

Extract from the final report:

**Recommendations of the joint FAO/ OIE Emergency regional meeting on
Avian Influenza control in animals in Asia
Bangkok, Thailand 26 to 28 February 2004**

Group 1

Situation, notification, achievements and recommendations

1. Situation and notification

Heavy losses in poultry populations commenced in the region in mid 2003. Starting in December 2003, eight countries and territories¹ in the region have reported confirmed outbreaks of H5N1 to OIE. Since early February 2004 outbreaks have not been reported from additional countries.

The geographic distribution, rate of spread and severity of this epizootic are unprecedented. It is estimated that more than 100 million birds have died or have been killed in stamping out measures following OIE guidelines. Two countries have used vaccination as an additional disease control tool (Indonesia and China). In addition, Pakistan is currently experiencing an outbreak of H7N3 and has adopted a strategy of stamping out combined with vaccination.

The origin of the H5N1 outbreak and the mechanism(s) for its rapid and vast dissemination, both nationally and internationally, is not yet understood. The disease has had disastrous affects on the poultry industry through its impact on international trade and domestic consumption of poultry products. The public health impact has been most apparent in Viet Nam and Thailand with the deaths of 22 people. In some countries the disease situation is not clear because of weaknesses in diagnosis, surveillance capacity and variable adherence to obligations for timely and accurate reporting.

More frequent updates of the disease situation in animals is necessary to allow preventive measures in neighboring countries and to facilitate emergency preparedness for any necessary animal and public health interventions.

Reporting of significant animal disease events should be independent of commercial and political considerations.

2. Achievements

Achievements to date have been significant.

There is evidence that in some countries the massive control efforts undertaken have reduced the overall level of disease. In other countries the disease situation is not clear.

Countries have taken various disease control measures including culling infected flocks, quarantine and movement control, disinfection of affected premises and emergency

¹ Cambodia, China, Indonesia, Japan, Laos, Republic of Korea, Thailand and Viet Nam

vaccination in some countries. However, implementation of these measures should be broadened, strengthened and tailored to individual country situations.

Contingency plans have been prepared and activated by non-infected countries.

Efforts have been undertaken to link the activities by the different national ministries such as agriculture, human health, and trade to address this epizootic through a multi-sectoral and comprehensive approach.

3. Recommendations

A regional avian influenza coordination group should be formed to facilitate joint decision making, information sharing and training.

Member countries better fulfill their obligations for early and regular disease and epidemiological information notification to the OIE.

There should be an agreed mechanism for the systematic collection and epidemiologic analysis of all animal disease outbreak data, and comprehensive molecular analysis of field virus strains. This should be linked to public health surveillance systems.

The capacity of national animal and public health services for disease surveillance, response, control and prevention activities should be strengthened.

Group 2

Control strategies for Highly Pathogenic Avian Influenza (H5N1) in Asia

Incident Action Plan

The overall goal for response to a Highly Pathogenic Avian Influenza is to detect, control and eradicate the agent as quickly as possible to return individual farms to normal production and the country to disease free status. The response target time to accomplish this goal should be four months or less, as response efforts become more difficult to maintain after such a period of time. Avian influenza may impact the abundance, availability, cost or safety of the country's food supply, and the ability to market agricultural products. Control and elimination of avian influenza relies on three basic principles which make up the operational components of a response:

- Preventing contact between susceptible animals and HPAI agents is accomplished by the following actions: quarantine and movement controls, biosecurity measures, and epidemiologic investigations with risk assessments, tracing and surveillance.
- Stopping the production of the agent by the infected animals. This is accomplished using euthanasia and disposal of infected and exposed animals.
- Increasing the disease resistance of susceptible animals. This is accomplished by strategic vaccination.

To accomplish the control of HPAI the following is a summary of the specific recommendations discussed by the participating countries.

Organizational approach to the delivery of control strategies

Throughout the course of the presentations by both infected and non-infected countries, the need for cooperation across county boundaries was a common theme. For any country's programme, be it to eradicate the disease or remain free, depends upon their neighbour's success. For this reason it is imperative that the following be implemented immediately:

- A regional coordination group should be formed by FAO, OIE, WHO and the central governments of the countries in the region to allow joint decision making, resource and information sharing. This group should establish goals and objectives of the regional plan in sufficient detail to guide planning and operations.
- Establish a Veterinary Task Force in charge of preparing emergency control, contingency and response plans should include, among others from other agencies, individuals responsible for the public health sector for consultation by these authorities.
- Each country will need to assess and further develop adequate capacity within their veterinary infrastructure (human resources, equipment and laboratory supplies to name a few) to accomplish the recommendations contained in this report.
- The development of emergency preparedness programmes should be completed to prevent the establishment of infection or reinfection.

- A zoning approach to expand free areas while driving the disease into smaller and smaller pockets is essential to control within the region.
- A regional laboratory network system needs to be established as the closest laboratory may be in a neighboring county. This would also allow reagent production and sharing as needed.
- Development of common educational materials for biosecurity and public health should be completed and shared with the region for translation and distribution across the region would be essential for biosecurity and containment.

