中華人民共和國香港特別行政區政府總部衞生福利及食物局
Health, Welfare and Food Bureau
Government Secretariat, Government of the Hong Kong Special Administrative Region
The People's Republic of China

本函檔號 Our ref.: HWF(F)
來函檔號 Your ref.:

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17 October 2006

Mrs. Percy MA
Clerk to the Subcommittee
on Public Health (Animals and Birds) (Exhibitions)
(Amendment) Regulation 2006
Legislative Council Building
8 Jackson Road
Central
Hong Kong.

Dear Mrs. MA,

Subcommittee on Public Health (Animals and Birds) (Exhibitions) (Amendment) Regulation 2006

At the meeting of the Subcommittee on Public Health (Animals and Birds) (Exhibitions) (Amendment) Regulation 2006 held on 30 September, we pointed out that it was inaccurate to say that no pigeon had been found infected with avian influenza. In fact, the information we have shows that there were documented cases, both reported locally and outside Hong Kong, in which pigeons were found infected with H5N1 avian influenza. Some of the cases are detailed below:

(1) the Agriculture, Fisheries and Conservation Department found avian influenza virus in a pigeon during the avian influenza outbreak in Kowloon Park in December 2002 (see Annex I);

(2) in a press release in October 2005, the Department of Agriculture, Fisheries and Forestry of Australia announced that their quarantine authority had found three pigeons, among a consignment of 102 pigeons imported from Canada, which tested positive for antibodies for avian influenza virus (see Annex II);

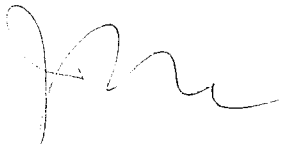
(3) World Organisation for Animal Health (OIE) reported cases of pigeons infected with avian influenza in Turkey and Romania in *Disease Information* issued in February 2006 (page 10 and page 16 of Annex III); and

(4) OIE received a report in August 2006 from the Russian Government about an avian outbreak in domestic pigeons in Tomsk Region (see Annex IV).

Indeed, there are overseas research reports, including a recent report from the Animal Health Research Institute of the Federal Republic of Germany (see Annex V), which confirms that pigeons are susceptible to avian influenza. In view of this, governments around the world have adopted measures to regulate pigeon racing activities. For instance, the Standing Committee on the Food Chain and Animal Health of the European Union made a statement at its March meeting in 2006 that cited cases in some countries that proved pigeons were susceptible to avian influenza as grounds for advocating regulation of pigeon racing activities. It recommended, *inter alia*, that pigeons should be kept indoors and that pigeon racing activities might only be allowed after risk assessment by the competent authorities concerned (see paragraph 18 of Annex VI).

I hope the above information explains why the Administration finds it necessary to properly regulate pigeon racing activities in order to protect public health and safeguard environmental hygiene.

Yours Sincerely,



(Johnson TANG)
for Secretary for Health, Welfare and Food

附件（一）

Annex (I)

Avian Pathol. 2004 Oct 33 (5): 492-505

Investigation of outbreaks of highly pathogenic H5N1 avian influenza in waterfowl and wild birds in Hong Kong in late 2002.

Ellis TM, Bousfield RB, Bissett LA, Dyrting KC, Luk GS, Tsim ST, Sturm-Ramirez K, Webster RG, Guan Y, Malik Peiris JS

Tai Lung Veterinary Laboratory, Agriculture Fisheries and Conservation Department, Lin Tong Mei, Sheung Shui, New Territories, Hong Kong SAR, China. ellis_trevor@afcd.gov.hk

Outbreaks of highly pathogenic H5N1 avian influenza have occurred in Hong Kong in chickens and other gallinaceous poultry in 1997, 2001, twice in 2002 and 2003. High mortality rates were seen in gallinaceous birds but not in domestic or wild waterfowl or other wild birds until late 2002 when highly pathogenic H5N1 avian influenza occurred in waterfowl (geese, ducks and swans), captive Greater Flamingo (Phoenicopterus ruber) and other wild birds (Little Egret Egretta garzetta) at two waterfowl parks and from two dead wild Grey Heron (Ardea cinerea) and a Black-headed Gull (Larus ridibundus) in Hong Kong. H5N1 avian influenza virus was also isolated from a dead feral pigeon (Columba livia) and a dead tree sparrow (Passer montanus) during the second outbreak. The first waterfowl outbreak was controlled by immediate strict quarantine and depopulation 1 week before the second outbreak commenced. Control measures implemented for the second outbreak included strict isolation, culling, increased sanitation and vaccination. Outbreaks in gallinaceous birds occurred in some live poultry markets concurrently with the second waterfowl outbreak, and infection on a chicken farm was detected 1 week after the second waterfowl park outbreak was detected, on the same day the second grey heron case was detected. Subsequent virus surveillance showed the outbreaks had been contained.

附件（二）
Annex (II)

Australian Government
Department of Agriculture, Fisheries and Forestry

search

DAFF Home > About DAFF > Media Centre > Australian Quarantine and Inspection Service Media Releases > 2005

QUARANTINE FINDS AVIAN INFLUENZA

20537
20 October 2005

A consignment of imported pigeons was being held in high-level quarantine facilities in Melbourne when several of the birds tested positive for avian influenza and newcastle disease antibodies.

The detection of the antibodies demonstrates that the quarantine system, which includes a mandatory post-arrival holding period to check for disease, is working as intended.

Three birds from a consignment of 102 imported last month from Canada tested positive to avian influenza antibodies and four to Newcastle Disease antibodies during post-arrival quarantine at an Australian Quarantine and Inspection Service (AQIS) high-security facility in Melbourne.

Although several of the birds have avian influenza and newcastle disease antibodies, none of the birds tested positive to having the actual virus.

The birds will not be released in Australia. The seven birds with antibodies will be euthanized. AQIS is in contact with Canadian authorities about returning the remaining birds to that country as soon as possible.

Importantly, there are no human or bird health issues associated with these pigeons as they have been contained in a purpose-built high-level quarantine facility since there arrival in Australia while tests have been conducted.

This detection demonstrates the importance and effectiveness of Australia's strict quarantine regime.

Media contacts: David Finlayson, AQIS – 02 6272 5234 or 0414 266 256

附件（三）
Annex(III)

Disease Information

23 February 2006
Vol. 19 - No. 8

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AVIAN INFLUENZA IN NIGERIA
Follow-up report No. 1

See also: 6 April 2006, 16 March 2006, 9 March 2006, 9 March 2006, 9 February 2006

Information received on 15 February 2006 from Dr Junaidu A. Maina, Acting Director, Department of Livestock and Pest Control Services, Federal Ministry of Agriculture and Rural Development, Abuja:

End of previous report period: 8 February 2006 (see *Disease Information*, **19** [6], 89, dated 9 February 2006).

End of this report period: 15 February 2006.

Precise identification of agent: highly pathogenic avian influenza virus type A.

Date of first confirmation of the event: 7 February 2006.

Date of start of the event: 10 January 2006.

Clinical disease: yes.

Nature of diagnosis: clinical, post-mortem and laboratory.

Details of new outbreaks:

First administrative division (State)	*Lower administrative division (Local Government Area)*	*Type of epidemiological unit*	*Name of the location*	*Date of start of the outbreak*	*Species*	*Number of animals in the outbreaks*				
						susceptible	*cases*	*deaths*	*destroyed*	*slaughtered*
Kano	Kumbotso	farm	Janguza farms, Danbara Area, Kano	19 Jan. 2006	avi	2,000	1,600	1,600	400	0
Kano	Kumbotso	farm	Sovet farms, Kano	26 Jan. 2006	avi	23,000	300	300	22,700	0
Plateau	Jos South	farm	M&D Farm, Bukuru low cost, Jos	...	avi	...	...	...	...	...
Plateau	Jos South	farm	Usourji Daniel Farms, Hausa Road, Jos	29 Jan. 2006	avi	1,200	1,080	1,080	120	0
Plateau	Jos South	farm	Katako, Jos	2 Feb. 2006	avi	7,300	7,201	4,826	2,474	0
Plateau	Jos South	farm	Rikkos, Jos	2 Feb. 2006	avi	3,000	1,875	1,875	1,125	0

Description of affected populations: All the affected farms are commercial poultry production units, mostly layers of over 40 weeks of age.

Diagnosis:

Laboratory where diagnostic tests were performed	*Species examined*	*Diagnostic tests used*	*Date*	*Results*
National Veterinary Research Institute, Vom, Nigeria	poultry	agar gel immunodiffusion test	14 Feb. 2006	positive

Source of outbreaks or origin of infection: unknown or inconclusive

Control measures

A. Undertaken:

- stamping out
- quarantine
- disinfection of infected premises/establishment

B. To be undertaken:

- control of wildlife reservoirs

- movement control inside the country

Vaccination prohibited: yes.

Other details/comments:

- The presence of the disease is now confirmed and an emergency plan has been activated.

- Further investigations are being carried out all over the country to determine the source of the infection and prevent its spread.

Final report: no.

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NEWCASTLE DISEASE IN ROMANIA
Follow-up report No. 8

See also: 15 June 2006, 6 April 2006, 9 March 2006, 2 February 2006, 19 January 2006, 5 January 2006, 30 December 2005, 16 December 2005, 9 December 2005, 2 December 2005, 25 November 2005

Information received on 16 February 2006 from Dr Gabriel Predoi, Director General, National Sanitary Veterinary and Food Safety Authority, Bucharest:

End of previous report period: 1 February 2006 (see *Disease Information*, **19** [5], 82, dated 2 February 2006).

End of this report period: 16 February 2006.

Date of first confirmation of the event: 14 October 2005.

Date of start of the event: 15 September 2005.

Clinical disease: yes.

Nature of diagnosis: clinical, post mortem and laboratory.

New outbreaks:

First administrative division (County)	*Lower administrative division (district)*	*Name of the location*	*Date of start of the outbreak*	*Species*	*Number of animals in the outbreaks*				
					susceptible	*cases*	*deaths*	*destroyed*	*slaughtered*
Braila	Marasu	Magureni	27 Jan. 2006	avi	12	5	3	9	0
Braila	Silistea	Muchea	27 Jan. 2006	avi	22	8	8	14	0
Braila	Galbenu	Galbenu	27 Jan. 2006	avi	18	9	9	9	0
Ilfov	Bragadiru	Bragadiru	18 Jan. 2006	avi	40	40	40	0	0
Ilfov	Petrachioaia	Vanatori	2 Feb. 2006	avi	35	35	35	0	0
Bucharest City	5th District	5th District	2 Feb. 2006	avi	7	6	6	1	0
Bucharest City	3rd District	3rd District	1 Feb. 2006	avi	20	3	3	17	0
Bucharest City	5th District	5th District	1 Feb. 2006	avi	12	2	1	11	0
Bucharest City	2nd District	2nd District	1 Feb. 2006	avi	40	28	28	12	0
Prahova	Surani	Soimari	31 Jan. 2006	avi	110	55	49	61	0

Arges	Pitesti	Pitesti	29 Jan. 2006	fau	...	...	1	...	0
Arges	Cateasca	Cateasca	29 Jan. 2006	fau	...	...	1	...	0
Arges	Cateasca	Ciresu	25 Jan. 2006	avi	32	16	16	16	0
Arges	Barla	Barla	25 Jan. 2006	avi	50	20	20	30	0
Arges	Buzoiesti	Vulpesti	2 Jan. 2006	avi	6	6	6	0	0
Arges	Caldararu	Strambeni	25 Jan. 2006	avi	31	10	10	21	0
Bucharest City	2nd District	2nd District	3 Feb. 2006	avi	6	6	6	0	0
Bucharest City	2nd District	2nd District	3 Feb. 2006	avi	6	6	1	5	0
Bucharest City	4th District	4th District	3 Feb. 2006	avi	36	31	31	5	0
Bucharest City	1st District	1st District	3 Feb. 2006	avi	5	4	1	4	0
Olt	Deveselu	Deveselu	8 Feb. 2005	fau	...	...	1	...	0
Buzau	Sahateni	Sahateni	31 Jan. 2006	avi*	2	2	1	1	0
Buzau	Stalpu	Stalpu	13 Feb. 2006	avi	28	22	22	6	0
Buzau	Vadu Pasii	Vadu Pasii	13 Feb. 2006	avi	35	26	26	9	0
Valcea	Racovita	Racovita	8 Feb. 2006	avi	11	11	4	7	0
Valcea	Bujoreni	Olteni	3 Feb. 2006	avi	42	4	4	38	0
Gorj	Pades	Pades	13 Feb. 2006	avi	10	...	4	...	0
Ialomita	Balaciu	Balaciu	14 Feb. 2006	avi	52	21	21	31	0

* ostriches

Affected population: affected poultry were in backyard flocks that may not have been included in vaccination campaigns.

Diagnosis:

Laboratory where diagnostic tests are being performed	*Samples examined*	*Diagnostic tests used*	*Date*	*Results*
Institute for Diagnostics and Animal Health (National Reference Laboratory)	cloacal swabs, tracheal swabs, organs	virus isolation in embryonated SPF[1] eggs	January-February 2006	positive
		intracerebral pathogenicity index test	in progress	pending

Origin of infection: the poultry may have come into contact with infected wild birds (pigeons or sparrows).

Control measures undertaken:

- all poultry in the infected premises have been culled and destroyed;

- quarantine;

- disinfection of infected shelters and backyard premises;

- restrictions on movement of poultry in the infected area and transport restrictions in the 10-km surveillance area have been introduced in every affected locality.

Vaccination prohibited: no.

Final report: no.

(1) SPF: specific pathogen free

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AVIAN INFLUENZA IN RUSSIA

See also: 10 August 2006

(***Date of previous outbreak of avian influenza in domestic birds in Russia reported to the OIE***: 28 October 2005).

Immediate notification report

Information received on 16 February 2006 from Dr Evgueny A. Nepoklonov, Head of the Main Veterinary Department, Ministry of Agriculture and Food, Moscow:

Report date: 16 February 2006.

