**1. Summary of the situation**

**Avian Influenza confirmed:**

As of 12/03/04, Highly Pathogenic Avian Influenza (HPAI) - H5N1 has been reported in Viet Nam, Thailand, Cambodia, Lao PDR, Japan, Republic of Korea, Indonesia and China. The number of countries affected remains the same since the last issue 7.

- **China:** China has reported HP Avian Influenza in 16 provinces (49 confirmed and 3 negative). No new suspected cases have been reported since 17/02/04. Lifting of isolation measures began on 22/02/04 after 21 days of isolation (Source: FAO and government website).
- **Taiwan province of China:** A new outbreak was reported in the southern Pingtung County on 01/03/04, where 12,000 chickens were culled. Migratory birds or vehicles moving between farms are suspected as the source of infection (source: gphin, yahoo news/AFP).

- **Japan:** The third H5N1 outbreak (Tanba, Kyoto prefecture) has spread to a poultry farm within the same town. Crows found dead at the infected farm and within the movement control area (Tanba town), and in Ibaraki city (Osaka prefecture) – a distance of 30 km from Tanba’ tested positive to H5N1 (Tanba) and H5 (Ibaraki) respectively. (4 - 11/03/04 – source: gphin, Japanese government and newspaper websites).

- **Indonesia:** The number of districts and municipalities infected has increased to 80 from as reported last week. Large areas in Sumatra and Kalimantan are suspected for the disease. Similarly, high mortality in poultry, have been reported on some other islands such as Lombok, Sumbawa, Flores. The death toll of chickens has been estimated at 6.2 million as of the end of February. This figure excludes those chickens that were culled (source: FAO).

- **Thailand:** H5N1 case was confirmed in a chicken from Chiang Rai on 26/02/04, and the disease is also suspected in Nakhon Ratchasima and Maha Sarakham. Deaths in 200 chickens were also reported in Chiang Mai on 11/03/04. (source: gphin, FAO)

- **Viet Nam:** Ban on movement and sales of poultry has been lifted in Hanoi city. The government authorities announced that affected localities can declare themselves free of the disease if they have no new infections for 30 days and if they meet strict disinfection and hygiene conditions. (source: FAO, newspaper websites)

- **United States of America:** Avian influenza (H7) was found in a commercial chicken farm on Maryland’s Eastern Shore on 06/03/04. (source: Maryland Department of Agriculture News Release, FAO liaison office in Washington D.C.)

- **Canada:** Of the outbreak announced on 23/02/04 in Fraser Valley, British Columbia, tests indicate both low and high pathogenic forms of the H7N3 virus were present on the same farm. On 09/03/04, a second farm (about 3 km from the first outbreak) was placed under quarantine after initial provincial tests indicated the possible presence of influenza virus. Samples are being sent to the National Centre for Foreign Animal Diseases in Winnipeg. (source: FAO liaison office in Washington D.C.)

**Under investigation / rumours and suspicions / other information:**

- **Mongolia:** 17 birds including 5 crows have been found dead around Erdenetsagaan soum county of Suhbaatar aymag province, eastern Mongolia. Under investigation (11/03/04 - source: gphin)

- **India:** The sudden death of pigeons observed in Kamakhya Hindu temple in Guwahati, state of Assam. Further information has been requested. (26/02/04 – source: gphin)

**Control strategies currently in implementation (see annex):**

- Vaccination has been started/ordered in: China (Central & Southern areas), Taiwan province of China, Hong Kong SAR, Indonesia, and Pakistan. Preventive vaccination is planned in Myanmar (source: reported during the regional meeting).
2. Countries affected (as of 12/03/2004)