Notification

- International reporting standards of the OIE is essential to establish confidence on the world stage of veterinary actions and progress toward stated goals.
- Additionally, the development and use of a common daily situation reporting format that can be used for internal planning purposes is critical to continual evaluations of the programme. This reporting format should be simple but sufficient to demonstrate progress toward goals.

Country zoning/compartimentalization, quarantine, movement controls and surveillance

The primary means of spread is by movement of infected birds, materials or means of transport. While each country has applied quarantine and movement controls in known infected areas, adequate surveillance may not have been conducted in what is thought to be “free” areas. Participants also discussed the need for a coordinated regional approach to eradication.

- Poultry populations should be divided into 3 categories (industrial commercial poultry, small commercial production and village poultry (subsistence farming and pet birds).
- Countries should move to a system of zones based on populations of poultry, geographic areas or disease status with the aim of developing free zones and recovery of export capacity.

Epidemiology

Given the unprecedented nature of the current disease outbreak it is inadequate on a global scale to allow a country by country epidemiologic report. A regional epidemiologic study must be conducted to assist in decision making and planning for the region.

- Resources should be made available to conduct an epidemiologic assessment by international and local experts to develop a descriptive epidemiologic analysis of the outbreak.
- A molecular analysis of isolates should be conducted with the assistance of the OIE/FAO/WHO reference laboratories to complement the epidemiological analysis.

- Support for research on disease transmission among other things to help control the disease in the region.

Strategic vaccination

A discussion of the use or non use of vaccine followed a presentation on the advantages and disadvantages of vaccines for avian influenza. The generally acceptable summary of that discussion is that:

- Vaccine is a valuable tool in the control and elimination of avian influenza
- Vaccine alone is unlikely to lead to a successful eradication; however vaccination combined with stamping out and adequate surveillance will likely lead to eradication in less time.
- Strategic vaccination in birds, if accompanied by appropriate surveillance will reduce the amount of virus excreted and lead to less viral exposure for humans.
- Vaccine, if used, must be produced in accordance with OIE guidelines.

Stamping-out policy for infected poultry (including valuation, disposal, cleaning and disinfection, biosecurity and animal welfare)

- Infected and susceptible animals will be euthanized and disposed of as soon as possible but striving for the recommended time of within 24 hours.
- Susceptible animals and on all suspect premises will be subject to regular inspection and observation over two or more incubation periods of the disease.
- If resources are limited, premises will be prioritized so that those with high potential for active spread of the agent are acted on before those that do not have a high potential for active spread.
- Depopulation should be accompanied with adequate and timely compensation payment to owners of animals and materials requiring destruction to prevent the spread of avian influenza.
- A study should be conducted looking at alternatives to compensation and analyzing the hazards, risks and alternative schemes for compensation should be conducted.
- Provide humane euthanasia methods for all animals to be euthanized.
- Contaminated and potentially contaminated materials, including animal carcasses, will be properly disposed of within 24 hours of the destruction of the susceptible animals. Disposal will be done in a manner that does not allow the avian influenza agent to spread, has little to no effect on the environment, and conserves meat or animal protein if logistically supportable from a biosecurity viewpoint.

- All premises on which animals are euthanized and disposed of will be required to be cleaned and disinfected.
- Biosecurity procedures to prevent the spread of avian influenza will be implemented within 24 hours of the identification of the first presumptive positive premises

Wildlife management

Massive killing of wild birds thought to be pests in the region lead to massive famine and failed crops since the wild birds in fact were controlling crop pests more than being crop pests. Therefore wildlife not only warrant protection due to the aesthetic and cultural values, but also because of the ecosystem “services” provided at very low costs by animals and plants in the environment. As a result:

- Wild birds should not be depopulated in an attempt to control avian influenza but separation, as much as possible should be attempted.
- Reducing contact rates between wild birds and large commercial poultry operations to prevent wild waterfowl from direct or indirect contact.
- Village poultry health care programmes, including possible vaccination programmes and certainly health/husbandry education is the best approach to 1) provide entree for surveillance operations, 2) reduce disease incidence, 3) improve rural livelihoods, and 4) reduce the threat or introduction of diseases into wild bird populations.
- Ministries of agriculture, as well as ministries of natural resources should limit the trafficking of wild birds, and ban the mixing of domestic and wild animals in live markets.
- Wildlife infectious disease surveillance programmes, both in semi-urban areas and in remote, rural areas may provide insights and early warning about diseases circulating in the wild prior to livestock outbreaks.
- Investment in raising awareness and capacity building is needed to allow more countries to begin integrating health monitoring programmes as they develop natural resource management efforts.

Rehabilitation

- Plans to rebuild the poultry sector must be developed and implemented to set the poultry industry in a more biosecure position and protect livelihoods.
- Establishment of educational programmes for improved poultry production should be started.