Reason for immediate notification: re-occurrence of a listed disease or infection in a country or zone/compartment resulting from the spread of the outbreak of the disease or infection.

Precise identification of agent: highly pathogenic avian influenza virus subtype H5N1.

Date of first confirmation of the event: 13 February 2006.

Date of start of the event: 25 January 2006.

Nature of diagnosis: clinical and laboratory.

Details of outbreak:

First administrative division	*Lower admin. division (District)*	*Type of epidemiological unit*	*Name of location*	*Date of start of the event*	*Species*	*Number of animals in the outbreaks*				
						susceptible	*cases*	*deaths*	*destroyed*	*slaughtere*
Dagestan Republic	Karabudachkentsky region	farm	Machachkala	5 Feb. 2006	avi	274,000	...	...	274,000	0
Dagestan Republic	Karabudachkentsky region	farm	Machachkala	25 Jan. 2006	avi	258,000	...	...	258,000	0

Description of affected population: commercial poultry farms

Diagnosis:

Laboratory where diagnosis was made	*Diagnostic tests used*	*Date*	*Results*
FGI ARRIAH, Vladimir (national reference laboratory for avian influenza	- virus isolation	15 Feb. 2006	Positive
	- ELISA	13 Feb.2006	Positive
	- PCR	13 Feb.2006	Positive

Source of outbreaks or origin of infection: under investigation.

Control measures undertaken:

- affected farms placed under quarantine;

- movement control;

- screening;

- zoning;

- disinfection of the affected farms.

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AVIAN INFLUENZA IN ZIMBABWE
Follow-up report No. 2

See also: 9 December 2005, 2 December 2005

Information received on 17 February 2006 from Dr Stuart K. Hargreaves, Director of Veterinary Services, Ministry of Agriculture, Harare:

End of previous report period: 6 December 2005 (see *Disease Information*, **18** [49], 490, dated 9 December 2005).

End of this report period: 10 February 2006.

Precise identification of agent: avian influenza virus subtype H5N2.

Date of first confirmation of the event: 28 November 2005.

Date of start of the event: 28 November 2005.

Clinical disease: no.

Nature of diagnosis: laboratory.

Details of outbreaks (updated data):

First administrative division (Province)	*Lower administrative division (District)*	*Type of epidemiological unit*	*Name of the location*	*Latitude*	*Longitude*	*Species*	*Number of animals in the outbreaks*				
							susceptible	*cases*	*deaths*	*des-troyed*	*slau*
Matebeleland North	Umguza/Bubi	farm	Mimosa	19(55' S	28(25' E	avi	10,000	0	0	0	
		farm	Dollar Block	19(27' S	28(50' E	avi	6,000	0	0	0	

Description of affected population:

- Outbreak in Mimosa: slaughter ostriches.

- Outbreak in Dollar Block: all classes of ostrich stock (chicks, breeders, slaughter ostriches).

Since the detection of avian influenza antibodies in ostriches during routine epidemiological surveillance, the Division of Livestock and Veterinary Services has launched a national surveillance programme on all ostrich and chicken farms, including backyard chicken flocks. To date, no chickens have tested positive and antibodies have only been recorded in two ostrich farms, Dollar Block and Mimosa, in Matabeleland North Province.

No clinical signs of disease have been observed in the seropositive flocks. Sentinel chickens placed in close contact with avian influenza seropositive ostriches have not seroconverted. All ostrich properties remain under strict veterinary control and biosecurity measures have been strengthened. Cloacal swabs from the positive ostriches have been sent to South Africa for virus isolation and the results are awaited.

Four commercial poultry companies, Irvines Day Old Chicks, Crest Breeders Glenara, Hubbard Zimbabwe and Hamara Chickens, have been officially registered as biosecure avian influenza free compartments within the terms of

Terrestrial Animal Health Code Chapter 1.3.5., and the suspension of exports of table and hatching eggs and day-old chicks has been lifted from these four establishments.

Monitoring is ongoing on these establishments to ensure continued freedom from the disease.

A high level of public awareness is being maintained throughout the country.

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HIGHLY PATHOGENIC AVIAN INFLUENZA IN TURKEY
Follow-up report No. 5

See also: 17 August 2006, 18 May 2006, 11 May 2006, 27 April 2006, 20 April 2006, 13 April 2006, 6 April 2006, 30 March 2006, 23 March 2006, 9 March 2006, 2 March 2006, 2 March 2006, 2 February 2006, 26 January 2006, 19 January 2006, 12 January 2006, 30 December 2005, 9 December 2005, 18 November 2005, 28 October 2005, 14 October 2005, 14 October 2005

Information received on 16 and 17 February 2006 from Dr Hüseyin Sungur, Director General, General Directorate of Protection and Control, Ministry of Agriculture and Rural Affairs, Ankara:

End of previous report period: 1 February 2006 (see *Disease Information*, **19** [5], 77, dated 2 February 2006).

End of this report period: 17 February 2006.

Identification of agent: highly pathogenic avian influenza virus subtype H5N1.

Date of first confirmation of the event: 26 December 2005.

Date of start of the event: 15 December 2005.

Clinical disease: yes.

Nature of diagnosis: clinical and laboratory.

New outbreaks:

First administrative division	*Lower administrative division*	*Type of epidemiological unit*	*Name of the location*	*Date of start of the outbreak*	*Species*	*Number of animals in the outbreaks*				
						susceptible	*cases*	*deaths*	*destroyed*	*slaughter*
Adiyaman	Kahta	village	Caybasi	7 Jan. 2006	avi	2,403	20	20	2,383	0
Adiyaman	Merkez	village	Altinsehir mah.	13 Jan. 2006	avi	369	1	1	368	0
Ankara	Polatli	village	Gures koyu	2 Feb. 2006	avi	359	13	13	346	0
Diyarbakir	Ergani	village	Merkez	12 Jan. 2006	avi	576	1	1	575	0
Diyarbakir	Merkez	village	Havacilar	31 Jan. 2006	avi	734	2	2	732	0
Diyarbakir	Merkez	village	Kucukakoren	31 Jan. 2006	avi	148	3	3	145	0
Diyarbakir	Merkez	village	Saridalli	30 Jan. 2006	avi	536	1	1	535	0
Edirne	Enez	village	Gaziomerbey Mah.	13 Feb. 2006	avi	1,113	19	19	1,094	0
Elazig	Baskil	village	Kizilusagi	12 Jan. 2006	avi	2,009	1	1	2,008	0
Elazig	Merkez	village	Isikyolu koyu	5 Feb. 2006	avi	3,832	1,700	1,700	2,132	0

Elazig	Palu	village	Yenimahalle	12 Jan. 2006	avi	986	1	1	985	0
Elazig	Yukaridemirtas	village		12 Jan. 2006	avi	8,040	1	1	8,039	0
Eskisehir	Seyitgazi	village	Gocenoluk koyu	31 Jan. 2006	avi	568	4	4	564	0
Izmir	Tire	village	Akcasehir koyu	6 Jan. 2006	avi	807	1	1	806	0
Konya	Aksehir	village	Reis Kas.	8 Jan. 2006	avi	3,166	1	1	3165	0
Malatya	Arguvan	village	Ermisli	12 Jan. 2006	avi	363	3	3	360	0
Malatya	Merkez	village	Ozalper mah	12 Jan. 2006	avi	109	1	1	108	0
Mardin	Kiziltepe	village	Ekinlik	14 Jan. 2006	avi	2,740	3	3	2,737	0
Samsun	Ayvacik	village	Ortakoy	6 Jan. 2006	avi	...	1	1	...	0
Samsun	Bafra	village	Gokceagac koyu	7 Jan. 2006	avi	...	1	1	...	...
Samsun	Bafra	village	Kapikaya koyu	7 Jan. 2006	avi	...	1	1	...	...
Samsun	Havza	village	Yaylacati mah	6 Jan. 2006	avi	18	3	3	15	0
Samsun	Merkez	village	Basalan koyu	6 Jan. 2006	avi	...	13	13	...	0
Samsun	Salipazari	village	Kocalar	12 Jan. 2006	avi	2,628	2	2	2,626	0
Samsun	Terme	village	Elmalik	5 Jan. 2006	avi	503	3	3	500	0
Samsun	Terme	village	Koybucagi koyu	7 Jan. 2006	avi	303	3	3	300	0
Sirnak	Silopi	village	Ozge koyu	2 Feb. 2006	avi	...	1	1	...	...
Tokat	Niksar	village	Cimenozu Koyu	6 Jan. 2006	avi	...	1	1	...	...
Tokat	Niksar	village	Merkez	9 Jan. 2006	avi	...	1	1	...	...
Trabzon	Merkez	village	Akoluk	6 Jan. 2006	avi	15	1	1	14	0
Trabzon	Merkez	village	Degirmendere	6 Jan. 2006	avi	11	1	1	10	0
Tunceli	Cemisgezek	village	Gozlucayir	3 Jan. 2006	avi	211	1	1	210	0

Affected population: one outbreak in Elazig province (Merkez Isikyolu) occurred in a small-scale commercial (broiler) poultry flock. All the other outbreaks occurred in backyard (village) poultry flocks.

Diagnosis:

Laboratories where diagnostic tests were performed	*Outbreak*	*Species examined*	*Diagnostic tests used*	*Date*	*Results*

Bornova Veterinary Control and Research Institute	Arguvan/Malatya	chicken	HI(1)	8 Feb. 2006	positive H5
	Baskil/ Elazig	chicken	HI	8 Feb. 2006	positive H5
	Ergani/Diyarbakir	chicken	HI	8 Feb. 2006	positive H5
	Izmir	turkey	HI	8 Feb. 2006	positive H5
	Kahta/Adiyaman	chicken	HI	10 Feb. 2005	positive H5
	Konya	chicken	HI	7 Feb. 2006	positive H5
	Mardin	chicken	HI	8 Feb. 2006	positive H5
	Merkez/ Adiyaman	chicken	HI	8 Feb. 2006	positive H5
	Merkez/Malatya	chicken	HI	8 Feb. 2006	positive H5
	Palu/ Elazig	chicken	HI	8 Feb. 2006	positive H5
	Yukaridemirtas/Elazig	chicken	HI	8 Feb. 2006	positive H5
Central Veterinary Control and Research Institute, Ankara	Ayvacik/Samsun	chicken	HI	9 Feb. 2006	positive H5
	Bafra/Gokceagac/ Samsun	chicken	HI	9 Feb. 2006	positive H5
	Bafra-Kapikaya/Samsun	chicken	HI	9 Feb. 2006	positive H5
	Eskisehir	chicken	HI	8 Feb. 2006	positive H5
	Havacilar-Merkez/ Diyarbakir	turkey	HI	10 Feb. 2006	positive H5
	Havza/Samsun	chicken	HI	9 Feb. 2006	positive H5
	Kucukakoren/ Diyarbakir	turkey	HI	10 Feb. 2006	positive H5
	Merkez -Basalan/Samsun	chicken	HI	9 Feb. 2006	positive H5
	Merkez/ Elazig	chicken	HI	10 Feb. 2006	positive H5
	Merkez-Akoluk/Trabzon	turkey	HI	9 Feb. 2006	positive H5
	Merkez-Degirmendere/Trabzon	turkey	HI	9 Feb. 2006	positive H5
	Niksar-Cimenozu/Tokat	chicken	HI	9 Feb. 2006	positive H5
	Niksar-Merkez/Tokat	chicken	HI	10 Feb. 2006	positive H5
	Polatli/Ankara	chicken	HI	8 Feb. 2006	positive H5
	Salipazari/Samsun	chicken	HI	9 Feb. 2006	positive H5
	Saridalli-Merkez/Diyarbakir	chicken	HI	10 Feb. 2006	positive H5
	Sirnak	chicken	HI	9 Feb. 2006	positive H5
	Terme/Samsun	chicken	HI	9 Feb. 2006	positive H5
	Terme-Koybucagi/Samsun	chicken	HI	9 Feb. 2006	positive H5
	Tunceli	chicken	HI	9 Feb. 2006	positive H5
Pendik Veterinary Control and Research Institute	Enez/Edirne	chicken, turkey	rapid test	14 Feb. 2006	positive
			HI	16 Feb. 2006	positive H5
			RT-PCR	16 Feb. 2006	positive N1

Origin of infection: contact with wild birds.

Control measures undertaken:

- stamping out;
- quarantine;
- movement control inside the country;
- screening;
- zoning;

- disinfection of infected premises/establishment(s).

Treatment of affected animals: no.

Vaccination prohibited: yes.

Other details/comments:

- In addition, H5 virus was detected in a swan in Bartin province, in two pigeons in Diyarbakir and Mardin provinces, in two starlings in Samsun province and in an owl and another wild bird in Tokat.

- Between 15 December 2005 and 15 February 2006, a total of 1,872,525 poultry were culled within and outside the outbreaks.

- Eleven outbreaks in 7 provinces have ended.

Final report: no.

(1) HI: haemagglutination inhibition test

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AVIAN INFLUENZA IN EGYPT

See also: 21 September 2006, 17 August 2006, 30 March 2006, 9 March 2006

(***Date of previous outbreak of highly pathogenic avian influenza in Egypt reported to the OIE:*** 1965).

Immediate notification report

Information received on 18 February 2006 from Dr Ahmed Tawfik Mohamed, Chairman of the General Organization for Veterinary Services, Ministry of Agriculture, Cairo:

Report date: 18 February 2006.

Identification of agent: highly pathogenic avian influenza virus subtype H5N1.

Date of first confirmation of the event: 17 February 2006.

Clinical disease: yes.

Nature of diagnosis: clinical and laboratory.

Location of outbreaks:

First administrative division *(governorate)*
Cairo
Giza
Menia
Quena
Qualiubia
Behera
Dakahlia

Diagnosis:

Laboratories where diagnostic tests were performed	***Results***
Animal Health Research Institute (national laboratory)	Positive for subtype H5N1
NAMRU-3 (Naval American Medical Research Unit)	Positive for subtype H5N1

Control measures undertaken:

- Quarantine of infected areas.