<table>
<thead>
<tr>
<th>area</th>
<th>date declared to OIE</th>
<th>type</th>
<th>animals affected</th>
<th>human case</th>
<th>additional information</th>
<th>info. source</th>
<th>source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Republic of Korea</td>
<td>17/12/03</td>
<td>H5N1</td>
<td>layer, duck</td>
<td>no</td>
<td>No outbreaks since 05/02/04</td>
<td>Governm ent</td>
<td></td>
</tr>
<tr>
<td>Viet Nam</td>
<td>8/01/04</td>
<td>H5N1</td>
<td>chicken, quail, duck, muscovik duck</td>
<td>yes</td>
<td>57 provinces affected</td>
<td>gphin2)</td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>12/01/04</td>
<td>H5N1</td>
<td>chicken, crow</td>
<td>no</td>
<td>fourth outbreak confirmed</td>
<td>FAO; governm ent</td>
<td></td>
</tr>
<tr>
<td>Taiwan province of China</td>
<td>20/01/04</td>
<td>H5N2</td>
<td>chicken, duck, pheasant</td>
<td>no</td>
<td>low pathogenic, new prefecture affected</td>
<td>gphin; meeting report</td>
<td></td>
</tr>
<tr>
<td>Thailand</td>
<td>23/01/04</td>
<td>H5N1</td>
<td>virus isolation: chicken, duck, goose, quail, turkey, stork</td>
<td>yes</td>
<td>reported in 3 provinces so far (Vientiane, Savannkhet, Champasak)</td>
<td>gphin, FAO; governm ent</td>
<td></td>
</tr>
<tr>
<td>Cambodia</td>
<td>24/01/04</td>
<td>H5N1</td>
<td>Chicken, duck, goose, turkey, guinea fowl, wild bird</td>
<td>no</td>
<td></td>
<td>FAO; governm ent</td>
<td></td>
</tr>
<tr>
<td>Hong Kong SAR</td>
<td>26/01/04</td>
<td>H5N1</td>
<td>Peregrine falcon</td>
<td>no</td>
<td>gphin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lao, PDR</td>
<td>27/01/04</td>
<td>H5N1</td>
<td>Chicken, duck and quail</td>
<td>no</td>
<td>FAO; governm ent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pakistan</td>
<td>28/01/04</td>
<td>H7N3 H9N2</td>
<td>layer</td>
<td>no</td>
<td>Only H7 is currently considered High Pathogenic</td>
<td>FAO; governm ent</td>
<td></td>
</tr>
<tr>
<td>Indonesia</td>
<td>06/02/04</td>
<td>H5N1</td>
<td>Chicken, duck and quail</td>
<td>no</td>
<td>chicken have been dying since August</td>
<td>gphin, FAO; governm ent</td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>06/02/04</td>
<td>H5N1</td>
<td>virus isolation: chicken, duck, goose, quail, pigeon, pheasant, black swan</td>
<td>no</td>
<td>16 provinces affected</td>
<td>FAO; governm ent</td>
<td></td>
</tr>
<tr>
<td>United States of America</td>
<td>11/02/04</td>
<td>H7</td>
<td>Chicken</td>
<td>no</td>
<td>Low pathogenic</td>
<td>Delaware Department of Agriculture Statement; FAO</td>
<td></td>
</tr>
<tr>
<td></td>
<td>23/02/04</td>
<td>H5N2</td>
<td>Chicken</td>
<td>no</td>
<td>High pathogenic</td>
<td>Texas Animal Health Commission and USDA website</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>H7</td>
<td>Chicken</td>
<td>no</td>
<td>conducting study</td>
<td>Maryland Department of Agriculture News Release</td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td>19/02/04</td>
<td>H7N3</td>
<td>Chicken</td>
<td>no</td>
<td>Low pathogenic</td>
<td>gphin</td>
<td></td>
</tr>
<tr>
<td></td>
<td>09/03/04</td>
<td>H7N3</td>
<td>Chicken</td>
<td>no</td>
<td>High pathogenic</td>
<td>gphin</td>
<td></td>
</tr>
</tbody>
</table>

1) Official (OIE) and non official Information (ProMed, press agencies, FAO tracking systems...)
2) Gphin: Global Public Health Intelligence Network (Health Canada)
3) FAO; government: FAO representative in concurrence with Government sources
3. Actions taken – follow-up

- **Bird flu: affected countries should not restock flocks too quickly, virus could still be circulating - strict precautionary measures required**

Countries affected by the deadly avian influenza virus H5N1 should not be too quick in restocking the premises, as this may lead to the disease flaring up again if cleaning and disinfection procedures were not totally effective.

