

HPA Weekly National Influenza Report

Summary of UK* surveillance of influenza and other seasonal respiratory illness.

Prepared by the Influenza / Respiratory Virus Team, HPA Centre for Infections

18 October 2007 (Week 42)



*Incorporating data from the Royal College of General Practitioners (England), The National Public Health Service for Wales (NPHS), Health Protection Scotland (HPS), CDSC (Northern Ireland), the Office for National Statistics (England and Wales) and NHS Direct (HPA West Midlands).

Covered in this report:

Data with the exception of ONS: 08/10/07- 14/10/07(Weeks 41/07)

ONS and MOSA: 01/10/07-07/10/07 (Week 40/07)

Summary

During week 41/07, clinical influenza activity in England and the rest of the UK has remained low and stable with the exception of Northern Ireland which has seen an increase; countries with baseline activity thresholds are below this level. Two samples referred to the Centre for Infections' Respiratory Virus Unit (RVU) tested positive for influenza A (both H1 subtype) and one for influenza B. Seasonal influenza activity reporting by the European Influenza Surveillance Scheme (EISS) has not yet begun.

The Indonesian Ministry of Health announced a new case of human infection of H5N1 avian influenza. A 12-year-old male from Tangerang District in Banten Province developed symptoms on 30 September and is currently in hospital. The investigation team found that he had direct contact with dead chickens near his school in the days before his illness. Of the 109 cases confirmed to date in Indonesia, 87 have been fatal. The total number of confirmed human infections worldwide, since December 2003, is 331 of which 202 (61%) have died.

Clinical indices of acute respiratory illness (England, Wales, Scotland and N. Ireland)

England

Royal College of General Practitioners

<http://www.rcgp.org.uk/bru/index.asp>

The influenza-like illness episode incidence rates** were similar at 6.1 per 100 000 persons in week 40/07 and 6.5 per 100 000 in week 41/07. The rates for both weeks are well below the baseline activity threshold of 30 per 100 000 (Figure 1).

Activity was at baseline levels in all regions and highest in southern England at 7.7 per 100 000. Activity was also at baseline levels in all age groups and highest in the 15-44 age group at 9.9 per 100 000 (Figure 2).

Rates for bronchitis increased from 82.5 per 100 000 in week 40/07 to 98.6 per 100 000 in week 41/07. The episode incidence rate was highest in the 65 and over age group at 214.7 per 100 000 in week 41/07.