- Disinfection of infected premises.

- Condemning and sanitary disposal of birds at infected areas.

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AVIAN INFLUENZA IN INDIA

See also: 17 August 2006, 8 June 2006, 16 March 2006, 2 March 2006

Immediate notification report

Information received on 20 February 2006 from Mr P.M.A. Hakeem, Secretary to the Government of India, Ministry of Agriculture, Department of Animal Husbandry and Dairying, New Delhi:

Report date: 18 February 2006.

Precise identification of agent: avian influenza virus subtype H5N1.

Date of first confirmation of the event: 18 February 2006.

Date of start of the event: 27 January 2006.

Clinical disease: yes.

Nature of diagnosis: clinical and laboratory.

Details of outbreak:

First administrative division (State)	*Lower administrative division (district)*	*Type of epidemiological unit*	*Name of the location*	*Date of start of the outbreak*	*Species*	*Number of animals in the outbreak*				
						susceptible	*cases*	*deaths*	*destroyed*	*slaughtered*
Maharashtra	Nandurbar	NA*	Navapur	27 Jan 2006	avi	...	...	5-15%	...	...

* NA: not applicable

Description of affected population: outbreaks in poultry (chicken) have occurred in both commercial and backyard farms.

Diagnosis:

Laboratory where diagnostic tests were performed	*Diagnostic tests used*	*Results*
High Security Animal Disease Laboratory, IVRI (ICAR), Bhopal	- virus isolation;	Positive H5N1
	- HA;	
	- HI;	
	- RT-PCR;	
	- real-time PCR;	
	- neuraminidase inhibition assay.	

Source of outbreak or origin of infection: under investigation.

Control measures undertaken:

- Culling and stamping out applied to all domestic poultry within a radius of approximately 3-4 km followed by thorough disinfection of premises.

- Vaccination of all poultry within a zone of approximately 6-7 km^2 around the zone of culling/stamping out.

- Movement control within the infected zone.

- Quarantine.

- Rapid response teams, from both veterinary and public health authorities are in place.

- Surveillance has been intensified around the infected area as well as in the entire country.

Treatment of affected animals: yes.

Vaccination prohibited: no.

Other details/comments:

- Newcastle disease has also been reported from the area.

- No human cases have been detected.

- Farm personnel as well as backyard farm owners and their families are being closely monitored.

- The team of cullers and vaccinators are under chemo-prophylactic cover.

Final report: no.

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FOOT AND MOUTH DISEASE IN BRAZIL
Follow-up report No. 17

See also: 14 September 2006, 27 July 2006, 22 June 2006, 1 June 2006, 25 May 2006, 27 April 2006, 20 April 2006, 6 April 2006, 16 March 2006, 2 February 2006, 19 January 2006, 12 January 2006, 23 December 2005, 9 December 2005, 2 December 2005, 18 November 2005, 18 November 2005, 4 November 2005, 4 November 2005, 28 October 2005, 28 October 2005, 28 October 2005, 21 October 2005, 21 October 2005, 14 October 2005, 14 October 2005

Translation of information received on 20 February 2006 from Dr Jorge Caetano Junior, Director, Department of Animal Protection (DDA), Ministry of Agriculture, Livestock and Food Supply, Brasilia:

End of previous report period: 1 February 2006 (see *Disease Information*, **19** [5], 81, dated 2 February 2006).

End of this report period: 19 February 2006.

Precise identification of agent: foot and mouth disease (FMD) virus serotype O.

Date of first confirmation of the event: 8 October 2005.

Date of start of the event: 26 September 2005.

Clinical disease: yes.

Nature of diagnosis: clinical and laboratory.

New outbreaks:

First administrative division (State)	*Lower administrative division (municipality)*	*Type of epide-miological unit*	*Latitude*	*Longitude*	*Date of start of the outbreak*	*Species*	*Number of animals in the outbreak*				
							susceptible	*cases*	*deaths*	*destroyed*	*sla*
Paraná	Grandes Rios	herd	24° 11'04.6" S	51° 20'38.1" W	21 Oct. 2005	bov	39	3	0	0	
Paraná	Maringá	herd	23° 20'34.9" S	51° 52'24.1" W	20 Oct. 2005	bov	57	5	0	0	
Paraná	Maringá	farm	23° 19'57.8" S	51° 50'59.0" W	21 Oct. 2005	bov	234	4	0	0	

Paraná	Loanda	farm	22° 58'10.6" S	52° 59'35.4" W	25 Oct. 2005	bov	2,416	1	0	0
Paraná	Loanda	farm	22° 59'47.3" S	52° 58'08.2" W	25 Oct. 2005	bov	1,703	7	0	0
Paraná	Bela Vista do Paraíso	farm	22° 05'23.7" S	51° 12'33.1" W	25 Oct. 2005	bov	81	...	0	0

MAP

Description of affected population: most affected animals are beef cattle for rearing and breeding.

Diagnosis:

Laboratory where diagnostic tests were performed	*Species examined*	*Diagnostic tests used*	*Date*	*Results*
LANAGRO/RS : Laboratório Nacional Agropecuário / Rio Grande do Sul	bov	enzyme-linked electro-immunotransfer blot (EITB) assay	17 Jan. 2006	positive

Source of outbreaks or origin of infection: unknown or inconclusive.

Control measures

A. Undertaken:

- stamping out;

- quarantine;

- movement control inside the country;

- screening;

- zoning;

- disinfection of infected premises/establishment(s).

B. To be undertaken:

- stamping out;

- disinfection of infected premises/establishment(s).

Treatment of affected animals: no.

Other details/comments:

Suspected cases of foot and mouth disease (FMD) in the State of Paraná were notified on 21 October 2005, based on an epidemiological link with an FMD occurrence in the State of Mato Grosso do Sul, caused by the entry of 87 cattle from an establishment in the vicinity of two other outbreaks in the municipality of Eldorado (Mato Grosso do Sul) and subsequently identified as an FMD outbreak on 5 December 2005 (see follow-up report no. 12). These animals entered the State of Paraná on 27 September 2005 and stayed for eight days in a rural establishment located in the municipality of Bela Vista do Paraíso (Paraná). On 4 October 2005, the animals were sent on to Londrina for auction, and sold on the same day to other rural establishments situated in the State of Paraná. These establishments, in addition to those situated within the buffer zone around the establishments, were kept under a ban throughout the investigation. No FMD suspicions have been identified since November 2005.

All the establishments that had received cattle from the auction were investigated by the Veterinary Service of the State of Paraná. After carrying out clinical and epidemiological inspections and laboratory tests, 11 establishments were identified with suspected vesicular disease: five which had acquired animals from the auction, a further five located in geographical proximity to the latter establishments, and one establishment that had received animals from the Mato Grosso do Sul outbreak and then sent them to Londrina for auction (see follow-up reports Nos 5, 7, 12 and 14).

On 5 December 2005, after investigations had been conducted in the suspect establishments, an outbreak was notified in the municipality of São Sebastião da Amoreira, in an establishment which had received cattle sold at auction

originating from the establishment where an outbreak was notified in Mato Grosso do Sul, and which presented antibodies to non-structural proteins (NSP) of the FMD virus (see follow-up report No. 12). Measures for slaughtering the existing cattle in that establishment are still in progress. In January 2006, a supplementary epidemiological investigation was carried out in the other rural establishments with suspected FMD occurrence, in collaboration with the Pan American Foot and Mouth Disease Centre (PANAFTOSA). Serological analyses were carried out to identify NSP antibodies in 2,205 animals, based on rigorous epidemiological and statistical parameters and OIE-approved techniques developed by PANAFTOSA.

The analyses, conducted in accordance with the regulations of the National FMD Eradication Programme (PNEFA) and with OIE guidelines, resulted in the confirmation of six FMD outbreaks in the suspected establishments situated in the municipalities which had been under a ban since 21 October 2005 (see table above).

In response to these confirmed outbreaks, the Brazilian Animal Health Protection Service will continue to apply the necessary measures in line with OIE guidelines.

Final report: no.

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NEWCASTLE DISEASE IN UKRAINE
Follow-up report No. 1

See also: 16 February 2006

Information received on 22 February 2006 from Dr Ivan Yuriyovych Bisyuk, Head, State Department for Veterinary Medicine, Ministry of Agricultural Policy, Kiev:

End of previous report period: 13 February 2006 (see *Disease Information*, **19** [7], 109, dated 16 February 2006).

End of this report period: 22 February 2006.

Identification of agent: velogenic strain of the virus.

Date of first confirmation of the event: 9 February 2006.

Date of start of the event: 23 January 2006.

Clinical disease: yes.

Nature of diagnosis: clinical, post-mortem and laboratory.

Details of outbreak (updated data):

First administrative division	*Lower administrative division*	*Type of epidemiological unit*	*Name of the location*	*Date of start of the outbreak*	*Species*	*Number of animals in the outbreak*				
						susceptible	*cases*	*deaths*	*destroyed*	*slaught*
Kharkiv region	Shevchenkovskiy district	farm	Staroverovka	23 Jan. 2006	avi	264,339*	13,346	13,346	41,044	0

* Poultry are kept on three sites:

- breeding site: House No. 17 (52,650 birds);

- rearing site: House No. 11 (61,660 birds);

- laying site: nine poultry houses (150,029 birds).

Vaccination in response to the outbreak:

First administrative division	*Species*	*Total number of animals vaccinated*	*Details of the vaccine*
Kharkiv region	avi	61,660 birds in House No. 11	live monovalent modified vaccine against Newcastle disease

Other details/comments:

On 14 February 2006, strict disinfection was carried out.

As from 13 February 2006, quarantine restrictions were imposed in Shevchenkivskiy district. Veterinary militia posts and quarantine posts were established.

During quarantine, sale of eggs produced in Staroverivskiy farm is prohibited.

Adult chickens undergo daily clinical examination with complete post-mortem examination of dead and slaughtered birds.

Considering the results of the measures taken, quarantine restrictions are planned to be lifted on 23 February 2006.

Final report: no.

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HIGHLY PATHOGENIC AVIAN INFLUENZA IN UKRAINE
Follow-up report No. 10

See also: 28 September 2006, 13 July 2006, 29 June 2006, 22 June 2006, 16 March 2006, 9 February 2006, 2 February 2006, 26 January 2006, 19 January 2006, 12 January 2006, 5 January 2006, 30 December 2005, 30 December 2005, 16 December 2005, 9 December 2005

Information received on 16 and 22 February 2006 from Dr Ivan Yuriyovych Bisyuk, Head, State Department for Veterinary Medicine, Ministry of Agricultural Policy, Kiev:

End of previous report period: 9 February 2006 (see *Disease Information*, **19** [6], 99, dated 9 February 2006).

End of this report period: 22 February 2006.

Identification of agent: highly pathogenic avian influenza (HPAI) virus subtype H5N1.

Date of first confirmation of the event: 2 December 2005.

Date of start of the event: 25 November 2005.

The State Veterinary Services of the Autonomous Republic of Crimea, in collaboration with local authorities, have formed 179 groups to perform clinical examination of backyard poultry throughout the territory of the Autonomous Republic of Crimea.

The total number of quarantine posts on the territory of the affected districts is now 1 (post in Feodosiya district).

Quarantine restrictions have been lifted in the following villages:

- Nekrasovka, Dmitrovka, Krasnoflotskoye, Sovetskoye, Chernozyomnoye, Prisivashnoye (Sovetskiy district);

- Izobilnoye, Akimovka, Yemelyanovka, Kirsanovka (Nizhnegorskiy district);

- Zavet-Leninskiy, Pushkino (Dzhankoyskiy district);

- Chernomorskoye, Khmelevo (Chernomorskiy district);

- Krepkoye (Krasnoperekopskiy district);

- Solnechnoye (Simferopolskiy district).

Final report: no.

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HIGHLY PATHOGENIC AVIAN INFLUENZA IN ROMANIA
Follow-up report No. 18

See also: 2 March 2006, 16 February 2006, 19 January 2006, 5 January 2006, 30 December 2005, 23 December 2005, 16 December 2005, 9 December 2005, 2 December 2005, 2 December 2005, 25 November 2005, 18 November 2005, 4 November 2005, 4 November 2005, 28 October 2005, 21 October 2005, 21 October 2005, 14 October 2005, 14 October 2005

Information received on 16 and 22 February 2006 from Dr Gabriel Predoi, Director General, National Sanitary

Veterinary and Food Safety Authority, Bucharest:

End of previous report period: 13 February 2006 (see *Disease Information*, **19** [7], 105, dated 16 February 2006).

End of this report period: 22 February 2006.

Precise identification of agent: highly pathogenic avian influenza virus subtype H5N1.

Date of first confirmation of the event: 7 October 2005.

Date of start of the event: October 2005.

Clinical disease: yes.

Nature of diagnosis: clinical and laboratory.

New outbreaks:

First administrative division (county)	*Lower administrative division (district)*	*Name of the location (village)*	*Date of start of the outbreak*	*Species*	*Number of animals in the outbreaks*				
					susceptible	*cases*	*deaths*	*destroyed*	*slaughtered*
Constanta	Aliman	Vlahii	13 Feb. 2006	avi	76	76	61	15	0
Constanta	Ostrov	Ostrov	14 Feb. 2006	avi	27	27	18	9	0
Constanta	Topraisar	Mereni	17 Feb. 2006	fau	...	...	1	0	0

MAP

Description of affected population:

- Outbreak in Vlahii: backyard premises with 69 hens and 7 geese; samples have been collected from 5 hens.

- Outbreak in Ostrov: backyard premises with 27 hens; samples have been collected from 10 hens.

- Outbreak in Mereni: a wild pigeon found dead near an irrigation canal, at a distance of 2 km from Mereni village.