Reports that certain countries, two months after the outbreak of the epidemic, are already planning to declare selected zones disease-free and to restock decimated flocks. Caution must be stressed as there may be residual virus in the environment or be in circulation even without a frank outbreak or clinical signs in animals. Before restocking, countries must:

- prove the absence of virus circulation by virus research, serological surveys and the use of non-vaccinated susceptible chickens (so-called sentinels) on infected sites to test if they become infected;
- monitor the movement of poultry and contaminated goods to avoid the reintroduction of the virus from affected areas;
- prevent contact between domestic and wild birds;
- apply intensive disease surveillance to ensure potential new infections are discovered immediately.

Such disease and infection-free status should be verified by independent experts. In some countries more information about the spread of the disease should be made available to the international community.

A recurrence of disease, especially in rehabilitated and restocked areas, will only decrease consumer and trading partner confidence, and severely jeopardise true recovery.


- **China-ASEAN Special Meeting on HPAI Control. Beijing, 2 March 2004**

The Government of the People's Republic of China called for a meeting in Beijing on Highly Pathogenic Avian Influenza Control on 2 March, 2004. The meeting was attended by Ministers, Senior Officers and Experts from China, ten ASEAN countries, FAO, OIE and WHO. The Government of People's Republic of China proposed to develop collaboration between China and ASEAN (of Southeast Asian Nations) countries in order to improve the efficiency of the control of this transboundary disease, which is also a threat to the Public Health. The commitment of all Governments of the Region is one of the key for the success to combat the disease in the countries which are affected and to strengthen the surveillance and the prevention measures in the non-infected countries. Delegates of ASEAN countries and China presented the current situation. Speeches by FAO, OIE and WHO delegates were made as well as proposals on concrete measures on information exchange and on joint prevention control of epidemics and technical cooperation. After one day of work and debate the following joint press statement has been released:

**Joint Press Statement: China-ASEAN Special Meeting on HPAI Control**
March 2nd, 2004, Beijing, China (full text)

The China-ASEAN Special Meeting on HPAI Control was held in Beijing, China on 2 March 2004. The Deputy Prime Minister of Thailand, the Minister of Animal Husbandry & Fisheries of Myanmar, Vice-Ministers and senior officials for agriculture and health, and experts from China and 10 ASEAN countries, as well as officials from ASEAN Secretariat, UN Food and Agriculture Organization, World Health Organization and
World Organization for Animal Health participated in the Meeting. Representatives from Hong Kong and Macao Special Administrative Regions of China attended the meeting as members of the Chinese delegation.

Acknowledging that the outbreak of HPAI in many countries in Asia since last December has caused negative impact on the region's agriculture, poultry industry and foreign trade, as well as on human health, and has become a major concern to the region and the international community;

Recognizing the trans-boundary nature of the disease, its threat to public health, and the need for China and ASEAN to cooperate on HPAI prevention and control so as to minimize losses;

Stressing that the disease must be tackled under strong leadership, with political commitment, and through inter-agency cooperation and partnership at both national and regional levels;

After a review of the current situation of HPAI and in-depth discussions on the preventive and control measures, the meeting agreed that collective efforts be made in the region to effectively address the challenge of HPAI through the following measures:

1. Provide access to and exchange of information and experience on HPAI status, prevention and control between China and ASEAN through the ASEAN disease surveillance network, the ASEAN plus three SARS focal point network and the proposed regional veterinary network in order to work towards creating an early warning system for epidemic recognition and control;

2. Enhance cooperation among inspection and quarantine agencies for border management in China and ASEAN countries to prevent the spread of the disease and minimize its impact on health and trade;

3. Propose the establishment of a China-ASEAN cooperation mechanism for public health, through regular meetings of agricultural or health ministers and their senior officials, and the convening of joint meetings of the health and agricultural ministers as appropriate;

4. Operationalize the “China-ASEAN Fund for Public Health” to finance relevant cooperation between China and ASEAN in addressing regional public health crisis;

