

## Update on the Avian Influenza situation (As of 20/06/2005) – Issue no. 31



Free ranging ducks in ploughed rice field.  
Jiangxi Province, China. Photo: Zhao Xiaomin

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) in wild birds and geese were reported in China and presence of the virus in pigs has been reported in Indonesia during the preceding month. Overall numbers of outbreaks have decreased a pattern similar to that observed last year. This is a good opportunity for all the affected and at risk countries to review contingency plans and be prepared for possible outbreaks that might occur in the forthcoming cooler months.

#### Country situation

**China:** The 519 wild birds deaths including bar-headed geese, great black-headed gulls, brown-headed gulls, ruddy shelducks and great cormorants that were found at the Qinghai Lake Nature Reserve in Gangcha County, Qinghai Province, were confirmed by the the National AI Reference Laboratory (Harbin) to be due to H5N1 avian influenza (AI) strain infection. The government's control measures included compulsory vaccination around the outbreak areas and along migration routes and the nearby regions. More than three million doses of vaccine against the H5N1 strain of the avian influenza virus were dispatched to Qinghai Province. Qinghai Province adopted a series of measures such as sealing off the epidemic area, the use of disinfectants in the affected zones as well as the administration of vaccines. Death of migratory birds was first reported in Naisuoma Village in Gangcha County on 4 May 2005. The 0.27-square-kilometer island where the dead birds were found is home to more than 100,000 birds including rare species such as swan, black-necked cranes and brown-headed gull. Chinese government has temporarily banned visitors from nature reserves.



Pink: Districts where HPAI H5N1 outbreaks were reported in China

Another outbreak of HPAI H5N1 was reported on a farm in Tacheng city, Tacheng district, Xinjiang Province on 8 June 2005. The index farm had 2,177 geese, where 1,042 were

positive for H5N1 and as of 8 June, 460 had died. More than 13,000 birds were culled in order to contain the new outbreak. Xinjiang authorities have adopted various control measures including modified stamping out and vaccination. (09/06/05, source: Government, FAO, media websites)

**Cambodia:** A 20-year-old woman from Kampot Province was hospitalised in Viet Nam on 13 May 2005 but later confirmed as avian influenza negative. According to a web media there were deaths of chickens in her neighbourhood a month ago. The National Animal Health and Production Investigation Centre continues surveillance in sentinel villages and sentinel duck flocks near the Mekong Delta boarder including Kampot, Svay Rieng and Takeo Provinces. (13/05/05, Source: FAO, WHO, media websites)

**Viet Nam:** Seven hundred chickens on a farm in An Khanh commune in Ben Tre province were culled on 11 June after 6,000 of them had died within four days. Test samples of the birds were positive for H5 virus. Media news says that smaller outbreaks have been continually occurring since April.

A 58-year-old man from Thanh Hoa province and a 52-year-old man from Vinh Phuc province tested positive for the H5N1 virus in mid May. A 46-year-old man from northern Hung Yen province was reported to have died due to avian influenza on May 23. His neighbours had sick poultry. A hospital doctor who had been taking samples from carriers of the H5N1 virus has been tested positive to H5.

Viet Nam's Agriculture and Rural Development Ministry has asked the government for permission and funds of 100 billion Vietnamese dong (about 6.3 million dollars) to vaccinate 212 million fowls nationwide against avian influenza later this year, following successful vaccination trials at poultry farms in northern Ha Tay province and southern Dong Nai province. (18/06/05, Source: Government, FAO, media websites)

**Indonesia:** After the finding of H5N1 virus infection in throat swabs and blood samples of a pig in Surabaya by a university scientist, the Ministry of Agriculture conducted tests on pigs in several regions including Bali, but as at 16 May only one area in West Java has shown positive results. Health authorities are testing sera from workers at poultry farms as part of a monitoring programme. Out of 63 human specimens, one serum from South Sulawesi province had antibodies against avian influenza. (17/06/05, source: Government, FAO, media websites)

