

Strengthening surveillance, value chain analysis and biosecurity for H7N9 Influenza in China: MoA and FAO held joint training to further strengthen H7N9 prevention and control

The FAO Emergency Center for Transboundary Animal Disease (ECTAD) China office and the Veterinary Bureau of the Ministry of Agriculture (MoA) jointly held a training program on strengthening surveillance, value chain analysis and biosecurity for H7N9 influenza in China. The three-day training on strengthening surveillance, value chain analysis and biosecurity was held in Guangzhou City from 18th to 20th March 2014. It was attended by over eighty participants, including representatives from the MoA, senior staff (Directors/Deputy Directors) from the provincial veterinary authorities around the country, the China Animal Health and Epidemiology Center (CAHEC), China Animal Disease Control Center (CADC) and the Field Epidemiology Training Program for Veterinarians (FETPV) network. The training included a mixture of formal presentations (delivered by two FAO international consultants, Dr Les Sims and Dr Nick Taylor, national trainers and FAO ECTAD staff), case studies and group discussions.



▲ H7N9 Training Group Photo



▲ Dr Les Sims making a presentation in the meeting

A number of positive outcomes were achieved during the training, including:

- Training provincial leaders from all provinces has the potential to significantly improve the implementation of plans for the control of H7N9 influenza in China;
- Several Provincial Directors were extremely interested in getting assistance with the development of more specific operating procedures for surveillance and biosecurity for H7N9 influenza. Taking the generic principles and turning them into location specific procedures was seen to be a priority; and
- Training provincial directors at the same time as their FETPV graduates/trainees provided a strong interaction and is expected to bring long term benefits.

The training demonstrated the determination of the Chinese government to actively respond to H7N9 influenza and it further enhanced the collaboration between FAO and the Veterinary Bureau of the MoA.

The training on the 21st March focused on advanced value chain analysis. Dr Nick Taylor with assistance of FAO ECTAD China staff conducted the training of 30 veterinary staff from the three target provinces (Hunan, Yunnan and Guangxi), CAHEC and members of the FETPV network. As one of outcomes from the workshop, representatives from Guangxi, Yunnan and Hunan Provinces agreed to combine, in a joint initiative with FAO support, to pursue the development of location specific standards for biosecurity; and to carry out value chain analysis in their provinces.



▲ H7N9 training in Guangzhou

Field sampling for Emerging Pandemic Threats Plus (EPT+) project in Guangdong Province



▲ Field sampling at a pig farm in Guangdong

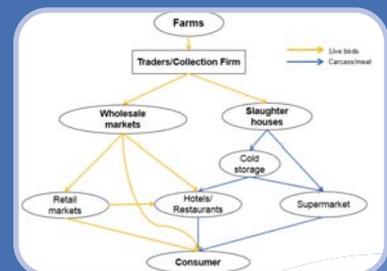
Dr Guo Fusheng, National Technical Advisor of FAO ECTAD China and Dr Yang Huanliang, expert from the FAO Reference Centre for Animal Influenza at the Harbin Veterinary Research Institute (HVRI) travelled to Guangdong Province from 2nd to 6th March 2014 to take swine nose swab and blood samples in the province. Prior to the sampling, a coordination meeting with the Provincial Center Animal Disease Prevention and Control (ACDC) was held to discuss sampling details. The sampling was done in two locations where genetic diversity was found in influenza viruses isolated in an earlier study in 2013.

The joint team from Guangdong Animal CDC, Harbin and FAO carried out sampling in eight pig farms and two slaughterhouses between 3rd to 14th March.

On each farm 50 nose swabs and 50 blood samples were collected and about 700 swabs and blood samples were taken from pigs at each slaughterhouse. Dr Guo joined the sampling team to train the staff and ensure successful implementation. During the sampling, questionnaires were used to obtain information about the production, biosecurity measures, human contact with pigs, feeding and management.

CAHEC and FAO ECTAD jointly conduct a pre-survey for a meat chicken market chain study in Anhui Province

FAO ECTAD China office conducted a joint activity with the Veterinary Bureau of the MoA, CAHEC and Queensland University from 23rd to 24th March in Ningguo County, Xuancheng Prefecture, Anhui Province. This was a pre-survey of meat chickens (broiler) to test the methods and questionnaires to be used in market chain study were carried out in the next few months. The main objective of the pre-survey was to validate the questionnaires for the broiler market chain study to be conducted in Anhui and Jiangsu provinces in the middle of 2014. This validation aimed at assessing the ease of comprehension, relevance to the intended topics, effectiveness in providing useful information, and the degree to which the questions are interpreted and understood by different individuals.



▲ The value chain for live poultry and fresh or frozen meat

General information from the county level veterinary service about local broiler industry, trade and transportation was obtained during the survey. Ms Zhou Xiaoyan, PhD student from Queensland University and Mr Li Yin from FAO ECTAD China visited one mixed-wholesale live bird market (LBM), one retail LBM and three broiler farms. The research team tested the questionnaire by interviewing different people, including broiler farmers, live bird markets managers, live poultry vendors and consumers. They obtained information on: biosecurity measures; knowledge, attitudes and practices (KAP) about disease control; and changes on their behavior before and after the two waves of H7N9. Two live poultry brokers were also interviewed to learn about their trading practices and their behavior in response to H7N9 influenza. Based on the interview, the research plans and questionnaires will be modified.

Upcoming Activities:

1. Representatives from the Ministry of Agriculture, China will visit FAO HQs in Rome from 22nd to 23rd May 2014.
2. A Scientific Workshop for the LinkTADs (Linking Epidemiology and Laboratory Research on Transboundary Animal Diseases and Zoonoses in China and EU) project will be held in Shanghai from 14th to 16th April 2014.
3. The Annual Inter-Regional ECTAD Meeting (AIREM) will be held in Siem Reap, Cambodia from 23rd to 25th April 2014.
4. Introductory training course for veterinary epidemiology for North Western provinces will be held in May 2014.