Diagnosis:

Laboratories where diagnostic tests were performed	*Diagnostic tests used*	*Date*	*Results*
Institute for Diagnostics and Animal Health (national reference laboratory)	- RT-PCR test for the detection of HPAI specific viral genome; - virus isolation on embryonated SPF eggs.	15-21 Feb. 2006	Positive Positive for subtype H5N1
Sanitary Veterinary Laboratory Constanta	RT-PCR, ELISA	14 Feb. 2006	Positive

Source of outbreaks: contact with infected animal(s) at grazing/watering; contact with wild animals.

Control measures

A. Undertaken:

- stamping out;

- quarantine;

- movement control inside the country;

- screening;

- zoning;

- disinfection of infected premises/establishments.

B. To be undertaken:

- control of wildlife reservoirs.

Treatment of affected animals: no.

Vaccination prohibited: no.

Other details/comments:

Control measures have begun to be applied in Vlahii village, in accordance with the legislative provisions in force; in addition to the usual control measures, culling of poultry is being performed. To date, 2,600 poultry have been culled in 110 backyard premises.

Final report: no.

Summary of the avian influenza situation in Romania (in poultry) as of 22 February 2006

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HIGHLY PATHOGENIC AVIAN INFLUENZA IN VIETNAM
Follow-up report No. 17

See also: 21 September 2006, 31 August 2006, 26 January 2006, 26 January 2006, 2 December 2005, 1 July 2005

Information received on 23 February 2006 from Dr Bui Quang Anh, Director, Department of Animal Health, Ministry of Agriculture and Rural Development, Hanoi:

End of previous report period: 23 January 2006 (see *Disease Information*, **19** [4], 57, dated 26 January 2006).

End of this report period: 23 February 2006.

Identification of agent: highly pathogenic avian influenza virus subtype H5N1.

Date of first confirmation of the event: 6 January 2004.

No new outbreaks have been reported during the reporting period.

Final report: no.

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MISCELLANEOUS: AVIAN INFLUENZA IN RUSSIA (IN WILDLIFE)

See also: 22 July 2005

Immediate notification report

Information received on 11 and 16 February 2006 from Dr Evgueny A. Nepoklonov, Head of the Main Veterinary Department, Ministry of Agriculture and Food, Moscow:

Report date: 11 February 2006.

Reason for immediate notification: re-occurrence of a listed disease or infection in a country or zone/compartment resulting from the spread of the outbreak of the disease or infection.

Precise identification of agent: highly pathogenic avian influenza virus subtype H5N1.

Date of first confirmation of the event: 9 February 2006.

Date of start of the event: unknown (estimated to be mid January).

Nature of diagnosis: clinical and laboratory.

Details of outbreaks:

First	*Lower*	*Type of*	*Name*	*Date of*	*Species*

administrative division	*administrative division (District)*	*epidemiological unit*	*of location*	*start of the event*		*susceptible*	*cases*	*deaths*	*destroyed*	*slaughtered*
Krasnodarsky	- Anapa - Novorossiysk - Gelendjck - Sochi - Tuapsinsky - Temruksky	NA*	Black Sea coast	unknown	fau	...	32	32	0	0

* NA: not applicable

Description of affected population: wild swans, ducks, crows.

Diagnosis:

Laboratory where diagnosis was made	*Species examined*	*Diagnostic tests used*	*Date*	*Results*
FGI ARRIAH, Vladimir (national reference laboratory for avian influenza)	fau	- ELISA; - PCR.	13 Feb.2006	Positive Positive

Source of outbreaks or origin of infection: under investigation.

Control measures undertaken:

- movement control;

- screening.

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MISCELLANEOUS: AVIAN INFLUENZA IN GERMANY (IN WILDLIFE)

See also: 21 September 2006, 10 August 2006, 25 May 2006, 18 May 2006, 13 April 2006, 6 April 2006, 30 March 2006, 16 March 2006

Immediate notification report

Information received on 16 February 2006 from Prof. Dr. Werner Zwingmann, Chief Veterinary Officer, Ministry of Consumer Protection, Food and Agriculture, Bonn:

Report date: 16 February 2006.

Identification of agent: avian influenza virus subtype H5N1.

Date of first confirmation of the event: 14 February 2006.

Date of start of the event: 8 February 2006.

Clinical disease: yes.

Nature of diagnosis: post-mortem and laboratory.

Details of outbreaks:

First administrative division	*Lower administrative division*	*Type of epidemiological unit*	*Name of the location*	*Date of start of the outbreak*	*Species*	*Number of animals in the outbreak:*				
						susceptible	*cases*	*deaths*	*destroyed*	*slau*
Mecklenburg-Vorpommern	Rügen Island	NA*	Wiek	8 Feb. 2006	fau	...	2	2	0	
Mecklenburg-Vorpommern	Rügen Island	NA*	Dranske	8 Feb. 2006	fau	...	1	1	0	

* NA: not applicable

Description of affected population: four swans (three *Cygnus olor* and one *Cygnus cygnus*) were found dead on 8 February 2006 in Wiek, in the northern part of the island of Rügen, in the Baltic Sea. On the same day a northern goshawk (*Accipiter gentilis*) was found dead in Dranske, also in the northern part of the island of Rügen. Avian influenza virus H5N1 has been diagnosed in two of the swans (*Cygnus olor* and *Cygnus cygnus*) and the goshawk.

Diagnosis:

Laboratories where diagnostic tests were performed	*Species examined*	*Diagnostic tests used*	*Date*	*Results*
Friedrich-Loeffler-Institut (national reference laboratory)	*Cygnus olor; Cygnus cygnus; Accipiter gentilis*	- PCR (gene M); - PCR (gene H5); - PCR (gene H7); - PCR (gene N1).	14-15 Feb. 2006	positive
VLA-Weybridge, United Kingdom (OIE Reference Laboratory)	*Cygnus olor; Cygnus cygnus; Accipiter gentilis*	- PCR (gene M); - PCR (gene H5); - PCR (gene H7); - PCR (gene N1).	16 Feb. 2006	positive

Origin of infection: unknown or inconclusive.

Control measures applied:

- control of wildlife reservoirs;
- movement control inside the country;
- screening;
- zoning.

Treatment of affected animals: no.

Vaccination prohibited: no.

Final report: no.

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MISCELLANEOUS: AVIAN INFLUENZA IN SLOVENIA (IN WILDLIFE) (Additional information)

See also: 6 April 2006, 9 March 2006, 2 March 2006, 16 February 2006

Information received on 16 February 2006 from Dr Simona Salamon, Deputy Director General, Veterinary Administration of the Republic of Slovenia, Ljubljana:

End of previous report period: 12 February 2006 (see *Disease Information*, **19** [7], 115, dated 16 February 2006).

End of this report period: 16 February 2006.

Identification of agent: highly pathogenic avian influenza virus subtype H5N1.

Date of initial detection: 11 February 2006.

Details of outbreak (reminder):

First administrative division	*Type of epidemiological unit*	*Name of the location*	*Date of start of the outbreak*	*Species*	*Number of animals in the outbreak*				
					susceptible	*cases*	*deaths*	*destroyed*	*slaughtered*
Podravska region	NA*	river Drava, near Maribor	...	fau	...	1	1	0	0

* NA: not applicable

Diagnosis (updated information):

Laboratory where diagnostic tests were performed	*Species examined*	*Diagnostic tests used*	*Date*	*Results*
National Veterinary Institute	*Cygnus olor*	- RT-PCR (M, N and H5 genes); - virus isolation.	...	positive for H5
Istituto Zooprofilattico Sperimentale delle Venezie (OIE Reference Laboratory)	*Cygnus olor*	- real-time PCR (H5); - PCR (N).	...	positive for H5N1

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MISCELLANEOUS: AVIAN INFLUENZA IN AUSTRIA (IN WILDLIFE)

See also: 3 August 2006

Immediate notification report

Information received on 20 February 2006 from Prof. Dr Ulrich Herzog, Chief Veterinary Officer, Federal Ministry for Health and Women, Vienna:

Report date: 20 February 2006.

Reason for immediate notification: First occurrence of a listed disease or infection in a country or zone/compartment.

Precise identification of agent: influenza A subtype H5N1.

Date of first confirmation of the event: 18 February 2006.

Date of start of the event: 13 February 2006.

Nature of diagnosis: laboratory.

Details of outbreak:

First administrative division	*Lower administrative division*	*Type of epidemiological unit*	*Name of the location*	*Date of start of the outbreak*	*Species*	*Number of animals in the outbreak*				
						susceptible	*cases*	*deaths*	*destroyed*	*slaughtered*
Graz-Umgebung	Steiermark	NA*	Mellach	13 Feb. 2006	fau	...	...	2	0	0

* NA: not applicable

Description of affected population: two swans found dead. Both positive.

Diagnosis:

Laboratories where diagnostic tests were performed	*Species examined*	*Diagnostic tests used*	*Date*	*Results*
AGES (Austrian agency for health and food safety)	swans	RT-PCR	14 Feb. 2006	Positive
Veterinary Laboratories Agency, Weybridge, United Kingdom (OIE/European Union Reference Laboratory)	swans	RT-PCR	18 Feb. 2006	Positive

Source of outbreak or origin of infection: unknown or inconclusive.

Control measures

A. Undertaken:

- movement control inside the country;

- screening;

- zoning.

Treatment of affected animals: no.

Vaccination prohibited: yes.

Other details/comments:

Several dead swans were found in a reservoir in Graz-Umgebung district on 13 and 14 February 2006. First results of the Austrian Agency were H5N1-positive. Confirmation was provided by the OIE/European Union (EU) reference laboratory for avian influenza, Weybridge, United Kingdom.

Since 19 February, the entire country is defined as a "risk area" - all poultry to be kept indoors, enforced biosecurity measures, prohibition of bird markets, in accordance with EU legislation.

Protection and surveillance zones have been established around the reservoir.

Other suspicions have occurred in the Federal Provinces of Steiermark (Hartberg district), Niederösterreich (Korneuburg district), and Vienna. Protection and surveillance zones have been established around all places where suspect wild birds have been found.

Final report: no.

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MISCELLANEOUS: AVIAN INFLUENZA IN BOSNIA AND HERZEGOVINA (IN WILDLIFE)

See also: 23 March 2006

Immediate notification report

Information received on 20 February 2006 from Dr Jozo Bagaric, Head of the State Veterinary Administration of Bosnia and Herzegovina, Sarajevo:

Report date: 20 February 2006.

Identification of agent: avian influenza virus subtype H5.

Date of first confirmation of the event: 20 February 2006.

Date of start of the event: 16 February 2006.

Clinical disease: yes.

Nature of diagnosis: clinical, post-mortem and laboratory.

Details of outbreak:

First administrative division (canton)	*Lower administra-tive division (municipality)*	*Type of epidemiological unit*	*Name of the location*	*Latitude*	*Longitude*	*Date of start of the outbreak*	*Species*	*Number of animals i*			
								susceptible	*cases*	*deaths*	*d*
Srednjobosanski	Jajce	NA*	Plivsko lake	44.34694° N	17.18855° E	16 Feb. 2006	fau	approx. 150	2	0	

* NA: not applicable

Description of affected population: about 15 swans arrived at Plivsko lake around 11 February 2006. On 16 February, two swans showed signs of disease, and were killed and sent to the laboratory for further examination. Pathological findings and a rapid test immediately raised strong suspicions of avian influenza and further tests after egg inoculation showed H5 strain.

Diagnosis:

Laboratory where diagnostic tests were performed	*Species examined*	*Diagnostic tests used*	*Date*	*Results*
Centre for Poultry Diseases, Veterinary Faculty, Sarajevo	swans	virus isolation in chicken embryos	20 Feb. 2006	positive for virus subtype H5
		agar gel immunodiffusion test with H5 antigen	20 Feb. 2006	positive

Origin of infection: unknown or inconclusive.

Control measures

A. Undertaken:

- quarantine;

- movement control inside the country;

- zoning;

- disinfection of infected areas.

B. To be undertaken:

- screening.

Treatment of affected animals: no.

Vaccination prohibited: yes.

Other details/comments: records show that every year only one flock of swans comes to Plivsko lake during migration.

Final report: no.

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MISCELLANEOUS: AVIAN INFLUENZA IN FRANCE (IN WILDLIFE)

See also: 1 June 2006, 4 May 2006, 6 April 2006, 16 March 2006, 9 March 2006, 2 March 2006

Immediate notification report

Translation of information received on 18 and 21 February 2006 from Dr Monique Eloit, Deputy Director General, General Directorate for Food (DGAL), Ministry of Agriculture, Food, Fisheries and Rural Affairs, Paris:

Report date: 20 February 2006.

Identification of agent: avian influenza virus subtype H5N1 showing 99% homology to the Asian H5N1 highly

pathogenic strain.

Date of first confirmation of the event: 17 February 2006.

Date of start of the event: 13 February 2006.

Nature of diagnosis: clinical, post-mortem and laboratory.

Details of outbreak:

First administrative division	*Lower administrative division*	*Type of epidemiological unit*	*Name of the location*	*Date of start of the outbreak*	*Species*	*Number of animals in the outbreak*				
						susceptible	*cases*	*deaths*	*destroyed*	*slaughtered*
Ain	Joyeux	NA*	Joyeux	13 Feb. 2006	fau	...	1	1	0	0

* NA: not applicable

CARTE

Description of affected population: seven wild ducks were found dead on 13 February 2006 in Joyeux. Samples were taken from three of them.

Diagnosis:

Laboratories where diagnostic tests were performed	*Sample examined*	*Diagnostic tests used*	*Date*	*Results*
Ain department laboratory	one sample consisting of tracheal swabs taken from 3 pochard (*Aythya ferina*) (i.e. testing of a pooled sample from the 3 ducks)	RT-PCR (gene M)	15 Feb. 2006	positive
AFSSA, Ploufragan (national reference laboratory)	one sample consisting of tracheal swabs taken from 3 pochard (*Aythya ferina*) (i.e. testing of a pooled sample from the 3 ducks)	RNA sequencing	17 Feb. 2006	positive

The isolate was sent to the OIE and European Union Reference Laboratory in Weybridge, United Kingdom, for laboratory confirmation.

