

FAOAIDEnews

Avian Influenza Disease Emergency

Update on the Avian Influenza situation (As of 22/10/2004) – Issue no. 24



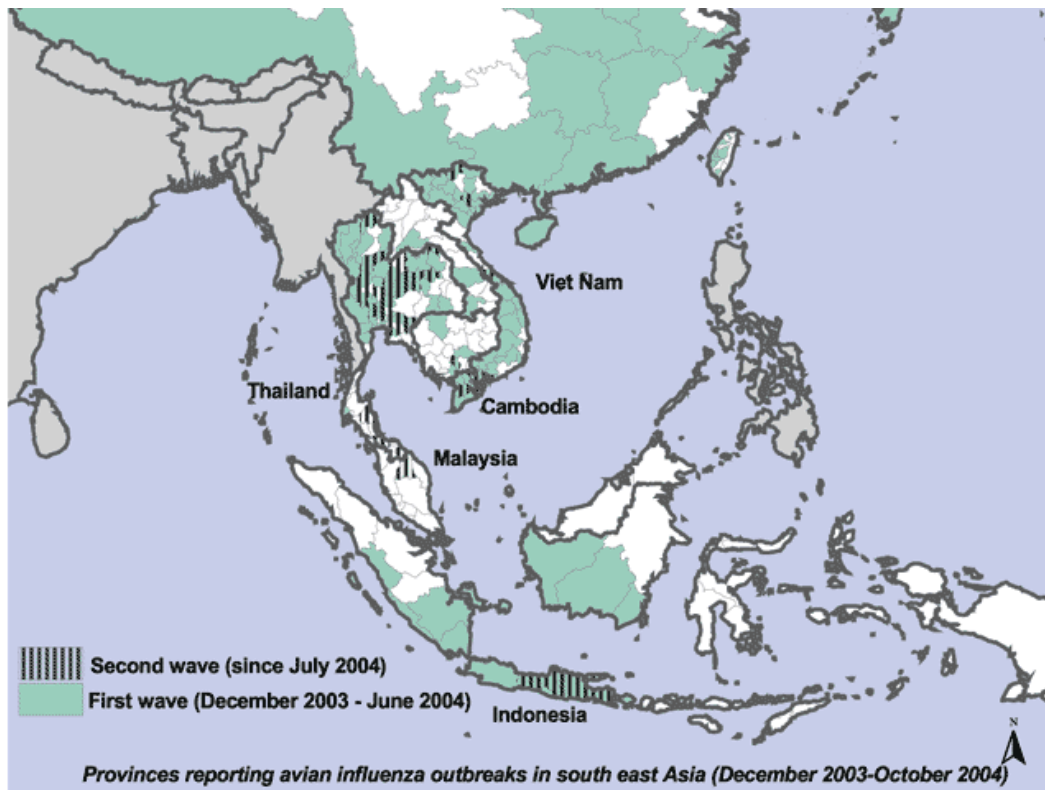
Ducks and chickens at a wholesale market

The information summarized below is gathered from official and non official sources, which are quoted in the text. AIDE news is prepared by the FAO Technical Task Force on Avian Influenza.

1. Latest information on Avian Influenza

Outbreaks of H5N1 Highly Pathogenic Avian Influenza (HPAI) have been suspected and confirmed in Cambodia, Indonesia, Malaysia, Thailand and Viet Nam. FAO issued Recommendations on the Prevention, Control and Eradication of Highly Pathogenic Avian Influenza in Asia on 27/09/04.

Country situation



Thailand: Since 03/07/04, avian influenza infections have been confirmed in 55 provinces and nearly one million birds have died or have been culled. As at 20/10/04, 291 locations in 42 provinces were subjected to 21 days-surveillance period imposed by the Department of Livestock Development (DLD), Ministry of Agriculture and Cooperatives.

Deaths in tigers have been reported at Sriracha Tiger Zoo in Chonburi province since 14/09/04. Fifty three out of a total of 441 tigers have died or been culled so far - aged

between 8 months to 2 years – with 30 more tigers are currently reported to be sick. The animals fell ill with flu-like signs and gradually died of respiratory failure with post mortem finding of severe pneumonia. The tigers had been fed raw chicken carcasses bought from a broker who has received their supplies from a large chicken slaughter house as well as small slaughter houses nearby. Zoo staffs have separated sick tigers and the remaining tigers are now being fed cooked chicken bones. Tests conducted at the National Institute of Animal Health confirmed infection with avian influenza H5N1 virus. Since 14/10/04, a total of 54 tigers have shown clinical signs tested positive.