5. Strengthen extensive cooperation and exchanges with other countries, regional and international organizations, such as WHO, FAO, OIE on HPAI prevention and control;

6. Exchange HPAI expert teams and organize joint technical training courses on HPAI-related technologies and methodologies to include among others laboratory management, diagnosis and testing, emergency response measures and quality of vaccines in compliance with OIE international standards; and

7. China and ASEAN will mutually provide, within their respective capacity, bilateral financial, material and technical assistance to countries in the region hit and at risk to be infected by HPAI. In this regard, National Reference laboratory of China will share experience and offer technical cooperation with diagnostic laboratories of ASEAN countries in term of diagnostic technology.

FAO/OIE Emergency Regional Meeting on Avian Influenza Control in Animals in Asia (26-28 February) The meeting was attended by veterinary service representatives of 23 countries, 13 donor representatives, ASEAN (Association of Southeast Asian Nations) and SAARC (South Asian Association for Regional Cooperation) personnel, 11 industry officials (animal health and feed sector companies), avian influenza experts, and FAO, OIE, and WHO staff. The main objective of the meeting was to assess the situation two months into the crisis, to identify the main constraints faced by countries and to agree on the strategies to be pursued in the control of the disease. As donor representatives were invited, opportunities for their investment at various levels were to be discussed. This was in a Programme Working Document, entitled: “Halting the Spread of Avian Influenza in...
Asia and Promoting Recovery” The Working Document was subsequently endorsed by the participants as a framework for coordinated action at national, regional and global level and in the short, medium and long term. The GF-TADs (Global Framework for the Progressive Control of Transboundary Animal Diseases) document was also distributed to participants by FAO and OIE, and it was made clear to the meeting that the Working Document constituted a first regional application of the Global Framework. In the meeting conclusions and recommendations, ASEAN and SAARC were recognized as the relevant platforms for programme implementation within this framework. The full text of the recommendation made by the participants is available on: http://www.fao.org/ag/againfo/subjects/en/health/diseases-cards/avian_recomm.html

- **FAO/OIE/WHO Technical Consultation on the Control of Avian Influenza**
  3 - 4 February 2004 Conclusions and recommendations
  Series of recommendations regarding HPAI control were made after the two-day meeting of experts. The full text is available on FAO website: http://www.fao.org/newsroom/common/ecg/36647_en_experts.pdf

- **Technical Cooperation Programme (TCP) projects:**
  FAO Technical Cooperation Projects (TCP) for Viet Nam, Cambodia, Lao PDR, Indonesia, China and Pakistan are operational. Regional TCPs on emergency control of the disease, regional networking (laboratories and epidemiological units), epidemiological understanding of the crisis, and rehabilitation are operational/pipeline.

- **Missions carried out /planned:**

  [Regional]
  - Dr. L. Gleeson (Australia), Australia Animal Health Laboratory, CSIRO, international expert in epidemiology and emergency management. special FAO consultant. Mission to Thailand, China, and Viet Nam. Ongoing.
  - Dr. H. Wagner, FAO Regional Office (Bangkok) Senior Animal Production and Health Officer. Mission to India for the SAARC meeting 16/02/2004

  [Lao PDR]
  - Dr. C. Benigno, FAO Regional Office (Bangkok) Animal Health Officer. Mission to Lao PDR 29/01-1/02/2004
  - Dr. R. Webb (Australia), International expert in epidemiology and programme management. Mission to Lao PDR. Ongoing.

  [Thailand]
  - Dr. D. Swayne (USA), Pathologist, Avian influenza and other exotic or emerging poultry diseases, Southeast Poultry Research Laboratory, USDA/Agricultural Research Service, OIE expert in collaboration with FAO, Mission to Thailand 9-17/02/2004

  [China]
  - Dr. H. Wagner, FAO Regional Office (Bangkok) Senior Animal Production and Health Officer. Mission to China. Ongoing.
  - Dr. J. Domenech, FAO (Rome) Chief, Animal Health Service, Mission to China. 01 – 02/03/04

