

*HPAI outbreaks reported in this publication refer to officially confirmed cases only.*

*The information is compiled from the following sources: World Organisation for Animal Health (OIE), national governments and their ministries, and the European Commission (EC) – these sources are responsible for any errors or omissions.*

## FAO and OIE to share bird flu virus data with world's scientists

Avian flu experts of the Food and Agriculture Organization (FAO) and counterparts from the World Organization for Animal Health (OIE) are to share information on avian flu virus sequences and make this available to the entire scientific community.

The move is part of both organizations' efforts to speed up work on surveillance and control of the highly pathogenic H5N1 virus in birds, and could help in the preparation of human vaccines that would be needed in the event of a human pandemic.

In a statement 1 August announcing that the data exchange will take place through their joint network on avian influenza (OFFLU), FAO and OIE also called on the world's scientists, international organisations and countries to follow suit and engage in global sharing of virus strains and sequences.



Under this new initiative, genetic information on virus strains will be posted on the OFFLU website ([www.offlu.net](http://www.offlu.net)), sent to the U.S. National Institutes of Health for sequencing, and deposited in the free-access database, GenBank.

Since its launch in April 2005, OFFLU has mainly worked on promoting the exchange of scientific data and biological materials (including virus strains) within the network, and sharing this information with the wider scientific community.

In March this year, OFFLU's scientific committee, made up of some of the world's leading veterinary experts on influenza, revised its terms of reference to put new emphasis on the need for further collection, characterization and exchange of influenza viruses, and for the expansion of the genomic database for animal influenza viruses.

Sharing virus strains, samples and sequences is a critical part of the global work on the surveillance and control of the highly pathogenic H5N1 virus, and supports the preparation of human vaccines. Avian influenza brings long-term implications for human health, and therefore OFFLU works closely with the World Health Organization Working Group on Influenza Research at the human-animal interface. *continues on Page 2*

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## **FAO and OIE to share bird flu virus data with world's scientists**

Virus strains can be considered as intellectual property and sharing them can be seen as potentially hampering research progress and scientific publication. However, in mid-February, Dr. Ilaria Capua of the Istituto Zooprofilattico Sperimentale delle Venezie in Italy and secretary of OFFLU, released sequence data of the H5N1 virus found in Nigeria and Italy on GenBank. At the same time, she urged 50 colleagues around the world to share their isolated H5N1 virus strains.

OFFLU scientists followed up in a letter published by the 'Science' review a few weeks later. "We will make available for genome nucleotide sequencing of H5N1 contemporary isolates from several countries and relevant historical strains," said Ilaria Capua and colleagues Ian Brown, Michael Johnson, Dennis Senne and David Swayne.

Meanwhile, the world scientific community's search for ways to combat infectious diseases came up during the recent Group of Eight (G8) summit in St. Petersburg, Russia, where G8 leaders declared their determination "to achieve tangible progress in improved international cooperation on the surveillance and monitoring of infectious diseases, including better coordination between the animal and human health communities, building laboratory capacities, and full transparency by all nations in sharing, on a timely basis, virus samples in accordance with national and international regulations and conventions, and other relevant information about the outbreaks of diseases."

## **FROM THE FIELD**

This issue of AIDEnews launches a new feature, offering readers a summary of recommendations formulated by FAO consultants after visiting affected or at-risk countries.

### **Egypt**

(Mission dates: 17 February – 3 June 2006)

#### ***Background***

H5N1 in poultry was first confirmed in February 2006, and while the country's commercial poultry industry was already vaccinating poultry against Newcastle disease, it required assistance with the national preparedness for and response to outbreaks of H5N1. Separate FAO missions in February and March had recommended the establishment of separate dedicated command structures for avian influenza and foot and mouth disease within the General Organization for Veterinary Services (GOVS). They had also called for immediate and medium to long-term measures in the fight against avian influenza:

#### *Immediate measures*

- Disease recognition capacity
- Early reporting
- Rapid outbreak containment
- Protection of personnel involved in disease control
- Aggressive surveillance
- Application of biosecurity and biosafety practices by bird owners and government workers

#### *Medium to long-term*

- Further enhancement of biosecurity and biosafety practices
- Re-structuring of poultry production and related marketing systems to reduce disease transmission, with particular attention to the live bird market system
- Coordination of laboratory submission and disease investigation data flow
- Vaccination strategy in line with current FAO and OIE policies

In general, FAO had recommended the following priorities, among others:

- Early detection and reporting
- Early coordinated and safe response
- Seamless information flow and sharing
- Comprehensive approach to the use of vaccination
- Policies and risk communication that stress the FAO message: "Protect Poultry, Protect People"

## ***Purpose***

- To review early detection and reporting mechanisms, early coordinated and safe response, seamless information flow and sharing and development of a comprehensive vaccination scheme.
- To support and develop compensation strategies, assess critical resource needs, coordinate risk communication strategies with representatives from national agencies, FAO, WHO and UNICEF and liaise with donors and technical assistance teams.