A nine year-old girl in Phetchabun Province died on 03/10/04 and was confirmed to have been infected by the H5N1 virus. A 32 year-old woman in Kampaeng Phet Province confirmed to have been infected by the H5N1 virus, has recovered from the infection. (22/10/04, Source: Government, FAO, WHO, media website)

Number of confirmed human cases
(19 Jul.04 - 4 Oct. 04, source WHO)

Country /Territory	Total cases	Deaths
Thailand	4	3
Viet Nam	5	5
Total	9	8

Viet Nam: Since the end of June, avian influenza has been confirmed in 14 provinces, and 46,984 birds have died or have been culled. New cases of avian influenza outbreaks were reported in Tien Giang Province on 28-29/09/04, in Long An Province on 30/09/04, Ben Tre Province on 01/10/04, with government operations culling 900 ducks, 2000 chickens and 2000 quails respectively. There were also suspected cases reported in chickens in Soc Trang Province on 1/10/04, and in Vi Thanh commune of Hau Giang province on 17/10/04. (18/10/04 Source: FAO, Government, media website)

Cambodia: The first and the only avian influenza H5N1 outbreak since April 2004, was detected on 21/09/04 in Kandal province and 4,560 birds have died or have been culled. Suspected mortality due to avian influenza virus infection in ducks, chickens or pigs were reported in Phnom Pehn (29/09 and 14/10), Rattanakiri Province (05/10), Kandal province (06/10 and 12/10), Prey Veng Province (06/10). However, all tested negative for the virus. (14/10/04 Source: FAO, Government).

Malaysia: Deaths of a large number of birds were reported on oil platforms in Terengganu state on 13/10/04. Samples were taken to test for HPAI. Since 17/08/04, outbreaks of avian influenza have been confirmed in 9 villages in Kelantan Province and 17,972 birds were reported to have died or been culled. The last avian influenza outbreak was on 22/09/04. (13/10/04, Source: media website)

Indonesia: H5N1 virus was confirmed in chickens which died in Kranggan Harjo, Toroh district, Grobogan regency, Central Java province. (05/10/04, Source: media website)

2. Recommendations on the Prevention, Control and Eradication of HPAI in Asia

- **FAO Recommendations on the Prevention, Control and Eradication of Highly Pathogenic Avian Influenza (HPAI) in Asia**-this is an FAO position paper based on peer reviewed publications, meetings with government officials and expert consultations including OIE and WHO experts.

Summary

Factors to consider in determining the appropriate strategy for control: The strategies chosen by veterinary authorities to control HPAI in compartments, countries or regions are determined by a number of factors. Endemically infected places include those with reservoirs of infection that either cannot be eliminated or can only be eliminated by changing the farming system significantly. Farming systems such as outdoor production of ducks on ponds present a high likelihood of

establishing and maintaining reservoirs of infection. Vaccination is more appropriately used in countries or compartments with endemic infection than those where the virus does not occur.

Wildlife Susceptibility varies with species and with the strain of virus. Authorities should take action to limit the exposure of farmed chickens and other poultry to wild birds by improving the biosecurity of farming enterprises. Where exposure cannot be limited, and there is evidence of a high level of HPAI in wild birds, vaccination against H5N1 should be considered.

Farming and marketing systems Farm management and marketing systems influence the probability of poultry being challenged and becoming infected with H5N1 HPAI. FAO has broadly defined the following production sectors:

Sector 1: Industrial integrated system with high level biosecurity and birds/products marketed commercially;

Sector 2: Commercial poultry production system with moderate to high biosecurity and birds/products usually marketed commercially;

Sector 3: Commercial poultry production system with low to minimal biosecurity and birds/products usually entering live bird markets;

Sector 4: Village or backyard production with minimal biosecurity and birds/products consumed locally.

Live poultry markets are important sites for multiplication of avian influenza viruses. Infection can spread from these markets to farms via the movement of contaminated people, poultry, cages and transport equipment. Egg marketing practices can also lead to the spread of avian influenza viruses. The epidemiological implications of pigs as hosts of HPAI viruses remain to be fully investigated. However, it has been suggested that farms that include poultry (especially ducks) and pigs appear to present a greater likelihood of pigs becoming infected with avian influenza viruses and for reassortment events to occur in the pig.