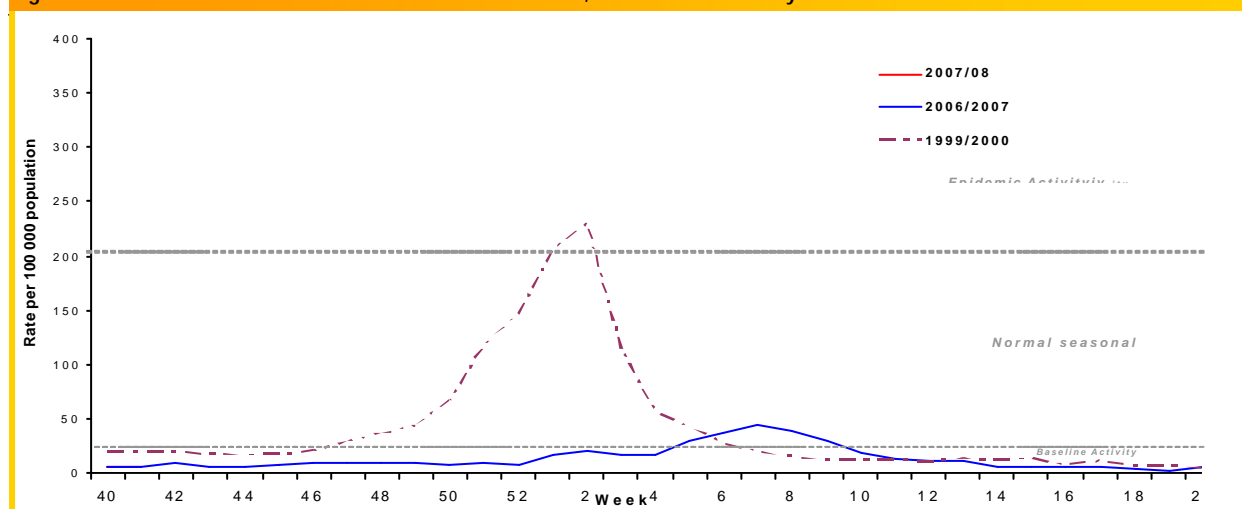
Scotland

<http://www.hps.scot.nhs.uk/>

Health Protection Scotland

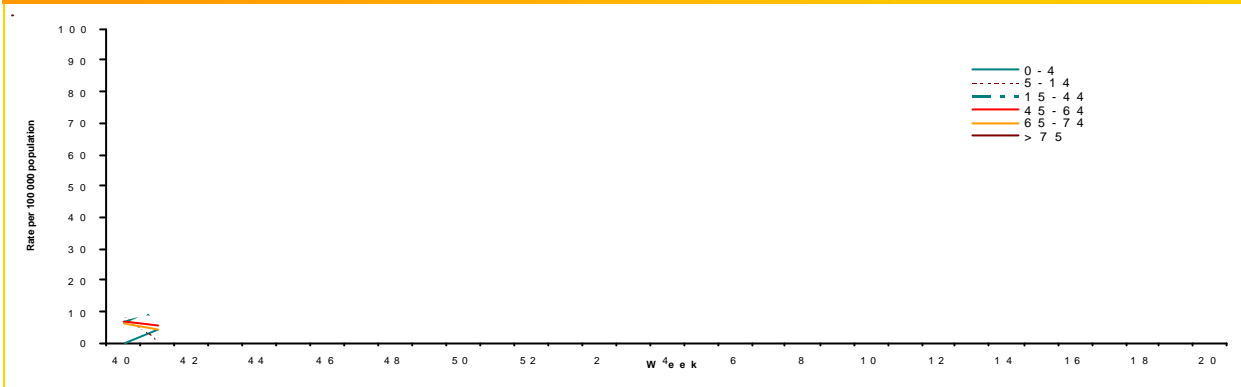
GP consultation rates for influenza-like illness decreased from 7 consultations per 100 000 in week 40/07 to 6 per 100 000 in week 41/07. These rates are well beneath the Scottish baseline threshold of 50 consultations per 100 000 (Figure 3).

Figure 1: RCGP consultation rate for influenza – like illness, 2007/08 and recent years.



**The phrase "episode incidence rates by week of occurrence" is more accurate and better reflects the definition of first or new consultations for an episode of illness, compared to "RCGP consultation rates".

Figure 2 RCGP Episode incidence rates for influenza-like illness (ILI) by age group, 2007/08



Wales

National Public Health Service

(<http://www.wales.nhs.uk/sites/home.cfm?OrgID=368>) GP Consultations for influenza remained low at 0.34 per 100 000 in week 41/07, well below the baseline threshold of 25 consultations per 100 000 (Figure 3).