  [Cambodia]
  - Dr. C. Benigno, FAO RAP (Bangkok) Animal Health Officer. Mission to Cambodia 9 – 14.02.2004

  [Indonesia]
  - Dr. S. Morzaria, FAO Regional Office (Bangkok) Animal Health Officer. Mission to Indonesia. 8 – 17.02.2004
- Dr. H. Westbury (Australia), international expert in epidemiology. Mission to Indonesia. 16/02 – 07/03/04.
- Dr. T. Forman (Australia), international expert in epidemiology and emergency management. Mission to Viet Nam. 15/02 – 07/03/04
- Dr. P. Blanc (France), international expert in project analysis. Mission to Viet Nam. 17/02 – 04/03/04
- Dr. G. Freeland (UK), international expert in project analysis. Mission to Viet Nam. Ongoing.
- Dr. H. BENARD (New Zealand), international expert in epidemiology and emergency management. Mission to Viet Nam. Ongoing.
- Dr. P. Roeder, FAO EMPRES Animal Health Officer (Virology). Mission to Pakistan 21/01/2004 - 1/02/2004
- Dr. J. Lambers (Netherlands), international expert in poultry diseases and epidemiology. Mission to Pakistan. 20/02 – 11/03/04
- Dr. I. Claassen (Netherlands), international expert in vaccine production and regulatory aspects of disease control. Mission to Pakistan. 15 – 25/02/04

4. Related issues

- **Pakistan AI status**

  Among the main findings was the conclusion that there is no reason to be concerned about any imminent or major public health threat posed by AI. Pakistan is likely to be endemically infested with low-pathogenic AI strains of H9, at least in some areas of the country. The Highly Pathogenic AI H7 strain is probably still around in the Karachi area even though there is no recent evidence of clinical outbreaks. The most severe damage so far brought to the poultry industry is caused by the drop in demand for poultry meat as triggered by the loss of confidence by consumers and the public in general in the safety of the local poultry products. This loss in confidence in part finds its origin in the poor communication by public services when it comes to clearly explaining what the real situation is.

  It is recommended to improve on a number of regulations and practices concerning poultry farming, especially on biosecurity. A sustainable national monitoring system may be created along with the design and implementation of a contingency plan. Importantly, there are no funds to compensate farmers for culling and this situation withholds successful disease control. Finally, Pakistan applies locally produced, homologous, inactivated AI vaccines to control AI; there is a need to further enhance the quality of production. (Dr. J. Lambers, FAO consultant)

  A mission to Pakistan was made by FAO consultant Dr. Jan Lambers, from 22 February to 9 March, in order to provide a basis for FAO emergency assistance under TCP/PAK 3002(E).

- **Indonesia AI status**

  HPAI is spreading in Indonesia. The number of districts and municipalities infected has increased from 78 previously reported to 80. Large areas in Sumatra and Kalimantan are suspected for the disease (not confirmed). Similarly, disease outbreaks suspected to be HPAI, and causing high mortality in poultry, have been reported on the islands of Lombok, Sumbawa, Flores. These are, however, not been officially confirmed to be HPAI. The death toll of chicken has been estimated at 6.2 million as at the end of February. Vaccination policy as tool to control the disease has been introduced and three local firms have been approved to manufacture inactivated...
vaccine based on the local H5N1 isolate. In addition, a local biologicals company has been authorised to import vaccines. Indonesia is now distributing 32 million doses of AI vaccine that conforms to the OIE standards. The main focus of the government vaccination program will be smallholder poultry farmers. Because of the scale of the problem in Indonesia, the country needs immediate help in a number of fields of disease control, that includes disease surveillance, planning and operation of disease control programs (culling, vaccination, biosecurity), laboratory and field diagnosis and sero-monitoring. (S. Morzaria, FAO Regional Office for Asia and the Pacific; Dr. H. Westbury, FAO consultant)

5. Avian Influenza Questions and Answers (full text available on the AGA Web site)

Q: What should be done when an outbreak occurs?