International trade For countries or compartments that are involved in international trade in poultry or poultry products, infection with HPAI may result in severe economic losses due to closure of export markets. These countries and compartments have a strong financial interest to eliminate the virus as quickly as possible and regain their export markets. Surveillance during and after the outbreak is important to demonstrate that the infection has been eradicated and virus is no longer circulating in the country or compartment of interest. Strict application of the compartmentalisation concept and the use of a Differentiating Infected from Vaccinated Animals vaccination strategy may enable earlier resumption of export, based on acceptance by the importing country of surveillance results confirming that there is no field virus circulating in vaccinated flocks. When an exporting country has defined a zone or compartment, based on implementation of the measures stipulated in the *OIE Terrestrial Animal Health Code*, an importing country should recognise the existence of this zone or compartment and accept the application of the appropriate measures with regard to the importation, or transit through its territory, of commodities from the zone or compartment.

Animal Health Infrastructure The Animal Health Infrastructure comprises the Official Veterinary Services, which have the mandate to control transboundary animal diseases via central and field services, the diagnostic laboratory infrastructure and the broader stakeholder group, including industry, private sector veterinarians, district/village animal health workers and smallholders. Therefore, the Official Veterinary Services are key players in animal health in all its ramifications. There must be a strong chain of command and scientific capabilities and infrastructure related to disease diagnosis, surveillance, data analysis, reporting, and disease control must be continually reinforced or augmented. The Official Veterinary Services must work closely with partners in industry, the private sector, the veterinary profession and other stakeholders, particularly when implementing disease control measures that will have a major impact on producers and consumers of poultry products. HPAI must be a reportable disease. The involvement of non-veterinary

animal health workers is important. Veterinary authorities must implement disease awareness programmes that clearly explain the advantages for prompt reporting of disease and the consequences for those not reporting. The content and presentation of this message must be appropriately structured for diverse audiences.

Economic, Political and Social issues Analysis of the costs and benefits of different approaches supports informed choice of control strategies. It can provide guidance on whether a proposed strategy is economically viable, the potential source of finance, the risks of non compliance with regulations and the best means to provide exit strategies for producers and processors who cannot afford to comply with more stringent measures.

Public health issues H5N1 HPAI is a zoonotic disease. WHO has recommended that urgent measures be implemented to reduce and eliminate the cycling of influenza viruses in poultry. WHO and relevant national human health authorities should be consulted on strategies that are implemented by veterinary authorities to protect public health in responding to HPAI.

The full text of the Guiding Principles is available on:

http://www.fao.org/ag/AGA/AGAH/EMPRES/tadinfo/e_tadAVI.htm at Relevant articles/publications:
or <http://www.fao.org/docs/eims/upload/165186/FAOrecommendationsonHPAI.pdf> (233KB)

3. Surveillance and Post-epidemic rehabilitation activities – What next?

- **The Inception Workshop for TCP/RAS/3007 “Diagnostic Laboratory and Surveillance Network Coordination for Control and Prevention of Avian Influenza in East Asia”** will be held in Beijing on 27-29 October 2004. The meeting will be attended by Chief Veterinary Officers from the region, Heads of the National Veterinary Laboratories and Epidemiologists, representations from OIE and WHO, FAO experts from Rome and Bangkok. The objective of the meeting is to set up a sub-regional (East Asia) network of national veterinary diagnostic laboratories and epidemiology units, in order to improve the quality of the laboratory diagnosis and the understanding of the epidemiological situation.
- **The National HPAI Workshop under TCP/CPR/3004 “Emergency assistance for the control of avian influenza”** will be held in Beijing in the week of 31 October 2004. The workshop will be held following the inception workshop and will train national veterinarians and laboratory staff on HPAI epidemiology and diagnostic skills.
- **National workshops and a regional workshop of TCP/RAS/3010 - Emergency Regional Support For Post-avian Influenza Rehabilitation** were held in Vientiane, Lao PDR, on 15-16 September; Jakarta, Indonesia, on 4-5 October; and, Ayutthaya, Thailand, on 11-12 (national) and on 14-15 October 2004 (regional) to recommend strategies for recovery and rehabilitation after avian influenza outbreaks. The following is the summary of the national workshop in Thailand:

Thailand (national workshop): Sectors have been defined by production systems as: 1) Large producers for export, intensive production; 2) Medium level with 10-20 000 birds (layers, broilers); 3) Small farmers with native chickens, ducks, fighting cocks, quails (grass roots level farmers). Categories 1 and 2 depend on import of grand parent/parent stock while group 3 has its own native gene pool spanning over hundreds of years. Proper measures should be introduced to preserve biodiversity of these native chickens. The economic margin of categories 1 and 2 is high and they can restart poultry production in comparison with group 3 which is highly vulnerable. Education will enhance discipline, movement control, carcass disposal and good practices in general, as problems are often related to lack of knowledge. Extension services at the sub-district level should be involved in training of farmers. Academic experts should be pooled for education of farmers at the sub-district level. The

Government needs to propose measures that are applicable to farmers since there are a lot of social factors and constraints. Control measures should not be solely based on western models such as the culling of millions of birds, which is against Buddhist law, and thus creates “silent protest” by small farmers. More funds are needed to be allocated at provincial level for more autonomy and to have contingency plans for application at local level.

Sound and comprehensive policies can create a safe environment for poultry producers and for consumers. One of the “Measures to be Implemented” would be the registration of all types of poultry including pet birds and fighting cocks. Continual public awareness campaigns should allow farmers to be well informed on precautions to be taken and the fundamentals to restart poultry farming. The introduction of zoning will support the process.

The policies for rehabilitation should be supported from the private sector, from the politicians and also from international institutions such as FAO. One important factor to be foreseen is the upgrading of education. Key people need to be identified at sub-district level and be involved in information dissemination.

Proposed models for small scale poultry production are: a) 1-10 chickens; b) 10-100 chickens; and c) 100 to few hundreds chickens. Promotion of biosecurity at farm level is an important factor to prevent the introduction of avian influenza as well as other infectious diseases. Communal poultry raising at village level (40-200 households) can be a suitable model to study education, culling and compensation when problems occur. Learning Centres and demonstration farms for technology transfer and dissemination; National Institution for Poultry Production and Development and National Task forces (genetic conservation) are needed. It was recommended to the Government to have clear, implementable, transparent and sincere policies.

- **Three-day training seminar on the detection and eradication of avian influenza and Newcastle disease** was held in Philippines on 27–29 September 2004. The seminar was organized by the United States Department of Agriculture, Animal and Plant Health Inspection Service in coordination with the Philippine Bureau of Animal Industry (BAI). The 40 seminar participants included the bureau's laboratory staff as well as veterinarians assigned to the various BAI regional offices.

4. Actions taken – follow-up

- **Recent Missions (September - November):**

*We will be grateful if other organizations/countries could send us information on their assistance missions to the countries concerned.
(e-mail to: Avian-Influenza-Registration@fao.org)*

[Region]

- Dr. P.Gautier, (France) Participating workshops (Poultry Production Expert), Ongoing (Lao PDR and Thailand)
- Dr. F. Dolberg (Denmark) FAO consultant (Poultry Production Expert), Ongoing (Mission to Cambodia, Indonesia, Lao PDR and Thailand).

[Cambodia]

- Dr. A. McLeod, FAO AGAL (Rome) Senior Officer (Livestock Policy). 1-3/09/04
- Dr. Wantanee Kalpravidh, FAO RAP (Bangkok), Project Co-ordinator, 1-3/09/04
- Dr. Y. Froehlich (France) FAO consultant (Project Technical Adviser), Ongoing.
- Dr. L. Huaguang (USA/China) FAO TCDC expert (Laboratory diagnostics), To commence in the week of 07/11/04
- Dr. C. Benigno, FAO RAP (Bangkok) Animal Health Officer, 1-3/09/04

[China]

- Dr. E. Trevor (Hong Kong SAR) Laboratory Expert. To commence in the week of 24/10/04

- Dr. L. Sims (Australia), FAO consultant (Avian Influenza Disease Management). To commence in the week of 24/10/04
- Dr. S. Kahn (Canada/Australia) FAO Consultant (Programme Management and Coordination). To commence in the week of 25/10/04
- Dr. V. Martin, FAO AGAH (Rome) Animal Health Officer (Infectious Diseases Emergencies). To commence in the week of 25/10/04

[Indonesia]

- Dr. C. Benigno, FAO RAP (Bangkok) Animal Health Officer, 3-6/10/04
- Dr. GuerneBleich, Emmanuelle, FAO AGAP (Rome) Animal Production Officer (Small Animals), 3-6/10/04
- Dr. S. Morzaria, FAO Consultant, 15 – 20/09/04
- Dr. J. Lubroth, FAO AGAH (Rome) Senior Officer (EMPRES). 18-25/09/04

[Lao PDR]