#### --- Other strains -----

**Canada:** The Canadian Food Inspection Agency (CFIA) has quarantined a turkey layer farm in Abbotsford, British Columbia based on preliminary results from the British Columbia Ministry of Agriculture, Food and Fisheries (BCMAFF) indicating the presence of H3 influenza virus in the flock. The turkey farm is near a swine farm that recently experienced an H3 influenza infection, and the virus is suspected to have originated from swine. The swine influenza has been confirmed on three pig farms by laboratory testing, and it appears to be affecting about 10 to 12 pig farms locally. The swine influenza was discovered in a flock of turkeys during a routine testing matrix. CFIA has confirmed that the turkeys had a swine influenza type H3. The quarantine on the turkey farm has been lifted. (02/06/05, source: media websites)

**USA:** The U.S. Agriculture Department informed the World Organization for Animal Health on 10 Jun 2005 of the outbreak of a low-pathogenic avian influenza (LPAI, H7N2 strain) case on a duck farm in Sullivan, New York. (15/06/05, source: media websites)

#### --- Other information -----

**Egg:** Chinese quarantine office has found the avian influenza virus in eggs carried into China by air passengers from Viet Nam. Checkpoint office at Guangzhou's international airport found 40 chicken, duck and goose eggs in passengers' luggage from two flights

from Viet Nam on April 28 2005. Laboratory tests carried out by quarantine office later found the eggs contained the H5N1 virus. (19/05/05, source: web media)

**Brunei Darussalam:** Suspicion of avian influenza H5N1 was reported in the country on 10 June 2005, however, this was a national simulation exercise. The target farm was immediately isolated and a quarantine zone was enforced by soldiers and police. (11/06/05, source: Government, OIE, media websites)

**Brazil:** On 31 May, deaths of 6,000 chickens at Mato Grosso do Sul state were reported in a web media. Authorities ordered the slaughter of 17,000 chickens, the farm in the town of Jaraguari where the chickens died was surrounded with road blocks. The Authorities have ruled out avian influenza on 1 June. (01/06/05, source: web media)

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

### ➤ Pakistan AI status

FAO project TCP/PAK/3002(E) was launched in February 2004 in order to give emergency assistance in AI control. The project, which will end in June 2005, has successfully completed most of its objectives. A nationwide monitoring program is now operative, including questionnaires on farms, samplings and testing. Both regional and central laboratories have been strengthened and a reference laboratory is being formed. Emergency preparedness is enhanced, using peripheral depots as a basis. Some of these achievements are not yet fully developed and further assistance may be needed to make the progress sustainable. This includes the monitoring programme, where still several relevant shortcomings are present, while the results not have been thoroughly analysed yet.

The national contingency plan for AI was developed under the project. A framework for this plan is constructed and several elements are designed into detail. A sound legal framework is needed for the plan, proposals on this item are given in headlines. Moreover, to ensure that the plan will be successful, a compensation fund is needed, in order to compensate farmers for their losses, resulting from an outbreak, and from control measures. As the poultry farmers organisation is not ready to raise this fund, it will be in the hands of the government. In its proposed form the fund will be an important motivator for farmers to take responsibilities in biosecurity and in disease prevention, as these will be used as the terms and conditions for compensations.

Within the TCP, the quality of local vaccine production would be evaluated and enhanced. This process is started, but the target has not yet been achieved. Detailed epidemiological studies have not yet been done, so far. The monitoring system provides a basis for this.

As a result of the project, there is now more clearness about the epidemiological situation of AI in Pakistan. Since the starting of the project, no major HPAI outbreaks have been reported. However, out of 8,500 cloacal swabs and tissue samples there were still several virus isolations, both H7 and H9 strains. These were acquired from all regions. Several sero-positive blood samples were also found from unvaccinated flocks. The breeder region in the North appears to be endemically infected with both H7 and H9 strains, despite massive vaccination. In and around Karachi in the South and also in certain regions of Punjab the virus is endemic in layer flocks, despite vaccination in Karachi. Vaccination is not used as a general strategy and the potency of the vaccines to reduce virus shedding under field conditions is not known.

The risk to human health is relatively low in Pakistan at the moment. However it is important to note H7 strains, like any other serotypes, could become equally dangerous when (many) people are massively exposed. No information is now available about sero-prevalence of AI viruses in humans in Pakistan. The present

uncontrolled use of vaccinations in poultry will complicate proper evaluation of highly pathological AI strains in the field.