Origin of infection: unknown or inconclusive.

Control measures undertaken:

- control of wildlife reservoirs;

- movement control inside the country;

- screening;

- zoning.

Precautionary measures have been implemented as from the evening of 17 February 2006 within a 10-km radius, including strengthened surveillance for poultry and wild birds and strengthened biosecurity measures in farms. These measures are being maintained for a minimum period of 30 days.

Vaccination prohibited: yes.

Final report: no.

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MISCELLANEOUS: AVIAN INFLUENZA IN CROATIA (IN WILDLIFE) (Follow-up report No. 6)

See also: 13 April 2006, 16 March 2006, 2 March 2006

Information received on 21 February 2006 from Dr Mate Brstilo, Director of the Veterinary Administration,

Ministry of Agriculture and Forestry, Zagreb:

End of previous report period: 8 February 2006 (see *Disease Information*, **19** [6], 98, dated 9 February 2006).

End of this report period: 21 February 2006.

Identification of agent: highly pathogenic avian influenza virus subtype H5N1.

Date of first confirmation of the event: 21 October 2005.

Date of start of the event: 19 October 2005.

Clinical disease: yes.

Nature of diagnosis: laboratory.

New outbreak:

First administrative division	*Lower administrative division*	*Type of epidemiological unit*	*Name of the location*	*Date of start of the outbreak*	*Species*	*Number of animals in the outbreak*				
						susceptible	*cases*	*deaths*	*destroyed*	*slaughter*
Splitsko-Dalmatinska	Ciovo	village	Slatina	15 Feb. 2006	fau	...	1	1	0	0

Affected population in the new outbreak: avian influenza was diagnosed from organs from a swan found dead in Slatina, on the island of Ciovo.

Diagnosis:

Laboratory where diagnostic tests were performed	*Species examined*	*Diagnostic tests used*	*Date*	*Results*
Poultry Centre of the Croatian Veterinary Institute	swan	- haemagglutination inhibition test; - RT-PCR.	21 Feb. 2006	- positive for H5; - positive for N1.

Origin of infection: seasonal migration of wild birds (swans).

Control measures undertaken:

- control of wildlife reservoirs;
- quarantine;
- movement control inside the country;
- screening;
- zoning;
- disinfection of infected areas.

Treatment of affected animals: no.

Vaccination prohibited: yes.

Final report: no.

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MISCELLANEOUS: AVIAN INFLUENZA IN GREECE (IN WILDLIFE) (Follow-up report No. 2)

See also: 24 August 2006, 30 March 2006, 2 March 2006, 16 February 2006, 16 February 2006

Information received on 17 and 22 February 2006 from Dr Vasilios Stylas, Head, Animal Health Directorate,

Ministry of Agriculture, Athens:

End of previous report period: 15 February 2006 (see *Disease Information*, **19** [7], 119, dated 16 February 2006).

End of this report period: 22 February 2006.

Identification of agent: highly pathogenic avian influenza virus subtype H5N1.

Date of first confirmation of the event: 14 February 2006.

Date of start of the event: 3 February 2006.

Clinical disease: yes.

Nature of diagnosis: laboratory.

New outbreaks:

First administrative division (region)	*Lower administrative division (prefecture)*	*Type of epidemiological unit*	*Name of the location*	*Latitude*	*Longitude*	*Date of start of the outbreak*	*Species*	*Number of animals in*			
								susceptible	*cases*	*deaths*	*d*
Central Macedonia	Thessaloniki	NA*	Thessaloniki (city)	40° 38' N	27° 57' E	3 Feb. 2006	fau	...	1	1	
Central Macedonia	Thessaloniki	NA*	Asprovalta (village)	40° 43' N	23° 43' E	3 Feb. 2006	fau	...	1	1	
Central Macedonia	Chalkidiki	NA*	Polychrono	40° 01 N	23° 31' E	10 Feb. 2006	fau	...	1	1	

* NA: not applicable

Affected population: swans.

Diagnosis:

Laboratories where diagnostic tests were performed	*Diagnostic tests used*	*Date*	*Results*
Centre of Veterinary Institutions of Thessaloniki (national reference laboratory for avian influenza)	- virus isolation in embryonated fowls' eggs; - haemagglutination test; - Haemagglutination inhibition test.	14-17 Feb. 2006	Positive for H5
C.R.L.-Weybridge, United Kingdom (OIE Reference Laboratory for avian influenza)	- haemagglutination test; - haemagglutination inhibition test; - PCR(1); - other preliminary tests.	16-21 Feb. 2006	Positive for H5N1

Source of outbreaks or origin of infection: unknown or inconclusive.

Control measures undertaken: zoning.

Treatment of affected animals: no.

Vaccination prohibited: yes.

Other details/comments:

On 3 February 2006, people informed the Veterinary Authorities about the presence of a swan found dead in the sea by a fisherman near Asprovalta village. On the same date, the coastguard authority informed the Veterinary Authorities about the presence of a dead swan found in the sea by a fisherman near Thessaloniki city. The Veterinary Authorities

collected both swans and sent them immediately to the national reference laboratory (NRL).

Since 9 February 2006, the Veterinary Authority of Thessaloniki has been conducting an epizootiological survey throughout the Prefecture. The survey has found no evidence of avian influenza in the area. Strict biocecurity measures have been applied to all poultry farms, establishments with captive birds, pet shops and especially to backyard flocks kept in villages throughout the Prefecture. The Veterinary Directorate of Thessaloniki is fully implementing the measures contained in European Commission Decision 2006/86/EC. These two new cases are located within the surveillance zone established following the case that occurred in the area of Stavros village.

On 10 February 2006, the veterinary authorities were informed about the presence of a dead swan (*Cygnus olor*) on the coast at Polychrono village and immediately collected the bird and sent it to NRL. The veterinary authorities have been performing an epizootiological survey and applying the measures contained in 2006/115/EU Commission Decision since 17 February 2006 when the NRL notified positive for AI results.

Final report: no.

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MISCELLANEOUS: AVIAN INFLUENZA IN ITALY (IN WILDLIFE) (FOLLOW-UP REPORT NO. 1)

See also: 28 September 2006, 9 March 2006, 16 February 2006

Information received on 22 February 2006 from Dr Romano Marabelli, Head of the Department for Veterinary Public Health, Nutrition and Food Safety, Ministry of Public Health, Rome:

End of the previous report period: 14 February 2006 (see Disease Information, **19** [7], 116, dated 16 February 2006).

End of this report period: 21 February 2006.

Identification of agent: highly pathogenic avian influenza virus subtype H5N1.

Date of first confirmation of the event: 11 February 2006.

Date of start of the event: 1 February 2006.

Clinical disease: yes.

Nature of diagnosis: post-mortem and laboratory.

New outbreaks:

First administrative division (region)	*Lower administrative division (province)*	*Type of epidemiological unit*	*Name of the location*	*Date of start of the outbreak*	*Species*	*Number of animals in the outbreaks*				
						susceptible	*cases*	*deaths*	*destroyed*	*slaughtered*
Puglia	Lecce	NA	Ugento	12 Feb. 2006	fau	...	...	1	0	0
Puglia	Lecce	NA	Vernole	14 Feb. 2006	fau	...	...	1	0	0
Puglia	Foggia	NA	Rodi Garganico	14 Feb. 2006	fau	...	...	1	0	0
Puglia	Bari	NA	Giovinazzo	17 Feb. 2006	fau	...	...	1	0	0
Sicilia	Catania	NA	Catania	19 Feb. 2006	fau	...	...	2	0	0
Sicilia	Catania	NA	Mineo	19 Feb. 2006	fau	...	...	4	0	0
Umbria	Perugia	NA	Panicale	19 Feb. 2006	fau	...	...	1	0	0

* NA: not applicable

Description of affected population: mute swans (*Cygnus olor*), sultan (*Porphyrio porphyrio*), buzzard (*Buteo*

buteo), wild duck (*Anas platyrhyncos*)

Diagnosis:

Laboratories where diagnostic tests were performed	*Location of outbreaks*	*Species examined*	*Diagnostic tests used*	*Date*	*Results*
IZS[1] della Puglia	Puglia	mute swan	RT-PCR (gene H5)	12-14 Feb. 2006	positive
IZS della Sicilia	Sicily	sultan, buzzard, mute swan	RT-PCR (gene H5)	19 Feb. 2006	positive
IZS dell'Umbria e delle Marche	Umbria	wild duck	RT-PCR (gene H5)	19 Feb. 2006	positive
OIE Reference Laboratory for avian influenza and Newcastle disease in Padova	Puglia, Sicily, Umbria	sultan, buzzard, mute swan, wild duck	- PCR (genes M, H5 and N1); - sequence analysis.	19 Feb. 2006	- positive for H5N1; - amino acid sequence at cleavage site indicates a highly pathogenic avian influenza profile.

Source of outbreaks or origin of infection: unknown or inconclusive.

Control measures undertaken:

- control of wildlife reservoirs;
- movement control inside the country;
- screening;
- zoning;
- disinfection of infected premises.

Treatment of affected animals: no.

Final report: no.

(1) IZS: *Istituto Zooprofilattico Sperimentale* (Experimental Institute for Veterinary Prophylaxis)

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俄羅斯西伯利亞爆發禽流感

二零零六年八月四日接獲莫斯科農業及食物部主要獸醫署主管 Evgueny A. Nepoklonov 呈報以下資料：

報告日期：二零零六年八月四日。

經精確鑑認的病原：高致病性禽流感病毒 H5N1 亞型

在二零零六年，西伯利亞聯邦區域內阿爾泰(Altaj)、托木斯克(Tomsk)、鄂木斯克(Omsk)及新西伯利亞(Novosibirsk)等地呈報私人散養場爆發禽流感。

托木斯克區錄得兩宗疫情，其中一宗涉及家養家鴿。

至二零零六年七月三十一日爲止，在托木斯克區爆發的其中一宗禽流感疫情尚未平息，但自二零零六年七月五日起沒有接獲新疫情的報告。

在圖瓦共和國(Tyva Republic)，有野鳥因感染禽流感而死亡。

國家政府獸醫主管當局和州政府主管食物當局正在監控疫區情況。

Annex (IV)

Avian influenza in Siberia, Russia

Information received on 4 August 2006 from Dr Evgueny A. Nepoklonov, Head of the Main Veterinary Department, Ministry of Agriculture and Food, Moscow:

Report date: 4 August 2006.

Precise identification of agent: highly pathogenic avian influenza virus subtype H5N1.

During 2006, in Siberian Federal District, avian influenza was reported in private backyards in Altaj, Tomsk, Omsk and Novosibirsk regions.

In Tomsk region, 2 outbreaks were registered, one of them in domestic pigeons.

On 31 July 2006, one outbreak of avian influenza was still active in Tomsk region. No new outbreaks of the disease have been reported since 5 July 2006.

In Tyva Republic, wild birds were found dead due to avian influenza.

The national veterinary services and the state service for food are controlling the situation in the infected territories.

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附件（五）
Annex(V)

Vet Pathol 43:463–470 (2006)

Neurotropism of Highly Pathogenic Avian Influenza Virus A/Chicken/Indonesia/2003 (H5N1) in Experimentally Infected Pigeons (*Columbia livia f. domestica*)

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Abstract. This investigation assessed the susceptibility of experimentally infected pigeons to the highly pathogenic avian influenza virus (HPAIV) H5N1 that caused recent outbreaks of avian influenza in birds and humans in several countries of Asia. For this purpose 14 pigeons were infected ocularly and nasally with 10^8 EID_{50} and clinical signs were recorded and compared with five chickens infected simultaneously as positive controls. The chickens demonstrated anorexia, depression, and 100% mortality within 2 days postinoculation. Three of the pigeons died after a history of depression and severe neurological signs consisting of paresis to paralysis, mild enteric hemorrhage, resulting in a mortality of 21%. Gross lesions in these pigeons were mild and inconsistent. Occasionally subcutaneous hyperemia and hemorrhage and cerebral malacia were observed. Microscopic lesions and detection of viral antigen were confined to the central nervous system of these pigeons. In the cerebrum and to a minor extent in the brain stem a lymphohistiocytic meningoencephalitis with disseminated neuronal and glial cell necrosis, perivascular cuffing, glial nodules, and in one bird focally extensive liquefactive necrosis could be observed. The remaining nine pigeons showed neither clinical signs nor gross or histological lesions associated with avian influenza, although seroconversion against H5 indicated that they had been infected. These results confirm that pigeons are susceptible to HPAIV A/chicken/Indonesia/2003 (H5N1) and that the disease is associated with the neurotropism of this virus. Although sentinel chickens and most pigeons did not develop disease, further experiments have to elucidate whether or not *Columbiformes* are involved in transmission and spread of highly pathogenic avian influenza.

Key words: Avian influenza; chicken; meningoencephalitis; neuronal necrosis; pigeon.

Introduction

In the past, a large number of avian influenza viruses (AIV), belonging to 16 hemagglutinin (H1-H16) and nine neuraminidase (N1-N9) subtypes, have been recovered from a variety of domestic and wild avian species worldwide. All subtypes have been found in wild birds from at least nine different orders, but the main reservoir hosts seem to be birds of the orders *Anseriformes* (geese, ducks, swans) or *Chadriiformes* (gulls, terns, surfbirds, sandpipers).[25] The wide distribution in these asymptomatically infected wild birds may result in spread to domestic poultry.[2] Highly pathogenic avian influenza (HPAI) is an acute, generalized, fatal disease etiologically restricted only to those AIV strains of the subtypes H5 and H7, which code for a furin-sensitive cleavage site in their hemagglutinin protein and, therefore, are capable of inducing systemic infections. HPAI occurs characteristically in chickens and turkeys.[1] However, other gallinaceous birds such as quails or guinea fowls, as well as ducks, geese, ratites, passerine birds, flamingos, herons, and raptors are also susceptible for the disease.[18,19] Since 2003, an epidemic emergence of H5N1 in Vietnam, Indonesia, and Thailand has resulted in the culling of millions of birds and led to 173 confirmed cases of human H5N1-influenza, with a total of 93 fatalities reported to the World Health Organization (WHO) until 27 February 2006 (http://www.who.int/csr/disease/avian_influenza). Controversial reports exist about the susceptibility of domestic birds, especially racing pigeons and wild pigeons, and their role as a link between wild and domestic birds and transmission and spread of HPAIV during epizootics over long distances.[10] Whereas several transmission experiments suggest a resistance, one report describes a minimal susceptibility of *Columbiformes* to infection with HPAIV of the H5 subtype.[16,18,20] Here, we focus on the clinical and

pathological findings and distribution of viral antigen after experimental inoculation of pigeons with the HPAIV A/chicken/Indonesia/2003 (H5N1).

