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▣ [Avian influenza A/H7N3 in poultry in Norfolk](#)

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▣ [Avian influenza A/H7N3 in poultry in Norfolk](#)

On 26 April 2006, the Department for the Environment, Food and Rural Affairs (DEFRA) reported an outbreak of A/H7 avian influenza (AI) in a 35,000-bird housed poultry flock in the county of Norfolk, eastern England. As a precautionary measure, all birds on the premises were culled, and restrictions were placed on the farm (1). The virus was subsequently confirmed as H7N3 and initial indications are that it is a low pathogenic virus [2]. Both low and high pathogenicity H7N3 avian influenza viruses acquired from birds have infected humans in Europe and elsewhere in the past. For people who handled infected birds, this has tended to result in mild illness (usually conjunctivitis with flu-like symptoms) or asymptomatic infection [3,4].

On 27 April 2006, a poultry worker from the farm presented with conjunctivitis [5]. Conjunctival and combined nose/throat swabs were taken. Infection with influenza A/H7N3 was confirmed and the patient was placed on a treatment course of oseltamivir.

The local Health Protection Unit and colleagues are carrying out serological surveillance on samples taken from other poultry workers who had contact with the birds on the farm. Additionally, conjunctival and combined nose/throat swabs for PCR testing are being taken from any additional workers who present with influenza-like illness (ILI) or conjunctivitis. Oseltamivir and seasonal influenza vaccine are being offered to all those who have had contact with birds on the farm. Over 100 people have so far been given oseltamivir, and serological specimens have been obtained from the majority of these individuals.

On 29 April 2006, three workers from a processing plant serving the original premises reported eye irritation. A worker involved in the initial response at the farm and already taking prophylactic oseltamivir also reported feverishness and respiratory symptoms on 29 April 2006. On 1 May 2006, a culler taking prophylactic oseltamivir, presented with itchy eyes and a sore throat. All five of these individuals tested negative for influenza A by PCR.

On 29 April 2006, two free-range poultry farms about 1.5 km from the original premises were tested by DEFRA (6). Results showed serological evidence of previous infection with H7N3 in the flocks, which were subsequently culled. It is not clear which of the three units was first infected or how disease may have passed between them. At present no further premises appear to be involved.

In 2003, a different high pathogenicity avian influenza virus, A/H7N7 affected chickens in the Netherlands, Belgium, and Germany (7,8,9). The virus was responsible for the deaths of many chickens, and also infected some people working with the chickens. A small number of these patients then passed the infection onto close family members, although no further person-to-person spread was reported. The Dutch patients experienced only mild to moderate symptoms (conjunctivitis and influenza-like illness), with the exception of one patient, a veterinarian with some degree of reduced immunity, died as a result of his infection (10). Such a severe illness, however, has never been reported with an low pathogenicity avian influenza or with A/H7N3 (high or low pathogenicity avian influenza). Similarly, person-to-person spread of low pathogenicity avian influenza has never been reported.

This is not the first reported case of conjunctivitis due to an avian influenza in the UK. In the 1990s conjunctivitis attributed to an low pathogenicity avian influenza (H7N7) from the waste products of domestic poultry was reported in a woman who had been cleaning a poultry shed (10).

Compared with seasonal influenza, avian influenza A/H7 does not transmit easily from human to human, so the risk to those in contact with the infected poultry worker is considered low and the risk to the general public is very low. In almost all cases of human H7 infection to date, the virus in both low and highly pathogenic forms, has only caused a mild disease, usually conjunctivitis.

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A pilot of enhanced surveillance of enteric fever in England, Wales, and Northern Ireland

A pilot for enhanced surveillance of enteric fever in England, Wales, and Northern Ireland has been launched. A standardised questionnaire to be piloted both for local purposes and for national surveillance, has been produced. Enhanced surveillance of enteric fevers will be piloted on all cases with specimen dates on or after 1 May 2006 and will run for one calendar year. The pilot has been approved by the Health Protection Agency's Local and Regional Services (LaRS) Surveillance Committee and will be administered by the Travel and Migrant Health Section at the HPA's Centre for Infections.