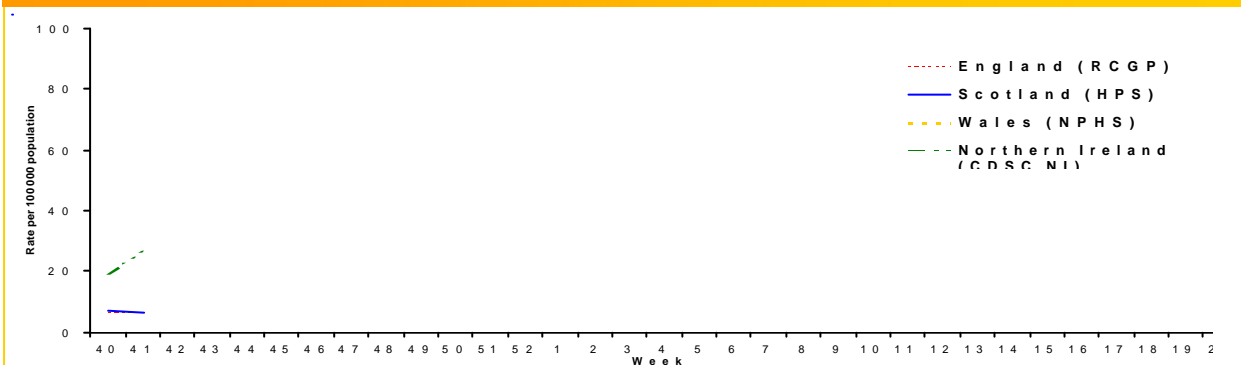
Northern Ireland

CDSC Northern Ireland

(<http://www.cdscni.org.uk/>)

The combined rate for influenza and influenza-like illness increased from the updated rate of 18.7 per 100 000 in week 40/07 to 26.89 per 100 000 in week 41/07 (Figure 3). No thresholds are available, as yet, for this surveillance scheme.

Figure 3 GP Consultation rates for influenza in the U.K



Other clinical Indices (U.K)

Outbreak Reports:

One suspected outbreak of influenza was reported from north west London during week 41/07.

The Centre for Infections would welcome any documented reports of influenza outbreak investigations.

Please e-mail respcdsc@hpa.org.uk

Medical Officers of Schools Association (MOSA)

Nineteen schools participating in the MOSA scheme reported data for weeks 40/07. The rate of influenza-like illness episodes was 0.19 per 1000 (1 episode).

QFLU

Health Protection Agency and Nottingham University Division of Primary Care.

This primary care surveillance system uses QFLU, a database of general practice derived data. In week 41/07, 474 practices reported from England, Wales, Scotland and Northern Ireland. These practices covered a population of 3.3 million. The rate of influenza-like illness remained low and similar at 6.0 per 100,000

compared to 5.8 per 100,000 in week 40/07. The highest rates were reported in London.

NHS Direct total call activity

England and Wales

(<http://www.nhsdirect.nhs.uk/>)

Experience from several years' surveillance of NHS Direct calls has shown that rises in cold/flu calls (all ages) and fever calls (5-14yrs) may provide early warning of a rise in influenza and influenza-like-illness in the community. The NHS Direct threshold values that will be used this winter are: cold/flu calls (all ages) - 1.2% of total calls; fever calls (5-14yrs) - 9% of total calls.

The national proportion of fever calls for 5-14 yrs increased to 4.2% for week 41/07 from 3.3% in week 40/07 and the national proportion of cold-flu calls for 15-44 yrs increased to 0.4% in week 41/07 from 0.3% in week 40/07. Both are below the threshold values. The national proportions of NHS Direct cold/flu calls and fever calls (all ages) are within baseline levels.

The NHS Direct England and Wales total call rate increased from 178.4 per 100,000 persons during week 40/07 to 196.9 per 100,000 persons during week 41/07.

Mortality Data
Office for National Statistics

(<http://www.statistics.gov.uk>)

The number of deaths registered in England and Wales decreased from 8592 in week 39/07 to 8542 in week 40/07. Deaths caused by diseases of the respiratory system decreased from 956 in week 39/07 to 855 in week 40/07. Based on limited data due to the postal strike.

Laboratory indices of acute respiratory illness

RVU (Cfl) Influenza Reference Laboratory

No samples referred to the Centre for Infections Respiratory Virus Unit (RVU), tested positive for RSV during weeks 41/07.

There were two influenza A detections (both H1 subtype) during week 41/07, both of which were from hospital sources; one was in the <5 years age group and one in the 5-14 years age group. There was one influenza B detection, also from a hospital source, in the 5-14 years age group.

Please note that these data are provisional.

Table 1: 'Detections' PCR and isolation of influenza and RSV made by RVU (Cfl) Reference Laboratory. Samples from community and hospital sources, by week of report.