Materials and Methods

Viruses

The HPAIV A/chicken/Indonesia/2003 (H5N1) was isolated in the national reference laboratory for avian influenza at the Friedrich-Loeffler-Institut, Isle of Riems, Germany, from chicken organs received from Indonesia. The isolate was once propagated in the allantoic cavities of 10-day-old embryonated specific pathogen-free (SPF) chicken eggs. The allantoic fluid was harvested and stored at −70°C.[25]

Animals and experimental design

Fourteen 4-month-old, male and female racing pigeons *(Columbia livia f. domestica)*, serologically negative for H5-specific hemagglutination-inhibiting antibodies, were inoculated ocularly and intranasally in each case with 0.5 ml allantoic fluid containing 1×10^8 EID_{50} (50% embryo infective dose) of the Indonesia/2003 HPAIV. For detection of virus excretion five 12-week-old serologically AIV-negative SPF White Leghorn chickens (VALO SPF, Lohmann, Cuxhaven, Germany) were added to the aviary with the pigeons 48 hours postinoculation (pi). Four pigeons were not inoculated with HPAIV and served as a negative control group. Furthermore five SPF chickens of the same age and breed were simultaneously and identically infected as positive controls and kept separately. Pigeons and chickens were housed in aviaries with free access to food and water. The animals were observed for 19 days pi (dpi), and clinical signs were recorded. All animals used for these investigations were kept under isolated conditions in the biosafety level 3 containment facilities on Isle of Riems. The experimental studies were permitted by the German Animal Welfare Committee, and general care was provided as required.

Sampling

All pigeons and chickens that died or were killed were necropsied for determination of gross lesions and histopathology. Animals were killed when they developed severe clinical signs consisting of severe depression, reluctance to move, neurological signs such as torticollis, paralysis, and loss of consciousness, or after 19 dpi. Tissue samples of all animals were fixed in 4% phosphate-buffered neutral formaldehyde and processed for paraffin-embedding.

Serology

Sera of pigeons and chickens were collected before infection and at the time of euthanasia or at 19 dpi. For detection of H5-specific antibodies the hemagglutination-inhibition test (HI-test) with inactivated H5 antigens was used.[25]

Generation of anti-nucleoprotein serum

The influenza virus strain Influenza A/FPV/Rostock/34 was used for the amplification of the viral sequence encoding the nucleoprotein (NP) gene by reverse transcription-polymerase chain reaction (RT-PCR) following standard procedures. The obtained RT-PCR fragment encompassing the complete coding region of the NP gene was cloned into the baculo transfer vector pAcGHLT-A (Pharmingen, Heidelberg, Germany), which resulted in a plasmid pAcGHLTA-NP-Ros encoding a fusion protein of the vector-derived glutathione-S-transferase (GST) and the open reading frame of the NP protein. After generation of a recombinant baculovirus using Baculo-Gold DNA (Pharmingen, Heidelberg, Germany), a recombinant NP expressing baculovirus was generated. The recombinant protein (GST-NP) was purified according to the manufacturer's instructions using GST-binding resin (Novagen, Bad Soden, Germany). Rabbits (SPF, Harlan, and Winkelman; Borchen, Germany) were inoculated intramuscularly four times with 100 µg of the purified GST-NP. The specificity of the anti-NP serum was monitored by Western Blot analysis using lysates of infected and noninfected cell cultures.

Histopathology and immunohistochemistry

Paraffin-wax sections (3 µm) were dewaxed and stained with hematoxylin and eosin (HE). To analyze distribution of HPAIV antigens, sections were mounted on positively charged SuperFrost Plus microscope slides (Menzel, Braunschweig, Germany), dewaxed, and rehydrated. The sections were incubated with the rabbit anti-NP serum. This antibody was applied at a dilution of 1 : 500 in Tris-buffered-saline (TBS, 0.1 M Tris-base, 0.9% NaCl, pH 7.6). As linker-antibody for the avidin-biotin-complex (ABC) method, a biotinylated goat anti-rabbit (IgG1) (Vector, Burlingame, CA; diluted 1 : 200 in TBS) was used. As negative control the preimmunization serum of the same rabbit was applied. By means of the ABC method and an immunoperoxidase kit (Vectastain Elite ABC Kit, Vector), a bright red signal was produced from the substrate, 3-amino-9-ethylcarbazole (DAKO AEC substrate-chromogen system; Dako, Carpinteria, CA). The sections were counterstained with Mayer's hematoxylin and sealed with aqueous medium (Aquatex; Merck, Darmstadt, Germany).

Results

Pigeons

Mortality and clinical signs. Ocular and intranasal administration of HPAIV Indonesia/2003 resulted in death of 5 of the 14 pigeons, during a time period of 19 dpi. Survival times varied from 5 dpi (pigeon No. 1) to 7 dpi (pigeons Nos. 2 and 3) to 19 dpi (pigeons Nos. 4 and 5, euthanized both with neurologic symptoms). Clinical signs were observed in all of these five animals (Table 1). Disease

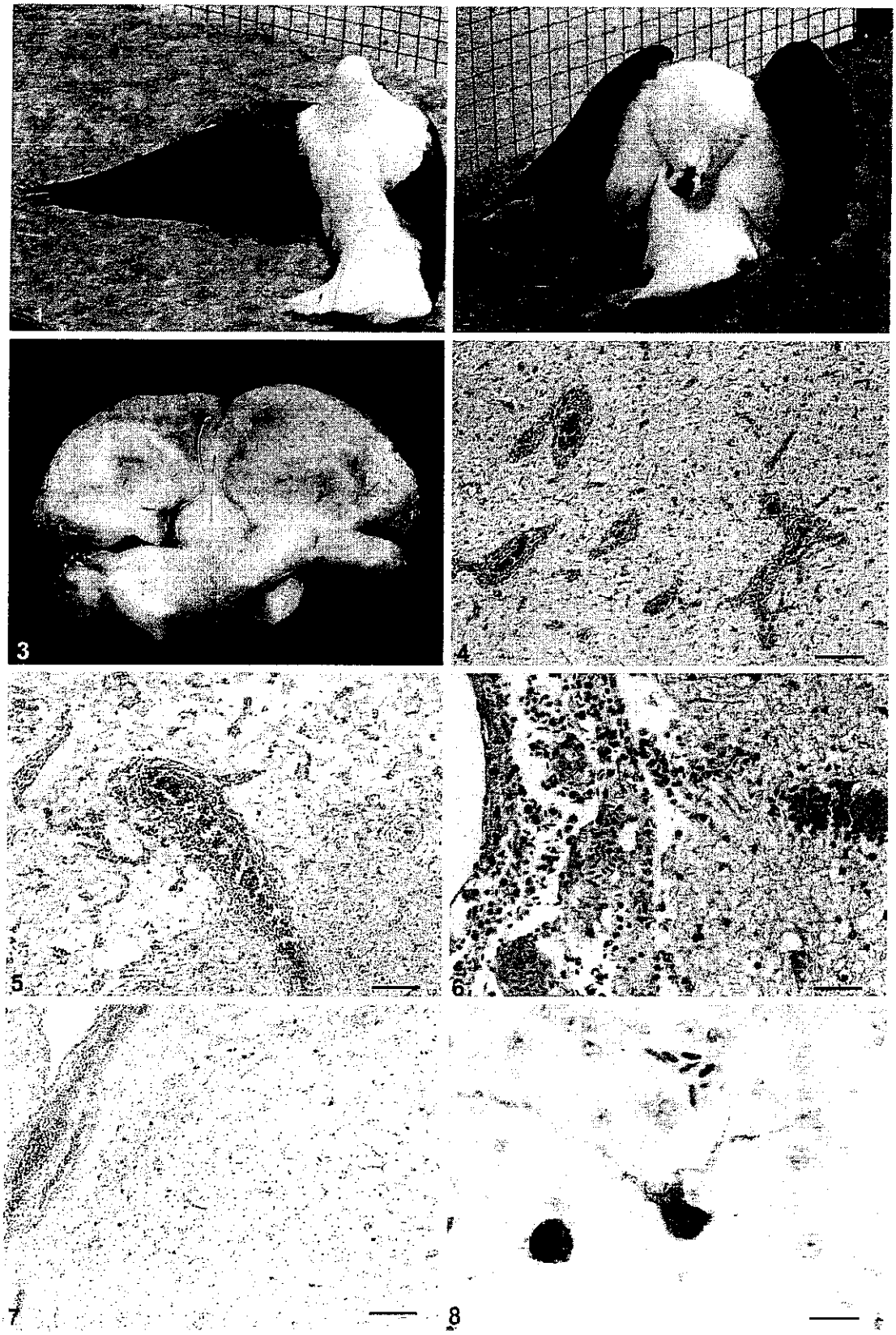
Table 1. Clinical signs, time to death, gross and histopathology, and results of immunohistochemistry of pigeons and chickens intranasally and ocularly inoculated with HPAIV A/chicken/Indonesia/2003 (H5N1)

Animal Nos.	Clinical Signs	Time to Death	Gross Lesions	Histopathology†	Immunohistochemistry‡
Pigeon 1	Neurologic signs	5 dpi	Subcutaneous hemorrhage	Cerebrum: meningoencephalitis (++)	Cerebrum (***)
Pigeon 2	Depression, neurologic signs	7 dpi	Subcutaneous hemorrhage, hydropericardium	Cerebrum, brain stem: meningoencephalitis (++)	Cerebrum (***)
Pigeon 3	Depression, neurologic signs	7 dpi	(/)	Cerebrum: meningoencephalitis (+++)	Cerebrum (*)
Pigeon 4	Neurologic signs	19 dpi*	(/)	Cerebrum: encephalitis (+)	Cerebrum (*)
Pigeon 5	Neurologic signs	19 dpi*	Cerebral malacia	Cerebrum, brain stem: meningoencephalitis, malacia (+++)	Cerebrum (**), brain stem (*)
Pigeons 6–14	(/)	19 dpi*	(/)	(/)	(/)
Chickens 1–5	Depression	2 dpi	Subcutaneous hemorrhage, hydropericardium	Disseminated epithelial and lymphoid necrosis, necrotizing vasculitis, interstitial pneumonia, necrotizing pancreatitis	Lung, intestine, adrenal, heart, liver, kidney, spleen (*) pancreas, thymus (**)

* Killed humanely.

† Histopathological grading of the lesions: (/) = none, (+) = mild, (++) = moderate, (+++) = severe.

‡ Numbers of IHC-anti-H5N9 positive cells: (/) = none, (*) = few, (**) = moderate numbers, (***) = numerous.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progressed over a period of 1 to 3 days from depression to enteric hemorrhage and severe neurological signs consisting of torticollis, nystagmus, and wing paresis to paralysis (Figs. 1 and 2). No clinical signs were observed in the nine pigeons (pigeon Nos. 6–14) euthanized 19 dpi (Table 1).

Serology. In all of the nonsymptomatic pigeons Nos. 6–14, significant H5-specific titers were detected on day 19 pi (ranging from 1 : 32 to 1 : 64).

Gross pathology. At necropsy, only mild and inconsistent lesions were present (Table 1). Whereas pigeons Nos. 1 and 2 showed a focal, well-circumscribed, 2-cm-diameter area of hyperemia and hemorrhage in the subcutaneous venous plexus of the neck, a hydropericardium was found in pigeon No. 2 (Table 1). A focally extensive area of unilateral cerebral malacia was observed in pigeon No. 5. In this case the complete anterior part of the left hemisphere showed a focal, well-delineated indentation with softening and yellow-brown discoloration of the neuroparenchyma as well as hyperemia of adjacent meningeal vessels (Fig. 3). Gross lesions could not be observed in pigeons Nos. 3 and 4 and the animals were killed at 21 dpi.

Histopathology. Histologic lesions were confined to the central nervous system (CNS) of the pigeons that developed clinical signs of HPAI (Table 1). Diffusely, lesions were present mainly in the cerebral gray matter but also in the brain stem. In the cerebrum, multifocal, moderate to severe necrosis of neurons and glial cells and hemorrhages were found in pigeons Nos. 1–5. Corresponding to these lesions, prominent multifocal glial nodules and occasional neuronophagia could be observed in the cerebral gray and white matter. Vessels showed multifocal perivascular cuffing with one to four layers of numerous lymphocytes, fewer histiocytes, and small numbers of heterophils (Fig. 4). In pigeon No. 5, additional extensive, multifocal to coalescent, irregularly shaped, moderately demarcated areas of liquefactive necrosis were found in the cerebrum, characterized by central complete loss of neuropil, leaving empty spaces that contained preexisting arterioles, small amounts of pale eosinophilic material, and few finely vacuolated macrophages (gitter cells; Fig. 5). Milder lesions were found in the brain stem but not in the cerebellum of pigeons Nos. 1 and 5. Rarely, swelling, degeneration, and necrosis of endothelial cells were observed. Four of the five affected pigeons showed moderate diffuse meningitis with small numbers of mainly perivascular mononuclear cells and mild edema (Fig. 6). Histologic examination of the heart, aorta, larynx, lung, spleen, pancreas, kidney, proventriculus, gizzard, and duodenum revealed no lesions. No lesions were observed in the pigeons that did not develop clinical signs.