All cases of enteric fever should be followed up by the Health Protection Unit (HPU) or relevant Environmental Health Department depending on local arrangements; this should not change current practice. HPUs are, however, asked to use the new standardised questionnaire for each case. The enhanced surveillance pilot does not replace the statutory notification system. The questionnaire and the accompanying protocol, which includes more information about the pilot and details on how to fill out the form, are available on the HPA website at <http://www.hpa.org.uk/infections/topics_az/typhoid/Enhanced/EnhancedSurveillance.htm>. Any queries about the pilot should be directed to the Travel and Migrant Health Section at <tmhs@hpa.org.uk> or telephone 0207 327 6412/7442/7565.

In 2005, there were 445 cases of enteric fever (typhoid and paratyphoid) reported in England, Wales, and Northern Ireland, the highest number reported in ten years [1]. Up until 1993, all cases of enteric fever were followed up by CDSC*; this is no longer the case. Considered against a background of changing global epidemiology of enteric fevers, ie, increasing reports – particularly of S. Paratyphi A in parts of the world and antibiotic resistant disease globally [2], there is a need to improve epidemiological understanding of both travel associated and non-travel associated enteric fever. This will contribute to the evidence base on which pre-travel advice is given, identify particular population subgroups at risk, and inform disease control within the UK.

Stakeholders

The questionnaire was designed by a steering committee (comprised of representatives from the LaRS, the Environmental and Enteric Diseases Department [including the Laboratory of Enteric Pathogens] at Cfl, Local Authorities Coordinators of Regulatory Services, the National Travel Health Network and Centre, and the Travel and Migrant Health Section at Cfl).

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*CDSC (Communicable Disease Surveillance Centre), is now part of the HPA Centre for Infections

New web resource on infections in pregnancy

The Health Protection Agency has launched a new section of its website on infections in pregnancy, available at <http://www.hpa.org.uk/infections/topics_az/pregnancy/rashes/default.htm>. The starting point for the pages was the existing guidance on the rash illness and contact with rash illness in pregnancy published in *Communicable Disease and Public Health* in 2002 [1]

By having the information readily accessible to hospital and primary care professionals as well as to the general public, the Agency aims to promote best practice in protecting mothers and their children from the effects of infection during pregnancy.

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Respiratory

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Next update due: **2 June 2006**

Respiratory Routine Data Reports

↘ Laboratory reports of respiratory infections made to the Health Protection Agency Centre for Infections from HPA and NHS laboratories in England and Wales: weeks 14-17/06

↘ Laboratory reports of respiratory infections made to the Health Protection Agency Centre for Infections from HPA and NHS laboratories in England and Wales: weeks 14-17/06

Table 1 Reports of influenza infection made to HPA Centre for Infections, by week of report: weeks 14-17/2006

Week	Week 14	Week 15	Week 16	Week 17	Total
Week ending	09/04/06	16/04/06	23/04/06	30/04/06	
Influenza A	34	24	28	32	118
Isolation	12	4	5	6	27
DIF*	4	6	5	9	24
Four-fold rise in paired sera	–	–	–	–	–
PCR	1	3	2	–	6
Other†	17	11	16	17	61
Influenza B	11	6	7	2	26
Isolation	4	2	–	–	6
DIF*	–	1	4	–	5
Four-fold rise in paired sera	–	–	–	–	–
PCR	–	–	–	–	–
Other†	7	3	3	2	15
Influenza (untyped)	–	–	–	–	–
Isolation	–	–	–	–	–
DIF*	–	–	–	–	–
Four-fold rise in paired sera	–	–	–	–	–
PCR	–	–	–	–	–
Other†	–	–	–	–	–

*DIF = Direct Immunofluorescence.

†'Other' = 'Antibody detection – Single high titre' or 'method not specified'.

Table 2 Respiratory viral detections by any method (culture, direct immunofluorescence, PCR, four-fold rise in paired sera, single high serology titre, genomic, electron microscopy, other method, other method unknown), by week of report: weeks 14-17/2006

Week	Week 14	Week 15	Week 16	Week 17	Total
Week ending	09/04/06	16/04/06	23/04/06	30/04/06	
Adenovirus*	23	19	9	23	74
Coronavirus	–	–	–	–	–
Parainfluenza†	9	10	19	14	52
Rhinovirus	1	2	–	1	4
Respiratory syncytial virus (RSV)‡	21	17	18	10	66

*Respiratory samples only. Excludes diagnoses made by electron microscopy (EM).