Influenza type (subtype)	Influenza Detections by PCR and Isolation			
	A (H1)	A (H3)	B	RSV*
Week 41/07	2	0	1	0
Cumulative to date (week 40/07 – 41/07)				
Northern England	0	0	1	0
Central England	1	0	0	0
Southern England	1	0	0	0
Wales	0	0	0	0
Scotland	0	0	0	0
Northern Ireland	0	0	0	0
Cumulative Total	2	0	1	0

* RSV detection is by PCR only

Other NHS and HPA laboratories (England and Wales)

During week 41/07, ten samples sent from northern England, 11 from central England and 15 from southern England were found to be positive for RSV. No samples tested in this time were positive for influenza A or B (Table 2).

Please note that these data are provisional.

Table 2: "Detections' (isolation, PCR, direct immunofluorescence and paired sera tests) of influenza and RSV reported to Cfl by NHS and HPA microbiology laboratories. Data for England and Wales by RCGP region, by week of report

	Detection (isolates, DIF and PCR)		
	Influenza A	Influenza B	RSV*
Week 41/07	0	0	24
Cumulative to Date (week 40/07 - 41/07)			
Northern England	0	0	10
Central England	2	0	11
Southern England	0	0	15
Wales	0	0	0
Cumulative Total	2	0	36

*Detections of RSV by isolation are not included.

Virological data from Northern Ireland

(<http://www.cdscni.org.uk/>)

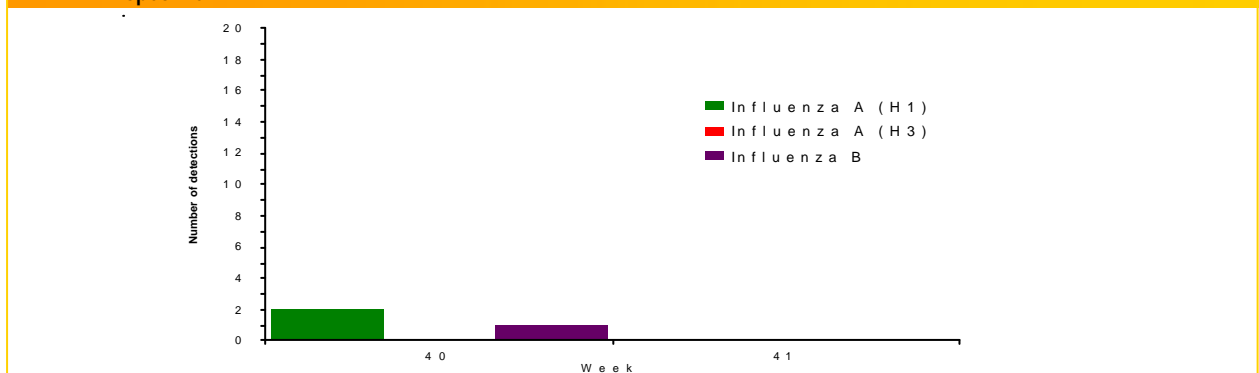
No influenza virus detections to date in Northern Ireland. Numbers of other respiratory virus detections remain low. (2 cases of para-influenza detected in hospitalized infants)

Virological data from Scotland:

(<http://www.show.scot.nhs.uk/sciehl/>)

We are currently awaiting virological data from Scotland. When we have received this data we will update this report appropriately.

Figure 4 : Total (Community and Hospital) Influenza detections (PCR and Isolation) characterised by RVU,Cfl, by week of specimen



Avian Influenza (H5N1)

On the 12 October 2007, the Indonesian Ministry of Health announced a new case of human infection of H5N1 avian influenza. A 12-year-old male from Tangerang District in Banten Province developed symptoms on 30 September and is currently in hospital. The investigation team found that he had direct contact with dead chickens near his school in the days before his illness. Of the 109 cases confirmed to date in Indonesia, 87 have been fatal. The total number of confirmed human infections worldwide, since December 2003, is 331 of which 202 (61%) have died.

Useful link:

Situation updates from WHO (human):

http://www.who.int/csr/disease/avian_influenza/en/

Situation summary from the HPA (avian and human):

http://www.hpa.org.uk/infections/topics_az/influenza/avian/situation_update.htm

Influenza activity outside the UK

Europe

European Influenza Surveillance System (EISS)

www.eiss.org

The first EISS Weekly Electronic Bulletin will be published on the 19 October and will refer to activity in week 41/07.