## ***Recommendations***

### ***Risk communication***

- A communication strategy must be designed and implemented in order to obtain the compliance of and cooperation from poultry owners to report disease and submit samples.
- Transparent accurate and consistent messages must be directed to various target groups including the general public, home bird owners, smaller commercial producers, and integrated companies.
- Communication must transmit the concept that vaccinated birds that test positive for H5N1 must be humanely euthanized in order to achieve source reduction.
- 'Knowledge, Attitudes and Practices' (KAP) studies should be carried out among backyard and rooftop owners related to long term re-structuring of backyard/rooftop production systems introducing basic home biosecurity practices such as caging birds.
- International (FAO, WHO, UNICEF) and national agencies (such as the ministries of agriculture and health) should participate in regular meetings to address uniform and accurate risk communication messages stressing disease recognition, biosecurity and the introduction of responsible poultry raising practices; these messages should include both veterinary and human perspectives supporting FAO's message: "Protect Poultry, Protect People".

### ***Source reduction***

- Assign a long-term consulting epidemiologist to the country's General Organization for Veterinary Services (GOVS) and National Laboratory for Quality Control and Poultry Production (NLQP) to further develop national surveillance, data management and coordinate field response activities
- Introduce effective control measures with the emphasis on surveillance, leading to early detection, early reporting and rapid response at local, regional and national levels.
- Activate balanced surveillance, including targeted surveillance of high-risk governorates, initiation of active surveillance and continuation of passive surveillance, accompanied by expansion of field and laboratory capacity.
- Conduct a census of Egyptian poultry to support science-based surveillance and vaccination.

### ***Structure for emergency preparedness, response and recovery***

- Provide training for the General Organization for Veterinary Services (GOVS), the National Laboratory for Quality Control and Poultry Production (NLQP) and governorate and national levels to improve capacity for planning, organizing and implementing an effective emergency response operation.
- Recruit consultant familiar with Incident Command System (ICS) emergency response practices to provide practical and adaptable information to address emergency preparedness.
- Conduct periodic simulation exercises to act as a feedback mechanism on the evolving state of national and local preparedness.

### ***Veterinary and laboratory infrastructure***

- Conduct needs assessment for recruiting and training qualified epidemiologists since current infrastructure and resources insufficient to support the elimination of H5N1 from poultry.
- Continuing support to build laboratory surge capacity, through central and properly controlled regional laboratories.

### ***Vaccination***

- Assess use of vaccination prior to an outbreak through a national risk assessment to ensure that it is used as part of a comprehensive disease control and elimination approach.
- Develop vaccination contingency planning (with assistance from FAO) as a component of emergency preparedness planning.
- Set up working group (including FAO, GOVS, NLQP and various types of poultry producers and owners, including representatives from marketing systems) to establish an exit strategy that coordinates vaccination with humane culling, carcass and manure disposal, biosecurity, movement controls and strong disease surveillance.

### *Marketing*

- Initiate long term re-structuring of the marketing system to take care of the 50 percent of slaughter capacity not addressed through regulated slaughter plants; a socio-economic study is needed to define the best approach to this re-structuring in a way that that balances economic development, alleviation of poverty, food security and food safety.
- Establish public/private sector working groups to propose long-term approaches and solutions which recognize that appropriate legislation and private financial support may be required to regulate this high risk marketing system.

### *Compensation and re-stocking*

- FAO should support the development of a national action plan to find support for compensation and provide the services of an economist to assist the national government in formulating a defensible compensation scheme.
- Develop a re-stocking plan as more susceptible birds are added to the existing population, many of which are vaccinated; FAO can provide technical advice in order to assess and avoid the potential for a second epidemic wave.

## **Bangladesh**

(Mission dates: 6 May – 6 July 2006)

### ***Background***

Bangladesh is at high risk of H5N1 incursions from adjacent countries at any time or from migrating waterfowl which will arrive in autumn. Incursions of H5N1 must be stamped out quickly by the government or the disease could become permanently established or endemic in the country. Close cooperation with WHO/public health authorities is essential. Any incursion of avian influenza would have a major socio-economic impact on the country.

### ***Purpose***

Review the Bangladesh government's veterinary laboratory capability to receive and diagnose highly pathogenic avian influenza (HPAI), including H5N1.

Assess and assist with the country's emergency preparedness, surveillance and emergency response plans for HPAI.

### ***Recommendations***

#### *Immediate*

- Laboratories require thorough cleaning and minor repairs.
- Broken and old equipment must be discarded and out-of-date chemicals disposed of.
- Standard operating procedures (especially those related to safety) must be prepared.
- High risk samples for HPAI must go directly to the country's reference laboratory at the Bangladesh Livestock Research Institute (BLRI) in bio-secure containers (IATA standard or equivalent).