It is therefore strongly recommended to raise new funds in order to make the achievements sustainable for the longer term, to fine-tune the monitoring system and to do a thorough epidemiological study on the possible role of vaccination in controlling outbreaks of HPAI, LPAI and in the feasibility to eradicate HPAI or LPAI, using strategic vaccination as a tool. (by Dr J.H. Lambers, FAO Consultant)

- **Preparing against risk - Australia:** South Australia had a four day simulation exercise on emergency disease outbreak to cope with an outbreak of avian influenza from 30 May. A national simulation is expected later this year.

**Slovenia:** A five day simulation exercise on avian influenza (AI) took place from 6 June 2005. This exercise is a part of workshop to simulate nine AI outbreaks in three different Regional Offices.

**EU Early warning system:** European Centre for Disease Prevention and Control (ECDC), in Solna, Sweden, became operational on 20 May to launch a new continent-wide monitoring system including avian influenza.

### 3. Actions taken – follow-up

- **FAO/OIE Second Regional Meeting on Avian Influenza Control in Animals in Asia (23-25 February): Recommendations** – a joint FAO/OIE meeting in collaboration with WHO and Government of Viet Nam, was held in Ho Chi Minh City, 23-25 February, 2005. The final recommendation of the meeting is posted on FAO AGA website [http://www.fao.org/ag/againfo/subjects/documents/ai/AI\\_2nd\\_RegMtg\\_HoChiMinhCity\\_Rep.pdf](http://www.fao.org/ag/againfo/subjects/documents/ai/AI_2nd_RegMtg_HoChiMinhCity_Rep.pdf)
- **Consultative Workshop: Review on Draft Global Strategy for the Control of HPAI** – was held in Bangkok on 17-18 May 2005. The draft document 'A Global Strategy for the Progressive Control of Highly Pathogenic Avian Influenza (HPAI)' prepared by FAO and OIE in collaboration with WHO, was submitted to the key stakeholders in Asia for review and comments. Subsequently a formal consultation on further improvement and refinement of the global strategy document was held in Bangkok between 17 and 18 May 2005. The meeting was attended by representatives from key affected and at risk countries in Asia (Australia, China, Democratic People's Republic of Korea, India, Indonesia, Japan, Pakistan, Thailand and Viet Nam), the ASEAN Southeast Asia HPAI taskforce, two regional organisations SAARC and ASEAN, and FAO staff members from the Headquarters and the Regional Office for Asia and the Pacific. During this two day meeting, the global strategy was presented, followed by formal comments by the attendees of the meeting. A series of group sessions were then held to address specifically the various components of the global strategy. All the suggested changes were then discussed in plenary sessions and general agreements were reached on the key amendments to be made to the document. These changes have now been completed and the revised draft has been circulated to OIE, WHO and all the participants of the Consultation. It has been agreed that the document as it stands represents a strategy for HPAI control in Asia. Plans are currently being finalized to develop the document further to include other regions of the world to include Central Asia, the Middle East, Africa, South, Central and North America and Europe.
- **ASEAN HPAI Task Force** was held on 30-31 May 2005 and the ASEAN Working Group on Livestock on 1-3 June 2005 in Pattaya, Thailand. During the HPAI Task Force meeting, the group supported the draft 'Global Strategy for the Progressive Control of Highly Pathogenic Avian Influenza (an initiative of FAO and OIE, within the umbrella of the Global Framework for the Control of Transboundary Animal Diseases (GF-TADs), and in collaboration with WHO) during the ASEAN Working Group on Livestock Meeting. The Meeting agreed that the ASEAN HPAI Taskforce should work

closely with the FAO/OIE for complementary and synergy, in the development of the ASEAN HPAI Taskforce Work plan.

