in western China due to the large number of livestock and complex eco-systems. This issue is considered as a priority by both animal health and human health authorities in western provinces. However, there are limited numbers of health professionals with epidemiology background and lack of understanding on the application of one health approaches and this has hindered the effective control of the zoonostic diseases in western China. To address this issue, a joint-training on epidemiology and zoonosis control for western provinces was held from 2-6 June 2015 in Xining, Qinghai Province.

The joint-training was co-hosted by China CDC and China Animal Health and Epidemiology Center (CAHEC), with support from FAO and US CDC. It was jointly delivered by 6 trainers from human health (China CDC/China Field Epidemiology Training Program [FETP]) and 4 trainers from animal health (CAHEC and Xinjiang Veterinary Research Institute) sectors. 50 participants from both human health and animal health sectors were trained. The main topics of the training included: basic epidemiology, one health approaches, outbreak investigation, surveillance, zoonosis control strategy, data analysis, risk analysis and risk communication. Dr Guo Fusheng and Mr Tang Hao participated in the workshop on behalf of FAO, and provided meeting facilitation. Dr Guo also presented on One Health approaches with practical examples.

It was the first joint-training on epidemiology for western provinces in China between animal health and human health sectors. A number of important impacts were gained through the training, including the mitigation of unbalanced development of epidemiology in western provinces. It also strengthened the collaboration among trainers of China FETP and China Field Epidemiology Training Program for Veterinarians (FETPV), provided a good opportunity for participants from both sectors in the same province to establish connection, enhance communication and exchange.
Module 2 of China Field Epidemiology Training Program for Veterinarians (FETPV) in Qingdao

Module 2 of the China FETPV 3rd cohort was held in Qingdao from 22 June to 17 July 2015. The first three weeks’ training was delivered by trainers from the Royal Veterinary College (RVC), London, with assistance of the Chinese trainer team. Key topics of the training included surveillance, sampling, diagnostic test, data analysis, and spatial analysis. In addition, trainers from the Friedrich Loeffler Institute (FLI), Germany; Bundesinstitut für Risikobewertung (BfR), Germany; and French Agricultural Research Centre for International Development (CIRAD), France also delivered several scientific workshops on surveillance to the trainees. 20 trainees from the national, provincial and municipal veterinary agencies attended the training. The fourth week training was delivered by Chinese trainers and the FAO GIS consultant Dr Zhou Xiaoyan. GIS application into epidemiology was an important focus of this week. Meanwhile, the Chinese trainers guided trainees on their field study design. Module 3 of the China FETPV will be held in November/December 2015.

FAO China ECTAD attendance at the 9th Annual Regional ECTAD Meeting (AREM) in Bangkok

Prof John Edwards and Dr Guo Fusheng attended the 9th Annual Regional ECTAD Meeting (AREM) in Bangkok from 12-15 May 2015. Main objectives of this meeting were to identify key elements of the draft Regional Strategy (2016-2020) of ECTAD Asia and to align key planning and technical issues with the development of EPT2 and budget allocation processes. Prof Edwards reviewed the progress of China project, highlighted the success of China FETPV and its potential to be used as a platform for EPT2 project delivery, and how multi-lateral collaboration mechanisms could be beneficial to the EPT2 and the epizone approach. Dr Guo Fusheng delivered a presentation on application of the FETPV network and poultry market chain studies for H7N9 in China.

Chinese partners using social media for effective communication and information exchange

With the widespread use of social media in China, WeChat (a new type of social media tool) has become very popular among Chinese partners who attended the training courses organized by FAO in the past. Trainees of China FETPV Program 2nd cohort and 3rd cohort, Chinese trainers for China FETPV, trainees from the joint One Health training course, and participants of the veterinary epidemiology trainings for university academic staff have all set up their own WeChat groups. These have become good platforms for communication, information exchange and knowledge sharing after the training has ended. For instance, the Chinese trainers for China FETPV frequently discussed about the arrangements of the curriculum and teaching topics in the WeChat group. Dr Guo Fusheng and Mr Tang Hao from FAO China ECTAD also joined some of these groups, and when there was a discussion on technical related issue in the group, they actively participated in the discussion as well.

Because of the unique features of the new social media tool, namely, fast, easy to use, multiple functions (support not only text message, but also voice message, video call, etc.), increasing number of Chinese partners are now using social media to communicate, exchange ideas and share information, and good outcomes were delivered through this. Strengthening and using these networks will be a focus of future activity.

Upcoming activities

1. The Third Veterinary Epidemiology training for the Executives will be held from 6-7 July 2015 in Qingdao.
2. The Second workshop for Training of Chinese trainers and the Linking Epidemiology and Laboratory Research on Transboundary Animal Diseases and Zoonoses in China and EU (LinkTADs) WP3 workshop on field Epidemiology training will be held from 8-10 July 2015 in Qingdao.
3. The LinkTADs WP3 workshop on risk-based surveillance and evaluation of surveillance systems will be held from 13-14 July 2015 in Qingdao.
4. The LinkTADs WP4 workshop on vaccine development and evaluation will be held from 16-17 July 2015 in Harbin.
5. The advanced risk analysis and risk-based approaches for disease control for university academic staff will be held from 27-31 July 2015 in Wuhan.
6. Prof John Edwards will provide epidemiology training in DPR Korea from 29 June to 2 July 2015.