#### *Short term*

- Minor upgrades (such as painting) are required.
- Urgently required equipment must be identified.
- Better use of space should be studied.
- Part-time bio-safety officers must be identified.
- Attention must be paid to bio-safety/containment concerns around post mortem room use and carcass disposal.
- The Department of Livestock Services (DLS) emergency response manual requires revision.

#### *Medium term*

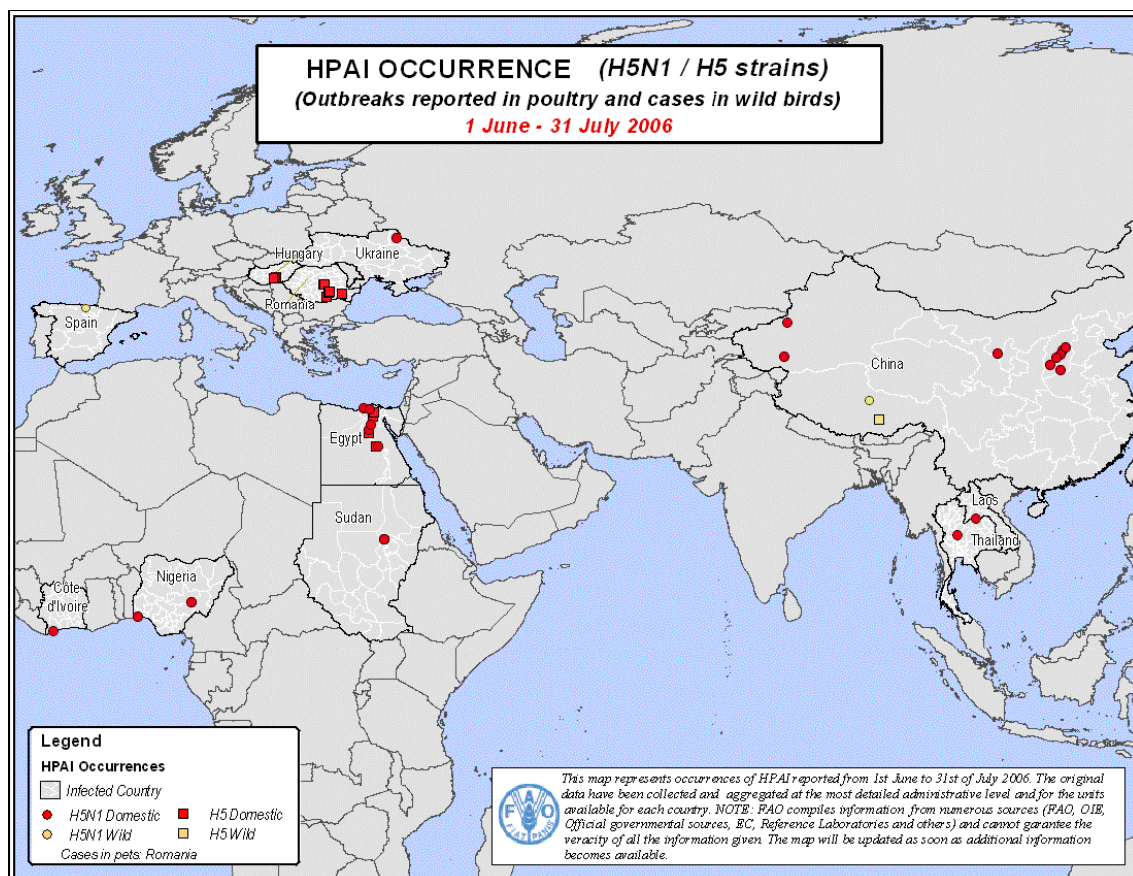
- Field disease investigation laboratories should be brought up to OIE minimum capacity requirements for a sub-national avian influenza network.
- Support equipment (such as generators and incinerators, or alternative disposal methods) should be purchased.
- Laboratory equipment needs include class 2 bio-safety cabinets and ELISA (with associated water systems) for AI surveillance.
- All laboratories need to have a rapid antigen test for influenza A in place.

- Gaps at national laboratories (Central Disease Investigation Laboratory and Bangladesh Livestock Research Institute) must be addressed – especially in terms of bio-safety/security.
- A simulated H5N1 incursion should be organised to identify response gaps.