- **Regional Training on Basic Epidemiology and Data Analysis** under FAO subregional projects was held in Bangkok on 13-17 June 2005. The workshop was organised by FAO with the collaboration of CIRAD. Participants were from Cambodia, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, Papua New Guinea, Philippines, Thailand, Timor Leste and Viet Nam.
- **Regional Training on Advanced Epidemiology and Data Analysis** under FAO subregional projects will be held in Bangkok from the end of June. The workshop was organised by FAO with the collaboration of Royal Veterinary Collage (RVC), UK. Participants expected are from Cambodia, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, Papua New Guinea, Philippines, Thailand, Timor Leste and Viet Nam.
- **Influenza Surveillance and Response: H5N1 as a Human Health Threat** was held in Geneva on 17 May 2005 as a side event to the World Health Assembly. In the presentation, FAO and OIE requested support by Public Health authorities and WHO to the control of H5N1 at source, i.e. in the animal, as the means of choice for the reduction of the pandemic risks. The resolution of the World Health Assembly on AI is available at: [http://www.who.int/gb/ebwha/pdf\\_files/WHA58/WHA58\\_5-en.pdf](http://www.who.int/gb/ebwha/pdf_files/WHA58/WHA58_5-en.pdf)
- **Donors meeting in Cambodia** - The 12th Donors' Meeting on AI was held on 19 May 2005. A preliminary framework of "a global strategy for the progressive control of HPAI" and a preliminary outline of a national strategy for the control of avian influenza in Cambodia was presented to the donors.
- **Recent Missions (May - July):**

*We would 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](mailto:Avian-Influenza-Registration@fao.org))*

#### **[Cambodia]**

- Dr. Y. Froehlich (France) FAO consultant (Project Technical Adviser), ongoing
- Mr B. Merklen international consultant (Project logistics), 18/04-07/05/05
- Dr. S. Desvaux (France) FAO consultant (Veterinary Epidemiologist), 09/05–08/06/05
- Dr. C. Benigno, FAO RAP (Bangkok) Animal Health Officer, 9-13/05/05
- Dr. W. Kalpravidh, FAO RAP (Bangkok), Project Co-ordinator, to commence in the week of 20/06/05

#### **[Indonesia]**

- Dr. S. Morzaria, FAO AGAH (Rome) ECTAD Coordinator, 23/05-06/06/05
- Dr. B. Brandenburg (USA), 16/05-11/06/05
- Dr. F. Pluimers (Netherlands) Avian influenza disease management expert, 01-11/06/05

#### **[Lao PDR]**

- Dr. C. Benigno, FAO RAP (Bangkok) Animal Health Officer, 23-28/05/05

#### **[Pakistan]**

- Dr. J.H.Lambers, (Netherlands), international expert in poultry diseases and epidemiology. 18/04–04/05/05

#### **[Thailand]**

- Dr. J. Domenech, FAO AGAH (Rome) Chief AGAH, 15-19/05/05
- Dr. S. Morzaria, FAO AGAH (Rome) ECTAD Coordinator, 15-23/05/05
- Dr. F. Guo (China), Project Co-ordinator, Regional Training on Basic Epidemiology and Data Analysis. 13-17/06/05
- Dr. F. Guo (China), Project Co-ordinator, Regional Training on Advanced Epidemiology and Data Analysis. To commence in the week of 27/06/05

- Dr. C. Benigno, FAO RAP (Bangkok) Animal Health Officer, ASEAN HPAI Task Force Meeting. 30-31/05/05
- Dr. C. Benigno, FAO RAP (Bangkok) Animal Health Officer, ASEAN Working Group on Livestock on 1-3/06/05
- Dr. W. Kalpravidh, FAO RAP (Bangkok), Project Co-ordinator, ASEAN HPAI Task Force Meeting. 30-31/05/05
- Dr. W. Kalpravidh, FAO RAP (Bangkok), Project Co-ordinator, ASEAN Working Group on Livestock on 1-3/06/05