- Dr. C. Benigno, FAO RAP (Bangkok) Animal Health Officer, 14-17/09/04
- Dr. L. Huaguang (USA/China) FAO TCDC expert (Laboratory diagnostics), Ongoing
- Ms. E. Bautista (Philippines) FAO TCDC expert (Project finance & administration officer), Ongoing

[Malaysia]

- Dr. H. Wagner, FAO RAP (Bangkok), Senior Officer, RAP, 6–8/09/04

[Singapore]

- Dr. S. Morzaria, FAO Consultant, WHO Expert Consultation on Outbreak Communications, 21-23/09/04

[Thailand]

- Dr. GuerneBleich, Emmanuelle, FAO AGAP (Rome) Animal Production Officer (Small Animals), 6-15/10/04
- Dr. J. Lubroth, FAO AGAH (Rome) Senior Officer (EMPRES). 25-28/09/04

[Viet Nam]

- Dr. A. McLeod, FAO AGAL (Rome) Senior Officer (Livestock Policy), 8-10/09/04
- Dr. Wantanee Kalpravidh, FAO RAP (Bangkok), Project Co-ordinator, 7-10/09/04
- Dr. C. Benigno, FAO RAP (Bangkok) Animal Health Officer, 7-10/09/04

5. Resources available

Relevant articles/publications:

- FAO-EMPRES (Emergency Prevention System against transboundary animal and plant pests and diseases) Avian Influenza website:
http://www.fao.org/ag/AGA/AGAH/EMPRES/tadinfo/e_tadAVI.htm
- FAO Recommendations on the Prevention, Control and Eradication of Highly Pathogenic Avian Influenza (HPAI) in Asia
<http://www.fao.org/docs/eims/upload/165186/FAOrecommendationsonHPAI.pdf> (233KB)
- Guiding Principles : Highly Pathogenic Avian Influenza Surveillance And Diagnostic Networks In Asia (FAO Expert Meeting 21-23 July 2004, Bangkok)
<http://www.fao.org/ag/againfo/subjects/en/health/diseases-cards/Guiding%20principles.pdf>
- FAO/OIE Emergency Regional Meeting on Avian Influenza Control in Animals in Asia (26-28 February 2004, Bangkok). The full text of the final report is available on:
http://www.fao.org/ag/againfo/subjects/en/health/diseases-cards/HPAI_Bangkok.pdf
- China-ASEAN Special Meeting on HPAI Control. Beijing (2 March 2004)
The full text of the Joint Press Statement "China-ASEAN Special Meeting on HPAI Control" is available on AIDEnews issue 8 pages 4 - 5:
<http://www.fao.org/docs/eims/upload/153869/AVIbull008.pdf>
- FAO/OIE/WHO Technical Consultation on the Control of Avian Influenza (3-4 February 2004, Rome) The full text of the Conclusions and recommendations is available on:

http://www.fao.org/newsroom/common/ecg/36647_en_experts.pdf

- Manual on the preparation of national animal disease emergency preparedness plans
<http://www.fao.org/docrep/004/x2096e/x2096e00.htm>
- The use of vaccination as an option for the control of Avian Influenza (I. Capua, S Marangon) – 71st OIE General Session (May 2003). Available at:
http://www.fao.org/docs/eims/upload/153564/A_71_SG_12_CS3E.pdf
- Information for shipping international diagnostic specimens to the International Reference Laboratories (see appendix 2 of AIDEnews issue 5 or 6, available at:
<http://www.fao.org/ag/AGA/AGAH/EMPRES/index.asp>)
- FAO EMPRES Manual on procedure for disease eradication by stamping out
(Available at: <http://www.fao.org//DOCREP/004/Y0660E/Y0660E00.HTM>)
- FAO AGAH Avian Influenza website:
http://www.fao.org/ag/againfo/subjects/en/health/diseases-cards/special_avian.html
- FAO AIDEnews (Vol. 1 - 23)
(Available at: http://www.fao.org/ag/AGA/AGAH/EMPRES/tadinfo/e_tadAVI.htm)
- FAO AIDEnews maps
(Available at: http://www.fao.org/ag/AGA/AGAH/EMPRES/maps/e_maps.htm)

Helpful links:

OIE Manual of Diagnostic Tests and Vaccines for Terrestrial Animals 2004 - CHAPTER 2.1.14. Highly Pathogenic Avian Influenza http://www.oie.int/eng/normes/mmanual/A_00037.htm