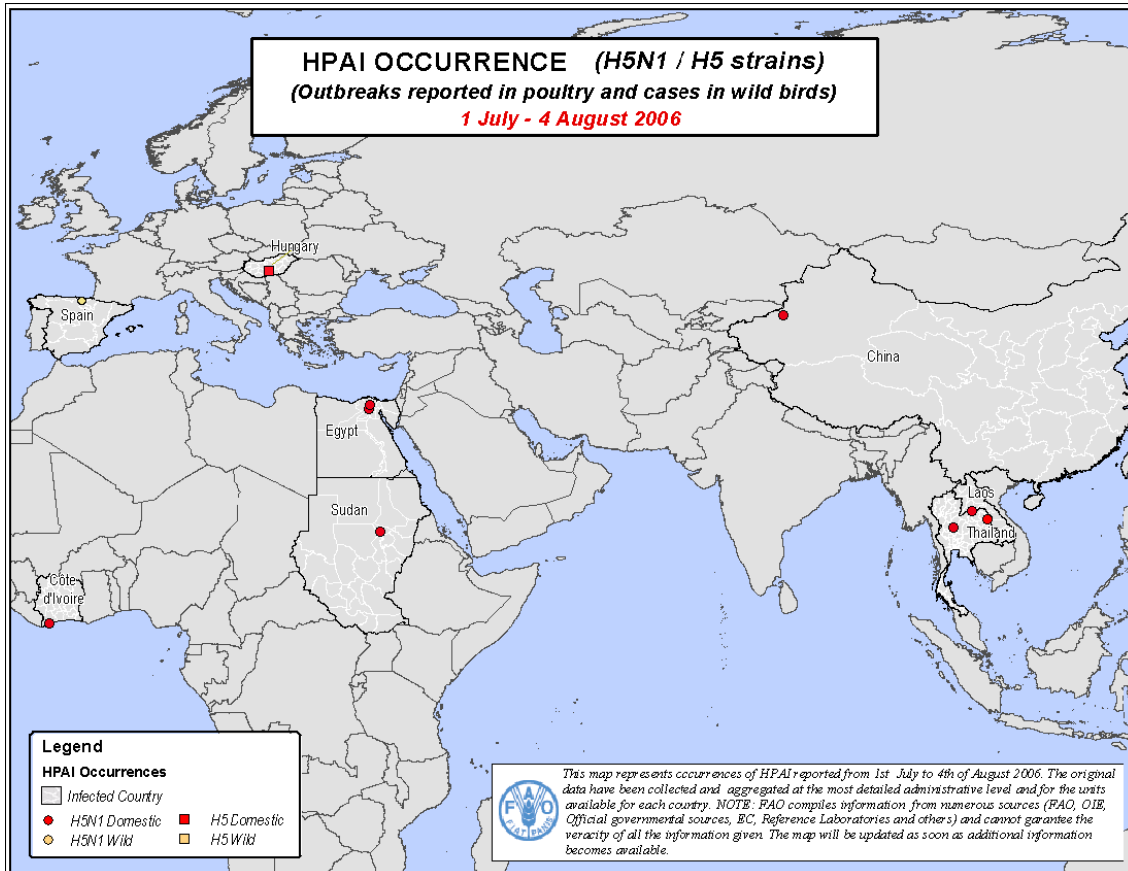
*Long term*

- The government must work towards meeting international standards for laboratories, including Animal Pathogen Containment Level 2 for field disease investigation laboratories, Level 2-enhanced for the Central Disease Investigation Laboratory, and Level 3 for the Bangladesh Livestock Research Institute.
- The possibility of obtaining modular laboratories needs to be investigated.
- The Department of Livestock Services should consider carrying out an assessment of its veterinary infrastructure using the OIE self-assessment tool to document strengths and gaps.

## OUTBREAK MAP (1 JUNE – 31 JULY 2006)



## OUTBREAK MAP (1 JULY – 4 AUGUST 2006)



## ASIA ROUND-UP

Highly Pathogenic Avian Influenza (HPAI) type H5N1 continues to spread in Asia. In addition to the 10 countries affected in the Southeast Asia (2003 - 2004), India, Pakistan, Myanmar and Afghanistan were newly affected by new outbreaks of HPAI in 2006 in poultry and wild birds.

More than 220 million birds have been culled as a consequence of HPAI outbreaks in Asia with a major impact on food security and people's livelihoods, backyard poultry farms and the international trade in live poultry and poultry products. In addition, the unproductive "downtime" forced on affected poultry farms has had a negative effect on such farms, public health issues and contact with HPAI H5N1 contaminated environments.

China, Cambodia, Lao PDR, Malaysia and Thailand reported new outbreaks of HPAI during 2006. Although there is an increase in knowledge and public awareness of HPAI in poultry, it is not yet clear what is the exact role of wild birds in the epidemiology of HPAI, the susceptibility of wild bird species, the mechanisms underlying virus persistence and virus transmission between and among wild migratory wild birds, resident wild birds, free range birds and domestic poultry populations.