The general approach to be selected and the combination of actions to be taken with regard to controlling marketing, imposition of movement restrictions, quarantine measures, culling, and any vaccination, varies according to the local set of circumstances and from country to country. There is no single solution applicable to all scenarios, and a balance must always be found to find effective, feasible and socially acceptable control measures that safeguard the short and long term livelihoods of farmers and the health of the population. It remains, however, that in the face of an emergency with multiple outbreaks suggesting Highly Pathogenic Avian Influenza (HPAI), levels of bio-security (prevention and containment) must immediately be raised appropriate to the risk, and there must be early detection and rapid plus safe culling of infected groups of birds, and those considered in contact with them, in order to halt disease spread...

More information is now available on:

6. Resources available

Relevant articles/publications:
- 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
- Avian influenza: update on European response (Available at: http://www.eurosurveillance.org/ew/2004/040205.asp#1
Study shows high level of avian to human transmission of influenza A (H7N7) during outbreak in the Netherlands 2003. (Available at: http://www.eurosurveillance.org/ew/2004/040226.asp#5)

Relevant Web sites:


OIE web site: http://www.oie.int/eng/en_index.htm

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


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Supervision and Coordination

J. Domenech, Chief, Animal Health Service (FAO Headquarters – Rome) Joseph.domenech@fao.org
### Annex 1

- **Control strategies currently in implementation** -

  Source of information: OIE reports, press releases, government and media reports, gphin.

<table>
<thead>
<tr>
<th>Area</th>
<th>Control measures</th>
</tr>
</thead>
</table>
| **Republic of Korea**               | **Stamping out**  
- Movement control (3km)  
- No vaccination  
- Surveillance (10km)  
- Import ban  
- Quarantine  
- Screening  
- Disinfection (include vehicles)  
- Zoning and check points  |
| **Viet Nam**                        | **Modified stamping out**  
- Movement control (10km)  
- Screening  
- Quarantine  
- Disinfection  
- Compensation  
- Control of wildlife reservoirs  
- Public awareness  |
| **Japan**                           | **Stamping out**  
- Movement control (30km)  
- No vaccination  
- Surveillance  
- Import ban  
- Quarantine  
- Disinfection  
- Screening  
- vaccine bank planed  |
| **Taiwan province of China**        | **Stamping out**  
- Import ban  |
| **Thailand**                        | **Stamping out**  
- Movement control (5km / 1km)  
- Surveillance (50km/5-10km)  
- No Vaccination  
- Daily reporting  
- Quarantine  
- Screening  
- Zoning  
- Compensation planned  
- 21 days surveillance programs  
- 30 days and 5 month phases  |
| **Cambodia**                        | **Stamping out**  
- Movement control  
- Surveillance (3-10km)  
- Disinfection  
- Quarantine  
- Import ban  
- Disinfection/Treatment  |
| **Hong Kong, SAR**                  | **Vaccination**  
- Surveillance in markets  
- Use sentinels  
- Import ban  
- Early detection programme  
- Wild bird survey  
- Test pigeon before marketing  |
| **China**                           | **Stamping out**  
- Vaccination (3-8km)  
- Movement control  
- Market control  
- Trucking back  
- Import ban  
- Disinfection  
- Quarantine  
- compensation planned  
- Vehicle check at main cities  
- Wild bird watch / disinfection  |
| **Lao, PDR**                        | **Selective stamping out**  
- Movement control  
- Surveillance (10km)  
- Import ban  
- Quarantine  
- Disinfection  
- Public awareness  |
| **Pakistan**                        | **Stamping out (voluntary)**  
- Movement control  
- Vaccination (voluntary)  
- Import ban  
- Quarantine  
- Zoning  
- Control wild reservoirs  
- Proper disposal of dead birds  
- Biosecurity  |
| **Indonesia**                       | **Modified stamping out**  
- Movement control of poultry, its products and farm waste  
- vaccination  
- surveillance  
- Tracking back  
- Quarantine  
- Zoning  
- compensation planned  
- Biosecurity  
- Monitoring and evaluation  
- no restocking for 30 days  
- Public awareness  |
| **United States of America**        | **Stamping out**  
- Movement control  
- Surveillance  
- Import ban  
- Quarantine  
- set hotline  
- market control  |