Proposed new chapter for The OIE Terrestrial Animal Health Code [Chapter 2.1.14.] Avian Influenza: http://www.oie.int/eng/AVIAN_INFLUENZA/safety.htm click the link to the proposed new chapter submitted in May 2004

OIE Update on Avian Influenza in Animals in Asia web site:
http://www.oie.int/download/AVIAN%20INFLUENZA/A_AI-Asia.htm

OIE Technical Disease Cards:
http://www.oie.int/eng/maladies/fiches/a_A150.htm

WHO Avian influenza web site:
http://www.who.int/csr/disease/avian_influenza/en/

Updated Information for Travellers about Avian Influenza A (H5N1)
<http://www.cdc.gov/travel/other/h5n1apr2004.htm>

Foreign Animal Diseases (1998) United States Animal Health Association. "The Gray Book" http://www.vet.uga.edu/vpp/gray_book/FAD/avi.htm

AUSVETPLAN including HPAI Disease strategies and Operational procedures
<http://www.aahc.com.au/ausvetplan/>

Avian Influenza - Disease and Control Strategies and Contingency Planning (intervet)
<http://www.avian-influenza.com/>

Avian Influenza - Its Causes, Effects & Control (Antec International)
<http://www.antecint.co.uk/main/avianflu.htm>

Biosecurity for the Birds (USDA Animal and Plant Health inspection Service, Veterinary Service) <http://www.aphis.usda.gov/vs/birdbiosecurity/>

Biosecurity for Poultry Flocks (Joan S. Jeffrey, University of California, Davis, School of Veterinary Medicine) http://www.vetmed.ucdavis.edu/vetext/INF-PO_Biosecurity.html

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Annex 1: Situation in Asian Countries (as of 22/10/2004)

area	date of first official reporting to the OIE	type	species affected since the start of the outbreak	human case	Latest information ¹⁾		
					last known case suspected and/or confirmed	source of the latest information and OIE declaration	comments
Republic of Korea	17/12/03	H5N1	layer, duck; virus isolated: magpie	no	24/03/04	Government; media websites. Declared to OIE	AHD/MAF informed OIE the negative result of the final serological testing of the sentinel birds on 19/07/04
Viet Nam	8/01/04	H5N1	chicken, quail, duck, muscovy duck	yes	01/10/04	FAO ²⁾ , Media websites	Five human cases confirmed since July 04
Japan	12/01/04	H5N1	chicken, crow	no	05/03/04 (crow)	Government and media website; Declared to OIE	All the movement restrictions lifted by 13/04/04
Taiwan Province of China	20/01/04	H5N2 (LP ³⁾)	chicken, duck, pheasant	no	09/03/04	Meeting report, media website. Declared to OIE	
Thailand	23/01/04	H5N1	Tiger, virus isolation: chicken, duck, goose, quail, turkey, stork	yes	22/10/04	Government, FAO, media websites. Declared to OIE	Possible human to human transmission reported in September, but not confirmed (WHO)
Cambodia	24/01/04	H5N1	Chicken, duck, goose, turkey, guinea fowl, wild bird	no	21/09/04	Government, FAO. Declared to OIE	
Hong Kong SAR	26/01/04	H5N1	Peregrine falcon	no			
Lao, PDR	27/01/04	H5N1	Chicken, duck and quail	no	13/02/04	Government, FAO	
Pakistan	28/01/04	H7N3 H9N2 (LP)	layer; broiler	no	July 04	Government, FAO	
Indonesia	06/02/04	H5N1	Chicken, duck and quail	no	August 04	Government, FAO, media websites	
China	06/02/04	H5N1	virus isolation: chicken, duck, goose, quail, pigeon, pheasant, black swan	no	06/07/04	Government, FAO, media websites. Declared to OIE	Export ban of poultry products from Anhui Province was lifted on 31/08/04.
Malaysia	19/08/04	H5N1	chicken, fighting cocks (?)	no	22/09/04	Government, media websites. Declared to OIE	Entire Kelantan State is under quarantine.

1) Official (OIE) and unofficial information (ProMED, press agencies, FAO tracking systems...)