In Asia, two sources of infection of HPAI virus probably coexist: the introduction, transmission and circulation of the virus in domestic poultry populations (particularly on backyard farms), live bird markets and commercial poultry farms with low biosecurity systems, and migratory wild birds. However, the link between domestic poultry and wild bird habitats and the true risk posed is still unclear. (*EMPRES-Watch*)

## AT A GLANCE

*The latest confirmed HPAI outbreaks as of 31 July 2006*

### **Note**

AIDEnews publishes reports of **confirmed HPAI cases only** to avoid any form of association with rumours or suspicions. AIDEnews uses the following sources, which are clearly identified for all reports: FAO, World Organisation for Animal Health (OIE), European Commission (EC), United Nations and national governments.

## GLOBAL OVERVIEW

During July, 14 suspected events of HPAI were reported, 10 (72%) of which were confirmed as HPAI, one (7%) denied and confirmed as Newcastle disease and three (21%) for which investigations are continuing. 12 of the cases involved domestic poultry (chickens, geese, ducks and pigeons), the other two concerned wild birds. The disease is still present in Europe, with several confirmed outbreaks of HPAI in domestic geese in Hungary and H5N1 detection in a wild duck in Spain. In Africa, HPAI H5N1 has been confirmed in domestic birds in Côte d'Ivoire and Egypt and an outbreak of HPAI is suspected in poultry in Nigeria. HPAI H5N1 outbreaks have been confirmed in poultry in Asia (China, Lao PDR and Thailand). Suspicions of HPAI outbreaks and positive wild birds in Russia are being followed up.

## AFRICA

### **Côte d'Ivoire**

The Ministry of Animal Production and Fish Resources confirmed an outbreak of H5N1 in an industrial rubber plantation 500 km south-west of Abidjan in a village in San Pedro, Grand Béréby, on 28 June following first news of the outbreak on 10 June. The country had first confirmed H5N1 on 19 April, after news of the outbreak on 30 March. In the latest outbreak, five traditional chickens died. Laboratory diagnostic tests (virus isolation and RT-PCR) were performed at the Central Veterinary Laboratory of the National Laboratory for Agricultural Development Support (LANADA) in Bingerville. (*OIE, 20 July*)

### **Egypt**

An outbreak of HPAI was reported on 6 July, and subsequently confirmed as H5N1, in domestic poultry in El-Giza in the district of Al-Mo'atamadiya. All birds at the site were culled. (*EMPRES-Watch*)

## NEAR EAST

### **Israel**

The country will regain its animal health status as a notifiable highly pathogenic avian influenza free country with effect from 1 August. Since confirmation 16 March of H5N1, the country has had no new cases. (*OIE, 23 July*)

## ASIA

### **China**

3,045 out of 6,000 chickens died on 14 July in the village of Yinglanganawatis in the autonomous region of Xinjiang, and H5N1 was confirmed on 19 July.

- Laboratory diagnostic tests (virus isolation and RT-PCR) were performed at the by the Harbin Veterinary Research Institute at the Chinese Academy of Agricultural Sciences (Harbin is the national reference laboratory). The laboratory diagnostic tests used were haemagglutination inhibition test, RT-PCR, virus isolation in SPF eggs and intravenous pathogenicity index test. (*OIE, 21 July*)

## Lao PDR

FAO will help inspect and advise the authorities in outbreak control capacity, following an outbreak in a farm 25 km from Vientiane. *(FAO, 31 July)*

Earlier, the government reported that specimens sent to Bangkok have been found positive for 'N1', confirming that the outbreak in Dong Bang farm, in Xaythani district, on July 18 was caused by H5N1. After discovery of the infection, about 6,000 chickens were killed and destroyed, including some 2,580 chickens found dead on the farm, which had experienced an earlier outbreak in 2004. The farm is now completely depopulated. *(Government, 27 July)*

## Thailand

The Department of Livestock Development in the Ministry of Agriculture and Cooperatives has confirmed re-occurrence of H5N1 following a previous report that outbreaks of the disease had ended.

The first reported outbreak started July 16 in a flock of 295 native chickens in a village in Pichitr province (BangMunlarn district); 31 chickens died and the remaining 264 were destroyed. Laboratory diagnostic tests (virus isolation and RT-PCR) were performed at the Lower Northern Regional Veterinary Research and Development Centre of the Department of Livestock Development in Pitsanuloke province. *(OIE, 26 July)*

The second reported outbreak started 24 July in a flock of 5,500 layer chickens in a conventional medium size farm with typically low biosecurity in Muang village, Nakhon Phanom province; 2,241 chickens died and the remaining 3,259 were destroyed. Laboratory diagnostic tests were performed in two laboratories:

- virus isolation and haemagglutination inhibition test on 29 July (resulting positive for H5) at the Upper Northeastern Regional Veterinary Research and Development Centre of the Department of Livestock Development in Konkean province;
- virus isolation and real-time PCR on 1 August (resulting positive for H5N1) at the National Institute of Animal Health.