†Includes parainfluenza types 1, 2, 3, 4, and untyped.

‡ Excludes diagnosis made by electron microscopy (EM).

Table 3 Respiratory viral detections by age group: weeks 14-17/2006

Age group (years)	<1 year	1-4 years	5-14 years	15-44 years	45-64 years	≥65 years	Unknown	Total
Adenovirus*	10	15	6	32	8	3	–	74
Coronavirus	–	–	–	–	–	–	–	–
Influenza A	19	13	17	20	21	27	1	118
Influenza B	2	4	4	6	4	6	–	26
Parainfluenza†	28	14	4	2	3	–	1	52
Rhinovirus	2	1	1	–	–	–	–	4
Respiratory syncytial virus (RSV)‡	44	4	–	6	4	6	2	66

*Respiratory samples only.

†includes parainfluenza types 1, 2, 3, 4, and untyped.

‡ Excludes diagnoses made by electron microscopy (EM).

Table 4 Laboratory reports of infections associated with atypical pneumonia, by week of report: weeks 14-17/2006

Week	Week 14	Week 15	Week 16	Week 17	Total
Week ending	09/04/06	16/04/06	23/04/06	30/04/06	
<i>Coxiella burnettii</i>	–	–	–	–	–
Respiratory <i>Chlamydia</i> sp*	1	–	–	3	4
<i>Mycoplasma pneumoniae</i>	23	10	5	8	46
<i>Legionella</i> sp	3	3	8	3	17

*Includes *Chlamydia psittaci*, *Chlamydia pneumoniae*, and *Chlamydia* sp detected from blood, serum, and respiratory specimens.

Table 5a Reports of legionnaires' disease cases in England and Wales, by week of report: weeks 14-17/2006

Week	Week 14	Week 15	Week 16	Week 17	
Week ending	09/04/06	16/04/06	23/04/06	30/04/06	Total
Nosocomial	–	–	–	–	–
Community	2	1	5	1	9
Travel abroad	1	2	3	2	8
Travel UK	–	–	–	–	–
Total	3	3	8	3	17
Male	3	2	5	3	13
Female	–	1	3	–	4

*Pneumonic and non-pneumonic cases.

Seventeen cases were reported with pneumonia – thirteen males aged between 39 and 84 years and three females aged between 68 and 90 years. Eight cases had community-acquired infection. Three deaths were reported. One travel case was associated with an outbreak in Malta .

Eight cases were travel associated: Spain (4), Italy (1), Kenya (1), Malta (1), UK/Germany (1).

Table 5b Reports of legionnaires' disease (pneumonic and non-pneumonic*) cases by region of report in England and Wales: weeks 14-17/2006

Region	Nosocomial	Community	Travel (Abroad)	Travel (UK)	Total
North East	–	–	–	–	–
Yorkshire & the Humber	–	1	2	–	3
East Midlands	–	–	2	–	2
East of England	–	2	1	–	3
London	–	–	1	–	1
South East	–	2	2	–	4
South West	–	1	–	–	1
West Midlands	–	1	–	–	1
North West	–	2	–	–	2
Wales	–	–	–	–	–
Total	–	9	8	–	17

*Including case who travelled both abroad and to UK.

Diary

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📅 [5 Nations Health Protection Conference](#)

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The 5 Nations Health Protection Conference will address important public health issues that have arisen since the last meeting and provide fresh perspectives on established areas of disease prevention and control. It is being held on Tuesday 23 May to Wednesday 24 May 2006 at Cardiff City Hall, Cathays Park, Cardiff, Wales.

Conference Themes include:

- Incident management (Special Session)
- Surveillance (inc. HCAI)
- Sexual Health
- GI Infection and Zoonoses
- Immunisation
- Late breakers/Hot topics

PLUS

A Debate will take place in the Debating Chamber at City Hall. Further details can be found on the conference website <http://www.5nations.com>

Or alternatively information is obtainable from Vivienne Fitch, Training and Events Unit, HPA Centre for Infections (telephone 020 8327 7569; Fax: 020 8200 7868; email: vivienne.fitch@hpa.org.uk).