Group 3

Human health

Conclusions

- The occurrence of Avian Influenza in Asia is unprecedented in scope and geographical distribution.
- There is a clear link between the occurrence of highly avian influenza in humans and a history of exposure to poultry infected with highly pathogenic avian influenza.
- Where outbreaks are still present in animals, there remains a risk to public health.
- Since the source of infection is of animal origin, control strategies should be focused on avian species and prevention in other susceptible animals, including humans.
- Continued enhanced surveillance of both animal and human disease and transparency in sharing of information is essential for improved decision making.

Recommendations

- Veterinary Task Force in charge of preparing emergency control, contingency and response plans should include, among others from other agencies, individuals responsible for the public health sector for consultation by these authorities.
- Preventing infection in individuals at higher risk of exposure (veterinarians, cullers, laboratory workers, health care workers, etc) should involve provision of personnel protective equipment (PPE), vaccines and antivirals, training, technical guidance and advisories. Those individuals who, either working in specific diagnostic laboratories or in field control actions may be exposed to high concentrations of virus, should have baseline serum drawn.
- Public awareness programme for avian influenza should focus on health hazards of handling infected or diseased birds (farmers, children), or contaminated equipment and material (egg crates, cartons, bird cages, ...).
- Potential public health consequences of selected strategies for the control of HPAI should always be considered. In dealing with a zoonotic infection, the veterinary services should consult with the public health sector when developing animal health country or regional programmes. Accepted tools and procedures used for the control of the disease in animals (e.g. vaccines) should also decrease the risk of exposure of the infection in the human population at large. As new tools (e.g. new vaccines) become available these should be assessed to ensure they do not pose human health risk.
- There is no risk to human health from consumption of wholesome and properly cooked, or processed products, including eggs. Good hygienic practices should always be applied in food preparation.
- Potentially exposed, known infected, or diseased poultry which are culled, should never enter the human or animal food chain, and be must be properly disposed of. Eggs produced under systems of potential or known exposure should likewise not enter food chains.

- Samples of animal origin should be sent to the national reference veterinary laboratory for preliminary or primary diagnosis with further dispatch to reference laboratories. Reference laboratories of OIE, FAO and WHO are recommended to share timely results of their analysis with other laboratories, the world community and most certainly the authorities of the country of origin. Samples of the material and/or isolates should be shared with appropriate laboratories able to handle the agent in question and possessing proper import permits. Veterinary laboratories should conduct diagnostic procedures according to the OIE *Manual of Standards for Diagnostic Tests and Vaccines*.
- External communiqués by UN bodies and the OIE, as they relate to zoonotic disease control where concerted action is warranted, should deliver concordant messages.

Group 4
Regional and international coordination, approach to countries

- 1) Asian member countries of the FAO and OIE have outlined their national strategies related to the control of highly pathogenic avian influenza (HPAI). They will take into account the recommendations from FAO-OIE Conferences held in Rome (3-4 February 2004) and Bangkok (26-28 February 2004) to prepare their short, medium and long term programmes related to the control of HPAI and other priority epizootics in animals to protect public health and to rebuild their poultry sector where relevant.
- 2) ASEAN and SAARC are the relevant institutions for the coordination of regional policies for animal health, in their member countries under the guidance of the Regional Steering Committee of Global Framework for the Progressive Control of Transboundary Animal Diseases (GF-TADs).
- 3) Member countries and donors will refer to the preliminary FAO-OIE assessment of needs defined during the Bangkok Conference (26-28 February 2004) as a guide for bilateral and regional arrangements.
- 4) Emergency preparedness plans must be developed in each country and at regional levels to allow rapid response to new outbreaks of highly contagious diseases.
- 5) Member countries and donors will refer to the OIE standards as references in the definition of new policies on animal health and zoonoses to be implemented through national and regional programmes for the short, medium and long-terms.

These standards include:

- Quality of vaccines;
 - Diagnostic methods;
 - Quality and evaluation of veterinary services;
 - Humane killing of animal and carcasses disposal methods;
 - Safety of animal and animal products in regional and international trade;
 - National surveillance and notification procedures of animal diseases to the OIE; and,
 - Zoning and compartmentalization.
- 6) Member countries and donors will refer to WHO guidelines for all occupational human health and safety.
 - 7) The world-wide FAO-OIE GF-TADs is an appropriate mechanism to ensure harmonization of policies to be implemented to face the avian influenza crisis and other epizootics in Asia. In this context, four regional and six national Technical Cooperation Programme projects have already been approved (US\$ 5.5 million). Other emergency donors contributions have also been made available to countries.
 - 8) Member countries and donors consider that the benefits of prevention outweigh the cost of emergency response.

In addition, the final general session in its final deliberations, recommended that the Chief Veterinary Officer or her/his representative of infected countries and countries at risk meet again in mid 2004 to monitor progress of the implementation of the programme.