*(OIE, 2 August)*

## EUROPE

### Hungary

There have been no new suspected outbreaks of avian influenza since 15 July but that laboratory tests on samples originating from earlier suspect cases in Bodoglar (reported 9 July) have shown positive results for the HPAI subtype H5, making this the 29th confirmed outbreak in Hungary. *(European Commission, 28 July)*

## AFFECTED COUNTRIES (BY MONTH)

(based on most recent outbreaks)

### JULY 2006

Egypt, China, Hungary (H5), Lao PDR, Spain, Thailand

### JUNE 2006

Côte d'Ivoire, Niger, Nigeria, Romania, Ukraine

### MAY 2006

Burkina Faso, [Czech Republic](#), Denmark (H5), Germany, [Mongolia](#), [Poland](#)

### APRIL 2006

Afghanistan, Djibouti, France, India, Myanmar, Pakistan, Sudan, Sweden (H5), Palestine Authority

### MARCH 2006

Albania, [Austria](#), Azerbaijan (H5), Cambodia, Cameroon, [Croatia](#), [Greece](#), Indonesia, Israel, Jordan, Kazakhstan, Malaysia, Serbia and Montenegro, [Slovenia \(H5\)](#), [Switzerland \(H5\)](#), Turkey, [United Kingdom](#)

### FEBRUARY 2006

[Bosnia-Herzegovina](#), [Bulgaria](#), [Georgia](#), [Italy](#), [Iran](#), [Iraq \(H5\)](#), [China \(Hong Kong SAR\)](#), Russia, [Slovakia](#)

### DECEMBER 2005

Viet Nam

### MARCH 2004

Rep. of Korea, Japan

Blue: wild birds only



## SUMMARY OF CONFIRMED HPAI OUTBREAKS IN AFFECTED COUNTRIES

(as of 31 July 2006)

*Note:* highlighted countries indicate those in which there has been only one officially confirmed outbreak

<b>EUROPE</b> Country	<b>1<sup>st</sup> outbreak</b>	<b>Most recent outbreak</b>	<b>Animals affected</b>	<b>Human cases / deaths</b>
Albania	16 February 2006	9 March 2006	Domestic poultry	-
Austria	10 February 2006	22 March 2006	Wild birds – cats	-
Azerbaijan	2 February 2006	18 March 2006 (H5)	Wild birds – domestic poultry – dogs	8 / 5
Bosnia-Herzegovina	16 February 2006	16 February 2006	Wild birds	-
Bulgaria	31 January 2006	9 February 2006	Wild birds	-
Croatia	21 October 2005	24 March 2006	Wild birds	-
Czech Republic	27 March 2006	19 May 2006	Wild birds	-
Denmark	12 March 2006	26 May 2006 (H5)	Wild birds – domestic poultry	-
France	17 February 2006	26 April 2006	Wild birds – domestic poultry	-
Georgia	23 February 2006	23 February 2006	Wild birds	-
Germany	8 February 2006	12 May 2006	Wild birds – domestic poultry – cats – stone marten	-
Greece	30 January 2006	27 March 2006	Wild birds	-
Hungary	4 February 2006	9 July 2006 (H5)	Wild birds	-
Italy	1 February 2006	19 February 2006	Wild birds	-
Poland	2 March 2006	7 May 2006	Wild birds	-
Romania	7 October 2005	6 June 2006	Wild birds – domestic poultry – cat	-
Russia	15 July 2005	31 July 2006	Domestic poultry – wild birds	-
Serbia and Montenegro	28 February 2006	16 March 2006	Wild birds – domestic poultry	-
Slovakia	17 February 2006	18 February 2006	Wild birds	-
Slovenia	9 February 2006 (H5)	25 March 2006 (H5)	Wild birds	-
Spain	7 July 2006	7 July 2006	Wild birds	-
Sweden	28 February 2006	26 April 2006 (H5)	Wild birds – game birds	-
Switzerland	26 February 2006	30 March 2006 (H5)	Wild birds	-
Turkey	5 October 2005	31 March 2006	Domestic poultry – wild birds	12 / 4
United Kingdom	30 March 2006	30 March 2006	Wild birds	-
Ukraine	2 December 2005	11 June 2006	Wild birds – domestic poultry – zoo birds	-