Ireland

Health Protection Surveillance Centre (HPSC)

<http://www.hpsc.ie/>

Ten cases of ILI were reported from sentinel GPs in Ireland during week 41/07, corresponding to an ILI consultation rate of 6.2 per 100,000 population, a slight increase from the updated rate of 5.7 per 100,000 population during week 40/07.

Six sentinel specimens were tested for influenza virus; one was positive for influenza. This is the first influenza positive specimen of the season.

Fifty one non-sentinel specimens were tested, none were positive for influenza virus and six were positive for RSV.

Canada

Public Health Agency of Canada

<http://www.phac-aspc.gc.ca/fluwatch/index.html>

During weeks 39/07 and 40/07, influenza activity remained low in Canada with 3 regions reporting sporadic activity (in British Columbia and Ontario). Only three of the 2143 (0.1%) specimens tested were positive for influenza A virus. The ILI consultation rates increased in weeks 39/07 and 40/07 compared to previous weeks (14 and 15 per 1,000 patient visits respectively) but is within the expected range. Sentinel response rates for these weeks were low (46 & 33%) but are expected to increase as the season progresses. One school outbreak of ILI was reported in week 40. Since the start of the season, one outbreak in a long term care facility was reported (in Ontario). In the current season to date, no new laboratory-confirmed influenza-associated paediatric hospitalizations were reported through the Immunization Monitoring Program Active (IMPACT) network.

The National Microbiology Laboratory (NML) has not reported any influenza strain characterizations for the 2007-2008 influenza season. However, an updated set

of figures for the 2006-07 season are now available: 276 (27%) A/New Caledonia/20/99-like, 628 (61%) A/Wisconsin/67/05-like, 13 (1%) B/Malaysia/2506/04-like and 111 (11%) B/Shanghai/361/2002-like.

United States of America

Centers for Disease Control and Prevention

<http://www.cdc.gov/flu/weekly/>

During week 40 (September 30 – October 6, 2007), a low level of influenza activity was reported in the United States. Twelve (1.5%) specimens tested by U.S. World Health Organization (WHO) and National Respiratory and Enteric Virus Surveillance System (NREVSS) collaborating laboratories were positive for influenza. The proportion of deaths attributed to pneumonia and influenza was slightly above the epidemic threshold. The proportion of outpatient visits for influenza-like illness (ILI) was below national and region-specific baseline levels. One state reported local influenza activity; eight states and Puerto Rico reported sporadic influenza activity; and 41 states and the District of Columbia reported no influenza activity.

From week 21 through week 39 (weeks ending May 26 – September 29), WHO and NREVSS laboratories tested 24,247 specimens for influenza and 511 (2.1%) were positive. Influenza positive tests were reported from eight of the nine public health surveillance regions during the summer. Of the positive results, 103 (20.2%) were influenza A (H1) viruses, 89 (17.4%) were influenza A (H3) viruses, 245 (47.9%) were influenza A viruses that were not subtyped, and 74 (14.5%) were influenza B viruses. More than half (54%) of these isolates were tested from mid-May through late July. Of the 104 influenza viruses reported during September (weeks 36-39), 38 (36.5%) were influenza A (H1) viruses, three (2.9%) were influenza A (H3) viruses, 53 (51.0%) were influenza A viruses that were not subtyped, and 10 (9.6%) were influenza B viruses. Among this subset of viruses, 37 (97.3%) of the influenza A (H1) viruses and 10 (100%) of the influenza B viruses were reported from the Pacific region.

During week 40, WHO and NREVSS laboratories reported 787 specimens tested for influenza viruses, 12 of which were positive: 11 influenza A viruses that were not subtyped (South Atlantic and West South Central regions) and one influenza B virus (South Atlantic region).

Other country reports can be obtained from the World Health Organisation:

<http://www.who.int/csr/disease/influenza/en/>

Acknowledgements

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