#### **[Viet Nam]**

- Dr. H. Oshitani, WHO WPRO (Manila) Regional Advisor in Communicable Diseases Surveillance and Response. Collaborative WHO/FAO mission to review significance of recent viral strains in Viet Nam
- Dr. P. W. Horby, WHO WPRO (Viet Nam) Medical Epidemiologist. Collaborative WHO/FAO mission to review significance of recent viral strains in Viet Nam
- Dr. D. Swayne (USA), FAO Consultant. Collaborative WHO/FAO mission to review significance of recent viral strains in Viet Nam
- Dr. L. Sims (Australia) FAO Consultant. Collaborative WHO/FAO mission to review significance of recent viral strains in Viet Nam
- Dr. J. Domenech, FAO AGAH (Rome) Chief AGAH, STVM Conference, To commence in the week of 20/06/05
- Dr. J. Lubroth, FAO AGAH (Rome) Senior Officer (EMPRES), 15-21/05/05
- Dr. A. McLeod, FAO AGAL (Rome) Senior Officer (Livestock Policy), Supervision mission for Avian Influenza Emergency Recovery Project (AIERP), ongoing
- Dr. V. Martin, FAO AGAH (Rome) Animal Health Officer (Infectious Diseases Emergencies), Supervision mission for Avian Influenza Emergency Recovery Project (AIERP), ongoing
- Dr. A. Tripodi (Germany/Italy), Project Coordinator, 05/04-04/06/05
- Dr. N. Taylor (UK) FAO consultant (Epidemiology), 25/04-15/06/05
- Dr. L. Sims (Australia) Avian influenza disease Management Expert. Supervision mission for Avian Influenza Emergency Recovery Project (AIERP) on vaccination strategy. 31/05-11/06/05

#### **[Cook Islands]**

- Dr. H. Wagner, FAO RAP (Bangkok) Senior Animal Production and Health Officer, Meeting of Ministers of Agriculture of the South Pacific States. 01-03/06/05

#### **[Other regions]**

- Dr. J. Lubroth, FAO AGAH (Rome) Senior Officer (EMPRES), Avian Influenza and Pandemic Infections Preparation Planning, Luxemburg/EU SANCO. 28/06/05

## **4. Resources available**

### **Relevant articles, publications and websites:**

#### **FAO**

- Second FAO/OIE Regional Meeting on Avian Influenza Control in Asia (23-25 February 2005, Ho Chi Minh City). The full text of the final report is available on: [http://www.fao.org/ag/againfo/subjects/documents/ai/AI\\_2nd\\_RegMtg\\_HoChiMinhCity\\_Rep.pdf](http://www.fao.org/ag/againfo/subjects/documents/ai/AI_2nd_RegMtg_HoChiMinhCity_Rep.pdf)
- 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)  
English: <http://www.fao.org/ag/againfo/subjects/en/health/diseases-cards/Guiding%20principles.pdf>  
中文: <http://www.fao.org/ag/againfo/subjects/zh/health/diseases-cards/Guidingprinciples.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](http://www.fao.org/ag/againfo/subjects/en/health/diseases-cards/HPAI_Bangkok.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](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](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 (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](http://www.fao.org/ag/AGA/AGAH/EMPRES/tadinfo/e_tadAVI.htm)
- FAO AGAH Avian Influenza website: [http://www.fao.org/ag/againfo/subjects/en/health/diseases-cards/special\\_avian.html](http://www.fao.org/ag/againfo/subjects/en/health/diseases-cards/special_avian.html)
- FAO AIDENews (Vol. 1 - 30)  
(Available at: [http://www.fao.org/ag/AGA/AGAH/EMPRES/tadinfo/e\\_tadAVI.htm](http://www.fao.org/ag/AGA/AGAH/EMPRES/tadinfo/e_tadAVI.htm))

## **OIE**

- OIE/FAO International Scientific Conference on Avian Influenza (OIE Paris, France, 7–8 April 2005) Recommendations [http://www.oie.int/eng/avian\\_influenza/OIE\\_FAO\\_Recom\\_05.pdf](http://www.oie.int/eng/avian_influenza/OIE_FAO_Recom_05.pdf)
- 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](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](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](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](http://www.oie.int/eng/maladies/fiches/a_A150.htm)