<b>AFRICA</b> Country	<b>1<sup>st</sup> outbreak</b>	<b>Most recent outbreak</b>	<b>Animals affected</b>	<b>Humans cases / deaths</b>
Burkina Faso	1 March 2006	20 May 2006	Domestic poultry - wild birds	-
Cameroon	21 February 2006	28 March 2006	Domestic poultry – wild birds	-
Côte d'Ivoire	31 March 2006	10 June 2006	Domestic poultry – wild birds	-
Djibouti	6 April 2006	6 April 2006	Domestic poultry	1 / 0
Egypt	17 February 2006	2 July 2006	Domestic poultry – wild birds	14 / 6
Niger	6 February 2006	1 June 2006	Domestic poultry	-
Nigeria	16 January 2006	12 June 2006	Domestic poultry – wild birds	-
Sudan	25 March 2006	13 April 2006	Domestic poultry	-

<b>NEAR EAST</b> Country	<b>1<sup>st</sup> outbreak</b>	<b>Most recent outbreak</b>	<b>Animals affected</b>	<b>Humans cases / deaths</b>
Iran	2 February 2006	2 February 2006	Wild birds	-
Iraq (H5)	18 January 2006	1 February 2006	Domestic poultry – wild birds	2 / 2
Israel	16 March 2006	30 March 2006	Domestic poultry	-
Jordan	23 March 2006	23 March 2006	Domestic poultry	-
Palestine Authority	21 March 2006	2 April 2006	Domestic poultry	-

<b>ASIA</b> Country	<b>1<sup>st</sup> outbreak</b>	<b>Most recent outbreak</b>	<b>Animals affected</b>	<b>Humans cases / deaths</b>
Afghanistan	2 March 2006	4 April 2006	Domestic poultry – wild birds	-
Cambodia	12 January 2004	22 March 2006	Domestic poultry – wild birds	6 / 6
China	20 January 2006	19 July 2006	Domestic poultry	19 / 12
(Hong Kong SAR)	19 January 2004	25 February 2006	Wild birds	-
India	27 February 2006	18 April 2006	Domestic poultry	-
Indonesia	2 February 2006	15 March 2006	Domestic poultry – pigs (with no clinical signs)	54 / 42
Japan	28 December 2003	2 April 2004	Domestic poultry – wild birds	-
Kazakhstan	22 July 2005	10 March 2006	Domestic poultry – wild birds	-
Korea, Rep. of	10 December 2003	22 March 2004	Domestic poultry – wild birds	-
Lao PDR	15 January 2004	18 July 2006	Domestic poultry	-
Malaysia	19 August 2004	21 March 2006	Domestic poultry – wild birds	-
Mongolia	10 August 2005	30 May 2006	Wild birds	-
Myanmar	8 March 2006	25 April 2006	Domestic poultry	-
Pakistan	23 February 2006	25 April 2006	Domestic poultry	-
Thailand	23 January 2004	16 July 2006	Domestic poultry – wild birds – tiger	23 / 15
Viet Nam	9 January 2004	17 December 2005	Domestic poultry	93 / 42

## ANNEX 1 CONTACT POINTS

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## ANNEX 2 LABORATORIES AND SAMPLE SHIPPING INFORMATION

### ITALY

#### ***OIE/FAO and National Reference Laboratory, Istituto Zooprofilattico Sperimentale (IZS) delle Venezie, Padova***

##### **Types of specimen**

Specimens for analysis may be virus isolates prepared in a submitting country or clinical specimens, such as tissues or swabs, collected from diseased birds.

##### *Note:*

Venice Marco Polo Airport only accepts material classified as "diagnostic samples" (code UN3373).

##### **Packaging requirements**

All materials should be in leak-proof containers. Packaging should be made up of three layers: (1) primary container, (2) secondary packaging and (3) rigid outer packaging.

Packaging of "diagnostic samples" (code UN3373) should comply with IATA PI650 standard. Packaging of "virus isolates" (code UN2814 for avian influenza virus and UN2900 for Newcastle virus) should comply with IATA PI602 standard.

Contact couriers to confirm the provision of boxes complying with these requirements.

##### **Accompanying documents for clearance**

Import permissions of the Italian Ministry of Health (formerly provided by the IZS).

A signed pro forma invoice (original with signature, no photocopy accepted) should be attached firmly to the box.

##### **Shipping**

Air freight or couriers via Milan Malpensa Airport (recommended, airport code: MXP), Rome Fiumicino Airport (couriers only, airport code: FCO) or Venice Marco Polo Airport (airport code: VCE, for diagnostic samples only, no isolates – code UN3373).

Arrange for shipments to arrive in Italian airports from Monday to Thursday only.

##### **Shipping address**

Istituto Zooprofilattico Sperimentale delle Venezie  
Virology Department  
Viale dell'Universita' 10  
35020 Legnaro, Padova  
Italy

##### **Notification of shipment**

Before shipping, please supply the IZS contact person with the following information:

- Date of embarkation
- Airline name and flight number
- Date of arrival in Italy
- Name of destination airport
- Airway bill number (**fax as soon as possible** to: [+39] 049 808 4360)
- Person to contact with the results of analysis (supply name, fax number and e-mail address)

##### **Contact people at IZS**

*For diagnostic samples and viral isolates*  
Micaela Mandelli ([mmandelli@izsvenezie.it](mailto:mmandelli@izsvenezie.it))  
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##### *For reagents*

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##### *Other contact persons*

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**Important:** Contact the IZS to discuss testing and testing materials before shipping. Provide details of the contact person with whom IZS should keep in touch.