Immunohistochemistry. Influenza virus antigen strongly colocalized with the histologic lesions in the brain. Intranuclear and intracytoplasmic staining for NP antigen was seen in numerous viable as well as degenerating and necrotic neurons of the cerebrum and brain stem as well as in a few glial cells and capillary and arteriolar endothelial cells of pigeons Nos. 1–3 (Figs. 7 and 8). In contrast, in pigeons Nos. 4 and 5 only a few NP antigen positive neurons and glial cells were detected in the cerebrum and the brain stem but no staining of endothelial cells was observed. In pigeon No. 5 few positive neurons surrounded closely the area of liquefactive necrosis. In pigeons Nos. 1–5 no viral antigen as detected in heart, larynx, lung, spleen, pancreas, kidney, or intestine. Furthermore, viral

←

Fig. 1. Pigeon No. 4, 19 dpi. Animal with hemiparalysis of the wing.

Fig. 2. Pigeon No. 5, 19 dpi. Animal with severe torticollis.

Fig. 3. Transversal section of formalin-fixed brain: Pigeon No. 5, 19 dpi. Left hemisphere of the cerebrum with moderate reduction in size and irregularly shaped, fairly demarcated area of liquefactive necrosis of white and gray matter.

Fig. 4. Cerebrum: Pigeon No. 4, 19 dpi. Severe perivascular cuffing of cerebral vessels and mild diffuse gliosis. HE. Bar = 250 μm.

Fig. 5. Cerebrum: Pigeon No. 5, 19 dpi. Area of liquefactive necrosis with complete loss of neuropil, remaining blood vessels and few finely vacuolated macrophages (gitter cells). HE. Bar = 250 μm.

Fig. 6. Cerebrum: Pigeon No. 4, 19 dpi. Moderate meningitis with small numbers of mononuclear cells and mild edema. HE. Bar = 175 μm.

Fig. 7. Cerebrum: Pigeon No. 5, 19 dpi. Immunohistochemical staining for AIV nucleoprotein in a moderate number of cerebral neurons and glial cells. ABC method with hematoxylin counterstain. Bar = 500 μm.

Fig. 8. Cerebrum: Pigeon No. 2, 7 dpi. Intranuclear and intracytoplasmic staining for AIV nucleoprotein in a cerebral neuron. ABC method with hematoxylin counterstain. Bar = 25 μm.

antigen could not be detected in pigeons Nos. 6–14 (Table 1).

Chickens (positive control group)

Inoculation with HPAIV A/chicken/Indonesia/2003 (H5N1) resulted in 100% mortality in chickens. Clinical signs were mild depression, anorexia, and minimal dyspnea. After occurrence of first clinical signs, the disease progressed rapidly to death within 8–12 hours at 2 dpi. At necropsy, lesions in the chickens consisted of ruptured ovarian follicles with diffuse serofibrinous "egg yolk" peritonitis and subserosal hemorrhages, scattered mucosal hemorrhages in the proventriculus, petechiation in adipose tissue as well as moderate to marked congestion of the lungs, liver, and spleen.

Histologic lesions were observed in a wide variety of organs and consisted of disseminated fibrinoid and necrotizing vasculitis with necrosis of endothelial cells, mild to moderate perivascular, mainly lymphohistiocytic, infiltrates and lymphoid depletion with necrosis in spleen, Peyer's patches, bursa, and perilaryngeal lymph follicles. The lungs showed marked congestion and mild infiltration with few lymphocytes and heterophils within the mildly edematous interstitial connective tissue. Furthermore, discrete foci of single cells or group necrosis of the pancreatic acinar epithelium, proventricular mucosa, and renal tubular epithelium as well as hepatocytes could be observed. Inflammatory response corresponding to these lesions was absent or minimal and consisted of few infiltrating heterophils. Immunohistochemically, intralesional, intranuclear, and intracytoplasmic staining for viral antigen was found within leukocytes of the Peyer's patches, bursa, perilaryngeal lymph follicles as well as cortical and medullary epithelium of the adrenal glands, renal tubules, pancreatic acini, and in few pneumocytes. Endothelial cells of small vessels and capillaries were invariably and diffusely positive for HPAIV antigen.

Sentinel chickens and negative control pigeons

Sentinel chickens and non-infected pigeons were euthanized at day 19 pi. None of the animals showed any clinical signs. Gross pathology and histopathology revealed no lesions in the brain, heart, vessels, larynx, lung, spleen, pancreas, kidney and intestine. Immunohistochemical staining detected no viral antigen in these tissues. Sera of the sentinel chickens revealed no significant H5-specific antibodies on day 19 pi.

Discussion

Ocular and nasal administration of HPAIV A/chicken/Indonesia/2003 (H5N1) resulted in moderate morbidity and mortality in pigeons within 5 to 19 dpi. Clinically, the affected birds showed depression and neurological dysfunction. Histopathology and immunohistochemistry demonstrated a pronounced neurotropism of HPAIV A/chicken/Indonesia/2003 (H5N1) for the cerebrum and brainstem in these pigeons. This is the first complete investigation integrating increased mortality with histopathology and distribution of viral antigen after infection of pigeons with HPAIV of the subtype H5.

Several transmission experiments addressed the susceptibility of pigeons to characterized and quantified HPAIV of the subtypes H5 and H7.[5,10,15,16,18,20] However, so far only one report demonstrated death of 1/19 pigeons after intranasal administration of HPAIV A/turkey/Ontario/7732/66 (H5N9).[24] In contrast to these results, our experiments demonstrate that pigeons are susceptible to HPAIV A/chicken/Indonesia/2003 and that this influenza virus exhibits a strong neurotropism in this species. The seroconversion of the nine pigeons that did not develop signs of avian influenza shows that these animals, although primarily infected, were obviously able to clear the virus. Furthermore the lack of clinical symptoms and of seroconversion in the sentinel chickens shows that bird-to-bird transmission of the virus did not occur.

Infections of the CNS with HPAIV of the subtype H5 have been observed in a wide variety of avian and mammalian species. Particularly in mice and rats but also in humans and ferrets, this virus displays a marked neurotropism.[3,9,21,29] Among avian species, the brain was consistently affected in emus, geese, house finches, and budgerigars, but microscopic lesions and viral antigen were also detected in other organs.[17,19] In chickens, zebra finches, Japanese and Bobwhite quails, turkeys, guinea fowl, pheasants, and partridges, infection was evenly distributed in the body including the brain.[17,19] Consequently, the pronounced neurotropism in pigeons observed in our experiments seems to be unprecedented at least in avian species. However, the virus may be more widely distributed in pigeons at earlier time points after inoculation.

Multiple basic amino acid residues defining a furin-sensitive cleavage site of the hemagglutinin protein and cellular proteases determine the virulence of avian influenza viruses by rendering them

processable in virtually all receptor-positive cells throughout the body.[11,22] In addition, an influence of the structure of the polymerase PB2 for virulence of Hong Kong H5N1 influenza A virus in mice could be shown.[7] The molecular basis of the neurotropism of certain influenza virus strains is not known but obviously can be influenced by the host and the virus strain.[25] Furthermore, viral adaptation to the host might be important, since enhanced neuropathogenicity of an influenza virus strain (H5N3) could be produced by repeated passages through air sacs and brains of chickens.[23]

It has been shown that highly pathogenic influenza virus replicates in endothelial cells throughout the body during early stages of infection in chickens, and virus spread in the body occurs following viremia.[4,12,26] After penetrating the blood-brain barrier, infection is propagated to glial cells and neurons.[23] In mice, CNS infections may occur by ascending transsynaptic transmission of H5N1 via vagal and trigeminal nerve fibers.[13,25] Hence, viral antigen was found mainly in vagal and trigeminal ganglia, and vagal and trigeminal nuclei of the brainstem but not in the cerebral cortex.[14] The exact mechanism of intraneural transport of avian influenza A is unknown but a dependence on integrity of intermediate filaments such as neurofilament has been shown.[14] In contrast to the situation in mice, the more diffuse infection of cortical and midbrain neurons and the sparing of brain stem nuclei of cranial nerves raises the question of whether infection of the CNS in the pigeons follows rather a hematogenic than a neurogenic route. Nevertheless, the exact pathogenesis remains to be further elucidated and is currently under investigation in our laboratory. Whether the observed malacia in pigeon No. 5 was directly caused by viral infection of neuronal structures with necrosis or apoptosis in this area or by ischemia caused by endothelial damage after infection and consequent thrombotic infarction remains unclear.[8] Although adjacent neurons and glial cells stained for AIV NP-antigen and no thrombi could be detected, the focally extensive pattern and the limitation to one animal favors a vascular pathogenesis.

While reported isolations of HPAIV H5N1 were limited to one dead wild pigeon during the outbreak of avian influenza in Hong Kong 2002, the results obtained from this experiment support the view that pigeons are not resistant to infection and might be at least hypothetically involved in transmission of avian influenza.[6] Further experimental studies are ongoing to investigate the shedding of avian influenza virus by infected pigeons.

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SUMMARY RECORD OF THE STANDING COMMITTEE ON THE FOOD CHAIN AND ANIMAL HEALTH HELD IN BRUSSELS ON 07-08 MARCH 2006

(Section Controls and Import Conditions)
(Section Animal Health and Welfare)

(Biological Safety of the Food Chain)

Presidents: Bernard Van Goethem and Alberto Laddomada

All the Member States were present, except Austria absent on 08 March but represented by Germany

1. Update information in relation to the avian influenza situation

The Austrian delegation delivered a timeline concerning the outbreak which occurred in the animal shelter in Graz. On 22 February the National Reference Laboratory confirmed H5N1 in a wild swan which was brought to the animal shelter and died on 16 February. 5 further birds which were clinically healthy were tested positive for H5N1. As a precautionary measure, samples were also taken from 40 cats and on 6 March three samples were found PCR positive for H5N1. On 2 March samples were taken from 34 cats and the PCR results were negative. A total of 170 cats were brought to a quarantine station where investigations will be carried out by experts of the University of Veterinary Medicine, Vienna. The employees of the animal shelter have been under medical supervision and no signs of an infection have been detected.

The Polish delegation distributed and presented "Avian Influenza in Poland". On 5 March the Polish authorities have informed the Commission of confirmed cases of H5 in two dead swans found in a park in the city of Torun. A protection zone with radius of 3 km and a surveillance zone have been established. 33 farms keeping poultry were registered and identified in the protection zone until 6 March.

The German delegation updated the Committee on the avian influenza situation. Up till now 6 Länder have detected confirmed cases of the H5N1 virus. The German delegation assumes that the source of the disease is coming from Eastern Europe. On 8 March the German delegate informed that, a total of 3 cats have been tested positive for H5N1 by the National Reference Laboratory. The Commission requested Germany to send as soon as possible written information on the cases in cats.

The Spanish delegate informed that due to the cold weather there has not yet been a big wave of spring migration from the African continent.

The French delegation informed that a swan infected with the H5N1 virus was found in the Department "Bouche du Rhone". Another case was detected around Lake Geneva. Vaccination in ducks was started on 24 February in the department "Lande". Up till now, 38 holdings have been vaccinated.

The Italian delegation presented "Protection measures in relation to confirmed cases of highly pathogenic avian influenza H5N1 in wild birds in Italy ". H5N1 was confirmed in a mallard found dead in a lake in Umbria. Another case of H5N1 was detected in a swan in the South of Calabria. The census of all swan flocks carried out by Italian National Wildlife Institute is still ongoing.

The Hungarian delegation provided a "Summary record on the epidemiological situation concerning HPAI outbreaks in wild birds in Hungary". The virus H5 has been isolated on 3 March in three swans. Samples will be submitted to the Community Reference Laboratory on 8 March.

The Dutch delegate informed that preventive vaccination has not started yet. It will be launched on 15 March in backyard flocks. The Netherlands will provide detailed information on the implementation in the subsequent Committee.

The Bulgarian delegation informed that since the last SCFCAH no new cases were found in Bulgaria.

Slovakia has no new information to report since the last Committee meeting.

The Slovenian delegation informed that 24 cases of the H5N1 virus were detected out of which there are 22 cases in mute swans. One new case was detected in the region of Markovci. As notified by Slovenia already at the last SCFCAH, a new surveillance zone was established which comes up to the Croatian border.

The Swedish delegation distributed "Update of the Swedish Avian influenza (AI) situation". Two tufted ducks found at the South East coast of Sweden were confirmed positive on 28 February by the National Veterinary Institute as regards highly pathogenic AI (HPAI) subtype H5. Samples have promptly been sent to the Community Reference Laboratory in Weybridge. So far, another 8 tufted ducks from the same area have been tested positive for H5. The precautionary measures set out in Commission Decision 2006/115/EC were immediately applied following the findings of HPAI, and surveillance and protection zones were put in place. New cases in wild birds were detected on 8 March at the South East coast of Sweden and the Swedish delegate informed the Committee thereof by distributing a written report.

As regards the avian influenza situation in Romania, the Commission stated that new outbreaks in domestic poultry were detected in the province of Constanta. The Commission also informed the Committee that H5N1 virus was confirmed in samples of chicken from Albania.

Furthermore, the Commission reported back from a conference where the situation in Vietnam was discussed. In the last months massive vaccination has been applied. Controls of chicken movements have been enforced. A DIVA strategy is not being applied; however a lot of PCR testing is being performed. All these measures have led to a clear improvement of the situation during the last months.

In the context of the discussion concerning the avian influenza situation, vaccination programmes of zoo birds against avian influenza were presented by Italy, Lithuania, Estonia, Ireland and Sweden. During the last weeks, the Commission has received also programmes

from France, Netherlands, Portugal, Denmark, Belgium, Spain, Latvia and Hungary. All these countries are now in a position to vaccinate zoo birds. The vaccination programmes will be forwarded to all Member States.