2) FAO: FAO representative in concurrence with Government sources

3) LP: low pathogenic strain

4) Gphin: Global Public Health Intelligence Network (Health Canada)

Annex 2: Situation in other Countries (as of 22/10/2004)

area	date of official reporting to the OIE	type	species affected since the start of the outbreak	human case	Latest information ¹⁾		
					last known case suspected and/or confirmed	source of information and its OIE declaration	comments
United States of America	11/02/04	H7N2 (LP)	Chicken	no	11/02/04 (Delaware)	Delaware Department of Agriculture Statement; FAO.	Final report submitted to OIE on 15/05/04
		H2N2 (LP)	Chicken	no	03/02/04 (Pennsylvania)	Pennsylvania Department of agriculture website; ProMED	
	23/02/04	H5N2	Chicken	no	Late February (Texas)	Texas Animal Health Commission and USDA website; FAO. Declared to OIE	USDA informed OIE the eradication of HPAI in Gonzales County, Texas on 01/04/04; 17/08/04
		H7N2 (LP)	Chicken	no	09/03/04 (Maryland)	Maryland Department of Agriculture News Release; FAO; Declared to OIE	Final report submitted to OIE on 15/05/04
		H7N3 (LP)	non-commercial	no	22/06/04 (Texas)	Texas Animal Health Commission website	
		H3N2	Turkey	no	17/09/04 (Missouri)	ProMED	
Canada	19/02/04	H7N3 (LP)	Chicken	yes (conjunctivitis)	29/04/04 (British Columbia)	Government website. Declared to OIE	CFIA informed OIE that the identified zone is no longer considered as infected, as of 9 July 2004
	09/03/04	H7N3					
South Africa		H6 (LP)	commercial poultry	no	25/03/04	ProMED	
	06/08/04	H5N2	ostrich farms	no	21/09/04 (Eastern Cape province)	Web Media	HPAI outbreaks were reported from ostrich farms in Eastern Cape province
Egypt		H10N7 (LP)	wild duck	yes	18/04/04 (from survey sample)	ProMED	

1) Official (OIE) and unofficial information (ProMED, press agencies, FAO tracking systems...)

2) FAO: FAO representative in concurrence with Government sources

3) LP: low pathogenic strain

4) Gphin: Global Public Health Intelligence Network (Health Canada)

Annex 3**- Donor Assistance -**

Many institutions and governments have committed emergency assistance funds to help control HPAI outbreaks. FAO AIDE news is collecting information on donor assistance (financial, in kind or technical assistance) through FAO representations in Asian countries. FAO recognises that the tables below may be incomplete. We thank all donors and governments for their cooperation in providing additional complementary information.

Recipient countries:**Cambodia**

Donors	Amount (US\$)	Description
FAO TCP	\$390,000	TCP/CMB/3002 Emergency assistance for the control of avian influenza
ADB*	\$91,940	Non-Trust Fund, under general coordination of FAO (for training, equipment and public awareness activities)
Australia	\$50,000	AusAID through FAO Trust Fund (OSRO/CMB/402/AUL)
China	\$50,000	Direct contribution to government (no details given)
France	\$57,600	French Cooperation through FAO Trust Fund (OSRO/CMB/403/FRA)
Germany	\$50,000	GTZ through FAO Trust Fund (OSRO/CMB/401/GER)
Japan	\$56,000	Non-Trust Fund, grant assistance for grass-roots human security project for antiviral medicines & equipment
	\$402,176	MoFA through FAO Trust Fund (OSRO/RAS/401/JPN, total \$1,610,083)
WHO	\$3,000	PPE supplies/training, lab training for DAHPs investigating teams and Human Flu Vaccine purchase.

*: Asian Development Bank

(As of 03/04/04. source: FAO representation in Cambodia)

China

Donor	Amount (US\$)	Description
FAO TCP	\$390,000	TCP/CPR/3004 Emergency assistance for the control of avian influenza

(As of 14/04/04. source: FAO Emergency Operations Service)

Indonesia

Donors	Amount (US\$)	Description
FAO TCP	\$390,000	TCP/INS/3001 Emergency assistance for the control of avian influenza
Australia	\$250,000	Human health protection through WHO Provide training (2 virologists) in AAHL, Geelong, Australia - dispatch 3 epidemiologists working with the Disease Investigation Center's staff members to assist the surveillance action plan - dispatch 1 virologist for bench training in DIC R-III, R-IV and R-VI (18 vets and assistants) - Provide training (2 field veterinarians) on HPAI in AVA, Singapore
China	\$100,000	Vaccines, training, public awareness at off farm
Germany	\$61,000	OSRO/INS/402/GER through FAO Trust Fund. Four trainings on clinical & gross pathology diagnosis (total 222 veterinarians)
Japan	\$78,906	MAFF provided protective gear through grass roots aid fund
	\$113,000	Public awareness campaign activities
	\$10,000	Through JICA/Indonesia on diagnostic training (24 veterinarians)
	\$402,117	MoFA through FAO Trust Fund (OSRO/RAS/401/JPN, total \$1,610,083)
Netherlands		May provide veterinary experts in support of FAO operations.
USA		Support through the provision of laboratory analysis available in Atlanta
World Bank		- avian influenza workshop in Bengkulu - training for field officers & farmers on clinical signs, vaccination & biosecurity measures in Bengkulu (3 districts)