**UNITED STATES OF AMERICA**

**National Veterinary Services Laboratories (NVSL), Ames, Iowa**

**Import permit**

Packages containing diagnostic specimens or organisms (infectious materials) imported from foreign locations into the United States of America must be accompanied by a permit issued by the U.S. Department of Agriculture. This permit, together with proper packaging and labelling, will expedite clearance of the package through U.S. Customs. One copy of the permit should be attached to the outside of the shipping container and a second copy placed just inside the lid of the outer shipping container. The permit can be obtained from NVSL.

**Packaging requirements**

All materials should be in leak-proof containers and packaged to withstand breakage. All materials should be properly labelled.

**Shipping address**

National Veterinary Services Laboratories  
Diagnostic Virology Laboratory  
1800 Dayton Avenue, Ames, Iowa 50010  
United States of America

**Notification of shipment**

Please provide the Diagnostic Virology Laboratory with shipping information (date of arrival, airline/courier, weigh bill number, etc.) as soon as it is available. Fax information to (+1) 515 663-7348 or telephone (+1) 515 663-7551.

**Contact**

Dr. Beverly J Schmitt  
Tel (+1) 515 663 7532  
Fax (+1) 515 663-7348  
[Beverly.J.Schmitt@usda.gov](mailto:Beverly.J.Schmitt@usda.gov)

## **AUSTRALIA**

### **Australian Animal Health Laboratory (AAHL), Geelong**

#### **Type of specimen**

Specimens submitted to AAHL for disease diagnosis may be either virus isolates prepared 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, suitable transport containers and packing instructions 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 appropriate IATA regulations and appropriately labelled. 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**

When submitting specimens, please contact the accessions clerk at [accessions@csiro.au](mailto:accessions@csiro.au), the Duty Veterinarian at [dutyvet@csiro.au](mailto:dutyvet@csiro.au) or Dr. Peter Daniels on (+61) 3 5227 5000 and provide consignment details (including consignment note/air weigh bill number, courier/airline and expected arrival date) so that the specimens can be collected upon arrival in Australia. Alternatively send the information by fax to  
(+61) 3 5227 5555.

#### **Shipping address**

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

#### **Contact**

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.

**UNITED KINGDOM**

*(from outside the European Union)*

**Avian Virology Laboratory, Veterinary Laboratories Agency, Weybridge**

**Packaging requirements**

All materials should be in leak-proof containers, packed to IATA regulations by a registered IATA packer. At least two layers of packaging should be used and the inner layer treated lightly with disinfectant.

The outer packaging must be marked as follows:

**ANIMAL PATHOGEN - PACKAGE ONLY TO BE OPENED AT THE AVIAN VIROLOGY SECTION, VETERINARY LABORATORIES AGENCY, WEYBRIDGE, SURREY**

The packaging must also be marked with one of the following IMPORT LICENCE NUMBERS:

For Newcastle disease: AHZ/2232/2002/5

For avian influenza, other viruses, avian tissue, serum, faeces and eggs: AHZ/2074C/2004/3

**Shipping address**

Ruth Manvell

Avian Virology Laboratory

Veterinary Laboratories Agency (VLA)

Weybridge, New Haw, Addlestone, Surrey KT15 3NB

United Kingdom

**Shipment instructions**

A letter should accompany parcels with as much history about the isolates as possible (including species and age, area/country of isolation, clinical history if any, etc.).

If sending by air freight, it is essential that the airway bill number is given to the Avian Virology Laboratory, VLA-Weybridge by fax, telephone or e-mail before the arrival of the materials in order to facilitate early delivery.

**Notification of shipment**

Before dispatch, notify the Avian Virology Laboratory, VLA-Weybridge of the shipment details and the person to contact with information on results (name, fax number, e-mail address).

Tel : (+44) 01932 357736

Fax: (+44) 01932 357856

e-mail: [r.manvell@vla.defra.gsi.gov.uk](mailto:r.manvell@vla.defra.gsi.gov.uk)

**Contact**

If you wish to discuss a submission and options for support from the International Reference Laboratory for Avian Influenza and Newcastle Disease, please contact:

Dr. I. H. Brown

Tel: (+44) 01932 357 339

Fax: (+44) 01932 357 239

e-mail: [i.h.brown@vla.defra.gsi.gov.uk](mailto:i.h.brown@vla.defra.gsi.gov.uk)