## **WHO**

- WHO Inter-country Consultation - Influenza A/H5N1 in Humans in Asia. Manila, 6-7th May 2005 [http://www.who.int/entity/csr/disease/avian\\_influenza/H5N1IntercountryAssessment.pdf](http://www.who.int/entity/csr/disease/avian_influenza/H5N1IntercountryAssessment.pdf)
- WHO interim recommendations for the protection of persons involved in the mass slaughter of animals potentially infected with highly pathogenic influenza viruses [http://www.who.int/entity/csr/disease/avian\\_influenza/guidelines/en/Avian%20Influenza.pdf](http://www.who.int/entity/csr/disease/avian_influenza/guidelines/en/Avian%20Influenza.pdf)
- Advice for people living in areas affected by bird flu or avian influenza (WHO) <http://www.wpro.who.int/avian/docs/advice.asp>
- Laboratory study of H5N1 viruses in domestic ducks: main findings (WHO) [http://www.who.int/csr/disease/avian\\_influenza/labstudy\\_2004\\_10\\_29/en/](http://www.who.int/csr/disease/avian_influenza/labstudy_2004_10_29/en/)
- WHO Avian influenza web site: [http://www.who.int/csr/disease/avian\\_influenza/en/](http://www.who.int/csr/disease/avian_influenza/en/)

## **Others**

- Nature - Bird Flu Special (Nature 435, 26 May 2005) <http://www.nature.com/nature/focus/avianflu/index.html>
- 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](http://www.vetmed.ucdavis.edu/vetext/INF-PO_Biosecurity.html)
- DEFRA(UK): Low Pathogenic Notifiable Avian Influenza (H5 and H7) in poultry meat (386 KB) - 5 January 2005  
<http://www.defra.gov.uk/animalh/diseases/monitoring/pdf/lpai-poultrymeat.pdf>
- DEFRA(UK): Low Pathogenic Notifiable Avian Influenza (H5 and H7) in poultry eggs for consumption (363 KB) - 5 January 2005  
<http://www.defra.gov.uk/animalh/diseases/monitoring/pdf/lpai-poultrymeat.pdf>
- Viet Nam Livestock Working Group web site (including HPAI disease map)  
<http://www.livestockworkinggroup.org>
- Experimental Study to Determine if Low-Pathogenicity and High-Pathogenicity Avian Influenza Viruses can be present in chicken breast and thigh meat following intranasal virus inoculation. David E. Swayne and Joan R. Beck (Avian Diseases 49:81–85, 2005)  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=15839417](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=15839417) (summary)
- National Strategic Plan for Avian Influenza Control in Thailand  
<http://www.tatnews.org/ccc/2480.asp>
- Proposal on Strengthening Nationwide Veterinary System during 2005-2010 (2<sup>nd</sup> draft)  
<http://www.mard.gov.vn/dah/dichcumga/Nam%202005/DeAn%20tang%20cuong%20Ohetong%20TY%204.05.htm>
- Italian AI outbreak information <http://www.oevr.org/or4/or?uid=oevr.main.index&oid=7656>
- Mexican AI outbreak information  
<http://web2.senasica.sagarpa.gob.mx/xportal/dgsa/czoo/Doc694/>
- Canadian Animal Health Network Bulletin. Special Edition: Avian Influenza  
<http://www.cahnet.org/bulletinsE/CahnetBulletin9english.pdf>

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### Supervision and Coordination:

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**Annex 1****Information for shipping international diagnostic specimens**

To the **Australian Animal Health Laboratory (AAHL)**

The Australian Animal Health Laboratory (AAHL) at Geelong, Australia is an OIE Reference Laboratory for avian influenza and Newcastle disease. It offers a wide range of diagnostic tests and facilities for handling these viruses to support countries in their disease control and eradication programs.

**Type of specimen:** Specimens submitted to AAHL for disease diagnosis may be either virus isolates made in the submitting country or clinical specimens, such as tissues or swabs, collected from diseased birds.

**Import permit and packing:** Copies of Australian import permits are available from AAHL by contacting [aahl-accessions@csiro.au](mailto:aahl-accessions@csiro.au). All specimens must be packed in leak-proof containers in accordance with the appropriate IATA regulation and appropriately labelled. Suitable transport containers, packing instructions are also available from AAHL by contacting [aahl-accessions@csiro.au](mailto:aahl-accessions@csiro.au). Copies of the import permit and other consignment details should be attached to the outside of the package to expedite clearance through Australian customs.