2. Information on the classical swine fever situation in Germany

The German delegation reported on a new outbreak of classical swine fever in domestic pigs. The last outbreak in domestic pigs occurred in 2003. Last Friday classical swine fever was confirmed in three fattening farms in Haltern in the Kreis Recklinghausen. Following the confirmation with ELISA on 3 February, stamping out was immediately applied. The virustype is 2.3 Güstrow. Epidemiological investigations are ongoing, especially with regard to an illegal backyard pig holding which is located in close proximity to one of the three fattening farms. There is evidence of recent illegal slaughter in the backyard holding. The outbreak might have been spread by rodents. As regards protection measures, a protection zone of 3.000 m and a surveillance zone of 10.000 m were put up on 3 February.

Some Member States expressed their concerns on the disease situation and the Netherlands has already stepped up several measures such as double cleaning of tracks coming from Germany to the Netherlands.

The Commission commented that the situation is unclear, in particular due to the unknown source of the outbreak. The Commission requested maps of the protection zone and recommended suspending or at least reducing the movement of pigs within North-Rhine Westphalia until the epidemiological examinations are finished. The Commission will closely follow the situation and asked Germany to keep the Commission informed about any development.
The German delegation agreed to send to the Commission a written report on a daily basis.

3. Final Request for Member States to submit results on the amount of product of animal origin removed from personal luggage during 2005 as required under Annex IV of Commission Regulation (EC) No 745/2004

The Commission stated that the deadline for submitting information has passed already. However Member States can still send in their information.

4. Information from the Commission on a draft Commission decision approving a Diagnostic Manual establishing diagnostic procedures, sampling methods and criteria for evaluation of the laboratory tests for the confirmation of Avian Influenza (SANCO/10212/2006)

The Commission's representative explained that the laboratory techniques for diagnosis of avian influenza shall be laid down in a separate document called "Diagnostic manual". Experts from the Community Reference Laboratory have compiled the disease description, clinical diagnosis, laboratory techniques and safety requirements. Sampling and surveillance procedures referred to in the Articles of the Directive are not completed and work is still ongoing. The most recent developments concerning testing strategies for wild birds have not

yet been included such as a protocol for the M gene test and the optimal sampling/swabbing techniques. The Commission asked the Member States to submit comments on the draft document.

5. **Update information on the foot-and-mouth disease (FMD) situation in South America**

The Commission stated that it has received information that Brazilian animals are being exported from the North of Brazil to Lebanon (FMD endemic area) without any certification. The Commission will try to inquire more details on this issue.

As for Argentina, there was a second outbreak on 27 February; one sick animal was found within the restricted area. Brazil has eventually confirmed 6 outbreaks in Parana. The Commission highlighted that it receives weekly information from the Brazilian authorities.
The Commission also informed that vaccination is ongoing in the affected parts of Turkey and recommended Greek to step up appropriate measures at the border to Turkey. Member States were also asked to reinforce the control of passenger luggage from any flight coming from Turkey.

6. **Information by Italy on African swine fever and the implementation of Commission Decisions 2005/363/EC and 2005/624/EC**

The discussion was postponed.

7. **Information from UK on the system for the identification and registration of ovine and caprine animals implemented in Great Britain and Northern Ireland temporarily recognised by Commission Decision 2005/617/EC**

The UK delegate stated that the intention is to distribute as much information as possible on the derogation provided for UK concerning the system for the identification and registration of ovine and caprine animals. Member States should reflect on the issue and a discussion and possible vote is foreseen for one of the next Committee meetings.
The Member States thanked the UK for having circulated the documents. The Commission clarified that it will dispatch the FVO report to the Member States before asking them for an opinion.

8. **Russian import conditions for animals and products of animal origin. (RH)** ***(See point 3 of the 17 December 2004 SCFCAH and point 2 of the 19 October 2004, 18 January, 16 February, 16 March, 21 April, 24 May, 21-22 June, 23 September, 18 October, 22-23 November, 20-21 December 2005 and 24 January SCFCAHs)***

The Commission informed the Member States of the state-of-play as regards veterinary talks with Russia. The next technical meeting in Moscow takes place 9-10 March. The draft addendum on transit controls and the draft regionalisation memorandum are on the agenda. The Commission distributed to the Member States copies of Dr Nepoklonov's letter of 16.2.2006 concerning the amendment of the common EU export certificate for feed of

animal origin and Ms Husu-Kallio's letter of 3.3.2006 concerning the resident Russian inspectors.

9. Exchange of views and possible opinion of the Committee on a draft Commission Decision on the evolution of animal diseases in the Community and in third countries and in particular in relation to avian influenza

a) The Commission presented a "draft Commission Decision amending Decision 2004/639/EC as regards Croatia".

The purpose of this Decision is to add Croatia to the list of third countries from which imports of semen of domestic animals of the bovine species are authorised in the light of the situation achieved with regard to animal health in Croatia.

The German delegate requested an inspection of the semen station in Croatia.

Vote: Unanimously in favour. Austria absent but represented by Germany.

10. Exchange of views and possible opinion of the Committee on a draft Commission Decision amending Annex I to Council Decision 79/542/EEC as regards import of bovines from Chile (SANCO/10145/2006) (HLB)

The Commission explained that Chile has requested to be authorised to import bovine animals into the Community. The disease situation in this country is acceptable and, in addition it is already listed for non-domestic animals other than swine; therefore Chile should be listed for imports of bovines into the Community.

Vote: Unanimously in favour

11. Exchange of views and possible opinion of the Committee on a draft Commission amending Decision 2004/438/EC concerning raw milk from Chile (SANCO/10137/2006) (HLB)

Following a Commission inspection mission to Chile the competent veterinary services confirmed that Chile should not be listed for import into the Community of raw milk for sanitary and technical reasons. In addition it is opportune to update certain footnotes in regard to the Former Yugoslav Republic of Macedonia.

Vote: Unanimously in favour

12. Exchange of views and possible opinion of the Committee on a draft Commission Regulation amending Regulation (EC) No 999/2001 of the European Parliament and of the Council as regards the United Kingdom and repealing Council Decision 98/256/EC and Commission Decisions 98/351/EC and 1999/514/EC (Right of scrutiny of the European Parliament) (Document SANCO/3991/2005 Rev.4) (KVD) *(See point 12 of the 24 January and point 4 of the 22 February 2006 SCFCAH's)*

The purpose of this proposal is to allow the lifting of the ban on UK exports of live cattle, beef and beef products, which had been put in place in March 1996 due to the high BSE incidence at the time. Some derogation was granted under the Date Based Export Scheme. From 7 November 2005, the pre-1996 rule replaces the Over-Thirty-Months rule implying that bovine animals born before 1 August 1996 will permanently excluded form the food and feed chain. Since October 2004, the UK applies the same monitoring programme as the other Member States for the bovine population born after 31 July 1996. As the UK have a BSE incidence below 200 cases per million animals and the EU Food and Veterinary Office released a satisfactory report on BSE controls, the embargo can lifted.
In order to meet the concerns of French and Spanish delegations, the UK made the following declaration on its legislation:

"In December 1997 the UK introduced a ban (Statutory Instrument No 2959 of 1997) on the sale of beef containing any bone from bovine animals aged over 6 months at slaughter and the use of such bones in any products for human consumption:
In December 1999, following an assessment of the risk to human health from the consumption of beef containing vertebral column, the rules were changed to allow fresh meat containing bones to be marketed in the UK (Statutory Instrument No 3371 of 1999). Such meat could only come from cattle aged no more than 30 months at slaughter.
The ban on the use of all vertebral column for manufactured and processed products for human consumption remains in force. However restaurants are permitted to sell cooked beef including bones, such as T-bone steaks, in meals. Bones could also be used in gravy or sauces sold to the final consumers at the premises where the production takes place, such as restaurants."

Moreover, the UK will be able to resume trade in live animals born after 1 August 1996, and in meat and meat products produced after 15 June 2005 (linked to the date of the favourable FVO inspection). Its legislation on beef-on-the-bone will have to be adjusted to reduce the current age limit of 30 months for the removal of the vertebral column to 24 months, which is in line with the rule applied by all other Member States.

Furthermore the Commission made the following declaration:

"The Commission declares that following the adoption and coming into force of the Commission Regulation lifting the UK trade restriction, the Food and Veterinary Office of the European Commission will conduct a mission to the United Kingdom to assess the compliance with BSE legislation and in particular to assess the restrictions laid down in the annex of this Regulation before the end of 2006."

The Commission thanked the UK for its huge work and effort in tackling the issue of BSE and all the Member States for their cooperation.

Vote: Unanimously in favour

13. **Exchange of views and possible opinion of the Committee amending Commission Decision 2004/407/EC as regards import from certain third countries of photographic gelatine (Legal basis: Regulation (EC) No 1774/2002) (Right of scrutiny of the European Parliament) (MM) (SANCO/10226/2006/Rev.2)**

The purpose of this draft Decision is to extend the scope of Decision 2004/407/EC enabling import of photo gelatine from USA into Belgium and Luxembourg for the production of polyester film for X-ray purposes in the European Union. The Commission's representative highlighted some changes that have been made following comments made by the Legal Service.

Sweden made the following declaration regarding agenda point 13 on photographic gelatine:

"Sweden voted against the Decision 2004/407/EC and abstains from voting as regard the amending Decision, mainly since the Decision contradicts the principles established by TSE and ABP Regulation (999/2000/EC and 1774/2003/EC)."

Vote: Qualified majority in favour. Netherlands represented by Hungary. Austria absent but represented by Germany. Sweden abstained

14. Exchange of views on a draft Decision amending Decisions 2005/710/EC, 2005/733/EC and 2005/758/EC as regards an extension of their period of application (SANCO/10217/2006) (LK)

The discussion was postponed to the next Committee meeting

15. Exchange of views on a draft working document for a Commission Regulation laying down measures with regard to imports of products of animal origin by travellers for personal consumption (SANCO/10195/2006/Rev. 4) (AEF/HN)

A draft working document was discussed in detail at the last meeting and the Commission collected the views of the Member States. Although Member States acknowledged that the objective was sensible, it appears that several Member States' customs authorities will have difficulties to make this system operational. The Commission highlighted that the proposal mainly aims at raising passenger's awareness and should be seen as a tool for enforcement officials. In addition, although there maybe resource implications for customs authorities, these must been seen in the context of the potential risk, and subsequent costs, of a major animal disease epidemic within the EU; delegates were reminded that the direct costs of the 2001 FMD crisis were estimated to be 12 Billion Euros.
Although some Member States' reported that they were already cooperating with the airlines as far as the distribution of information sheets is concerned, the Commission urged all delegates to ensure leaflets were distributed to all passengers, and that the posters advertising the rules on personal imports were clearly displayed at all EU entry points.
The Commission will take on board the comments from the Member States and stressed once more that it is in close contact with DG TAXUD. Member States were requested to send further comments in writing.

16. Exchange of views on a draft Commission Decision concerning measures to prevent the spread of highly pathogenic avian influenza caused by influenza A virus of subtype H5N1 to susceptible birds kept in zoos in the Member States and repealing Decision 2005/744/EC (SANCO/10168/2005/rev.2) (MP)

The Commission's representative explained that it is appropriate to lay down at Community level detailed rules concerning preventive vaccination of birds kept in zoos that the Member States should follow, if they consider it appropriate to vaccine such birds. Furthermore it is appropriate to lay down at Community level detailed rules on bio-security measures for the prevention of highly pathogenic avian influenza caused by influenza A virus of subtype H5N1 in birds kept in zoos in the Member State to protect wild fauna and to conserve bio-diversity. The Commission asked the Member States to send their comments and suggested that the date for submission of the amended plans can be changed to July.

17. Exchange of views on a draft Commission Decision concerning certain transitional measures in relation to highly pathogenic avian influenza in poultry or other captive birds in the Community (SANCO/10194/2006/rev.1) (MP)

The Commission explained that pending transposition of Directive 2005/94/EC by the Member States, it is appropriate to lay down transitional provisions on measures to be applied on holdings where outbreaks of avian influenza caused by HPAI viruses are suspected or confirmed in poultry or other captive birds. The Commission requested the Member States to send their comments on this transitional measure.

At the end of the meeting, the Committee made the following Statement:

"Statement of the Standing Committee on the Food Chain and Animal Health
8 March 2006

Current information on the susceptibility of pigeons to avian influenza (especially H5N1) suggests that this species is relatively resistant to the infection. However it appears that if pigeons do contract infection, the species is capable of shedding infective virus. Information from Thailand, Russia and Turkey suggests that wild pigeons can be infected and die from the infection and may contribute to the spread of the disease.
In the light of the present situation with almost daily reports on new detections of H5N1 in wild birds in EU Member States the following is recommended with regard to racing pigeons:

- Racing pigeons may be allowed to fly in the vicinity of their quarters for the purpose of exercising and training, provided that the birds are fed and watered indoors.
- The competent authorities of a Member State may, based on a risk assessment, allow pigeon races on their territory, taking into account the epidemiological situation and the location of the high risk areas defined in the framework of Decision 2005/734/EC.
- The competent authorities of the Member States may based on a risk assessment agree to authorise a pigeon race crossing their borders when they have given each other mutual assurance that races do not start, cross or end in high risk areas of their territories as defined by Decision 2006/734/EC.

However, no pigeon racing should take place in or through the areas under restriction established in accordance with Decisions 2006/115/EC and 2006/135/EC, and if practically possible all birds, including pigeons should be kept indoors in such areas."

Miscellaneous

1) BSE suspicion in France and Cyprus

Further to the BSE suspicion in 2 sheep in France and 1 sheep in Cyprus, the Commission intends to increase the number of tests on healthy animals and fallen stock during a 6 months period. Samples have been sent to the Community Reference Laboratories and results should come out shortly. The European Food Safety Authority is also expected to release its views.
The Commission distributed to the Member States a table of statistical figures from Eurostat on the monitoring of healthy slaughtered sheep in 2004 in the EU. The MS were requested to check the accuracy of these data.

N.B. The proposals on which the Committee expressed an opinion are subject to a defined procedure in relation to the formal adoption by the Commission.
Mission reports are available on the Internet at the following address: http://europa.eu.int/comm/food/fs/inspections/vi/reports/index_en.html

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