(As of 27/07/04. source: FAO representation in Indonesia)

Lao PDR

Donors	Amount (US\$)	Description
FAO TCP	\$390,000	TCP/LAO/3001 Emergency assistance for the control of avian influenza
ADB	\$50,000	Direct procurement of Personnel, Protective clothing and equipment
Australia		Through AusAID to invite two government veterinarian for training course
China	\$50,000	Re-establishing poultry breeding farms
France	\$53,745	For surveillance activities (OSRO/LAO/401/FRA)
Japan	\$404,040	MoFA through FAO Trust Fund (OSRO/RAS/401/JPN, total \$1,610,083)
	\$50,000	Through JICA
USA	\$250,000	Direct contribution to WHO Regional Office (Manila)
WHO		Support for one veterinarian for a 2 month mission

(As of 14/04/04. source: FAO Emergency Operations Service, JICA)

Pakistan

Donors	Amount (US\$)	Description
FAO TCP	\$390,000	TCP/PAK/3002 Emergency assistance for the control of avian influenza
China	\$50,000	For strengthening the diagnostic/samples analysis capacities of the national labs.

(As of 28/04/04. source: FAO representation in Pakistan)

Thailand

Donor	Amount (US\$)	Description
FAO		Technical advice of experts
Japan		Experts & standard Antigen/reagents to assist avian influenza typing/sub-typing.

(As of 08/03/04. source: FAO representation in Thailand)

Viet Nam

Donors	Amount (US\$)	Description
FAO TCP	\$390,000	TCP/VIE/3003 Emergency assistance for the control of avian influenza
ADB	\$ 50,000	Protective gear
EC	\$968,000	Protective clothing, lab equipment
Germany	\$ 60,000	laboratory diagnostic equipment
Japan	\$200,000	Tamiflu (anti-viral drug)
	\$401,750	MoFA through FAO Trust Fund (OSRO/RAS/401/JPN, total \$1,610,083)
	\$1.800.000	Japanese Social Development Fund (JSDF) to assist vulnerable households and strengthen community based early warning through the World Bank AIERP project
WHO		Unspecified
World Bank	\$170,000	Formulation mission for Avian Influenza Emergency Recovery Project
	\$5,000,000	Avian Influenza Emergency Recovery Project (AIERP) for strengthening disease surveillance and diagnostic capacity; strengthening the poultry sector infrastructure to better cope with serious disease outbreaks; and safeguarding human health by improving public awareness and information
Denmark	nearly \$130,000	Through DANIDA, in kind cooperation for avian influenza control in 14 provinces (sprayers, protective clothing, diagnostic kits for local veterinarians)
AFD		Assessment mission to support the HPAI situation in Viet Nam and to provide recommendations for short and long term by Agence Française de Développement (AFD), Centre de coopération internationale en recherche agronomique pour le développement (CIRAD) and Vétérinaires Sans Frontières (VSF) was funded by AFD
Republic of Korea	\$30,000	to study measures to prevent and control bird flu

(As of 05/10/04. source: FAO representation in Viet Nam, the World Bank website, VSF)

Regional

Donor	Amount (US\$)	Description
FAO TCP	\$400,000	TCP/RAS/3004 Emergency regional coordination assistance for control of avian influenza in southeast Asia
FAO TCP	\$400,000	TCP/RAS/3006 Diagnostic Laboratory and Surveillance Network Coordination for Control and Prevention of Avian Influenza in Southeast Asia
FAO TCP	\$400,000	TCP/RAS/3007 Diagnostic laboratory and surveillance network coordination for control and prevention of avian influenza in East Asia
FAO TCP	\$400,000	TCP/RAS/3008 Diagnostic laboratory and surveillance network coordination for control and prevention of avian influenza in South Asia
FAO TCP	\$400,000	TCP/RAS/3010 Emergency regional support for post-avian influenza rehabilitation

(As of 14/06/04. source: FAO Emergency Operations Service)