**Notification of shipment:** If submitting specimens please notify the accessions clerk on [accessions@csiro.au](mailto:accessions@csiro.au), the Duty Veterinarian on [dutyvet@csiro.au](mailto:dutyvet@csiro.au) or Dr. Peter Daniels on **+61 3 5227 5000** of the consignment details so that the specimens can be collected upon arrival in Australia. Alternatively send the information by facsimile to **+61 3 5227 5555**. Consignment details include the consignment note/air weigh bill number, courier/airline and expected arrival date.

**Shipping address:**

The Director  
Australian Animal Health Laboratory  
5 Portarlington Road  
Geelong, 3220  
Australia  
Telephone 61 3 5227 5000  
Facsimile 61 3 5227 5555  
<http://www.csiro.au/aahl>

**Contact for Avian Influenza:** You may also wish to discuss the testing required with Peter Daniels ([peter.daniels@csiro.au](mailto:peter.daniels@csiro.au)) or Paul Selleck ([paul.selleck@csiro.au](mailto:paul.selleck@csiro.au)) on **+61 3 5227 5000** prior to submitting the specimens.

## Annex 2a: Situation in Asian Countries (as of 20/06/2005)

area	date of first official reporting to the OIE	type	species affected since the start of the outbreak	human case	Latest information <sup>1)</sup>		
					last known case suspected and/or confirmed	source of the latest information and OIE declaration	comments
Republic of Korea	12/12/03	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; Final report submitted to OIE on 21/09/04
		H5N2* (LP <sup>3)</sup> )	Duck*	no	01/12/04*	Government, media websites, Declared to OIE	
Viet Nam	8/01/04	H5N1	Chicken, quail, duck, muscovy duck	yes	01/04/05	FAO <sup>2)</sup> , Government	
Japan	12/01/04	H5N1	Chicken, crow	sero-positive	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)	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. Surveillance: the Little Cormorant, Asian Openbill, Scaly-breasted Munia, Red Turtle-Dove, Black Drongo and pigeon.	yes	12/04/05	Government, FAO, media websites, Declared to OIE	
Cambodia	24/01/04	H5N1	Chicken, duck, goose, turkey, guinea fowl, wild bird	yes	April 05	Government, FAO	
Hong Kong SAR	26/01/04	H5N1	Peregrine falcon; Grey heron, Chinese pond heron	no	10/01/05	Declared to OIE	
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	November 04	Government, FAO	
Indonesia	06/02/04	H5N1	Chicken, duck and quail; pig (without clinical sign)	sero-positive	end April 05	ProMED, media website	
China	06/02/04	H5N1	Virus isolation: chicken, duck, goose, quail, pigeon, pheasant, black swan; bar-headed geese, great black-headed gulls, brown-headed gulls, ruddy shelducks and great cormorants	no	08/06/05	Government, FAO, media websites, Declared to OIE	
Malaysia	19/08/04	H5N1	Chicken, fighting cocks (?)	no	19/11/04	Government, media websites, Declared to OIE	Final report submitted to OIE on 03/01/05
Democratic People's Republic of Korea	07/04/05	H7	Chicken	no	27/03/05	Government, media websites, Declared to OIE	Complete characterisation is awaited.

**Annex 2b: Situation in other Countries (as of 20/06/2005)**

area	date of official reporting to the OIE	type	species affected since the start of the outbreak	human case	Latest information <sup>1)</sup>		
					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	
	10/06/05	H7N2 (LP)	Duck	no	10/06/05	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 09/07/04; Final report submitted to OIE on 23/11/04.
	09/03/04	H7N3					
		H3 (LP?)	Turkey	no	01/06/05	ProMED	The virus was discovered during a routine testing matrix
South Africa		H6 (LP)	commercial poultry	no	25/03/04	ProMED	
	06/08/04	H5N2	Ostrich	no	early December (Eastern Cape province)	Web Media	
Egypt		H10N7 (LP)	Wild duck	yes	18/04/04 (from survey sample)	ProMED	
Mexico	20/03/05	H5N2 (LP)	Chicken	no	April 2005	Web Media	
Italy		H5N2 (LP)	Turkey	no	15 April 2005 (Lombardia)	Web Media, Local Government	

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)

\*) corrected