

# 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

23 January 2008 (Week 04)

\*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 and MOSA: 14/01/08 - 20/01/08 (Week 03/08)

ONS and MOSA: 07/01/08 - 13/01/08 (Week 02/08)

## Summary

During week 03/08, influenza activity decreased in Scotland, Northern Ireland and England and remained at about the same level in Wales. Activity has returned to baseline levels in both England and Scotland and remains at baseline levels in Wales. Of the samples referred to the Centre for Infection's Respiratory Virus Unit (RVU) during this week, 21 tested positive for influenza A(H1N1), two for A(H3N2), three for B and two for respiratory syncytial virus (RSV). Elsewhere in Europe there is currently increased influenza activity (but within expected seasonal limits) in the following, mainly western European countries: Austria, Bulgaria, France, Hungary, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Slovenia, Spain and Switzerland. All other countries report low levels of influenza activity.

The Ministry of Health of Indonesia has announced two deaths in humans from infection with H5N1 avian influenza: an 8-year-old male from Tangerang District, Banten Province (a newly identified case) died in an avian influenza (AI) referral hospital on 18 January; a 16-year-old female from West Java Province, who had previously been confirmed as a case of H5N1 infection, died on 15 January 2008. According to the World Health Organization (WHO), the total number of confirmed human infections worldwide with H5N1, since December 2003, is 351 of which 219 (62%) 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\*\* decreased from 30.5 per 100,000 persons in week 02/08 to 19.8 per 100,000 in week 03/08. The rate for week 03/08 is below the baseline activity threshold of 30 per 100 000 (Figure 1).

Rates of influenza-like illness have decreased in all regions; the highest rate is in the central region at 26.6 per 100,000. The rate is greatest in the 15-44 years and 45-64 years age groups at 23.6 and 26.2 per 100 000 respectively (Figure 2).

The rate for acute bronchitis decreased from 169.8 per 100,000 in week 02/08 to 118.0 per 100,000 in week 03/08. The episode incidence rate was highest in the 65 years and over age group at 269.0 per 100,000.

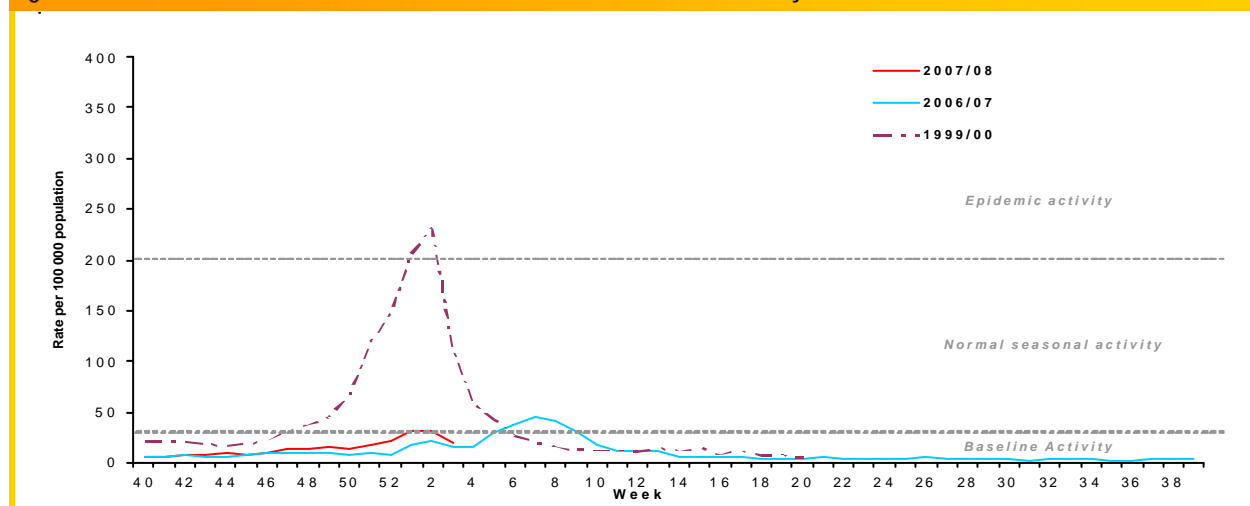
### Scotland

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

Health Protection Scotland

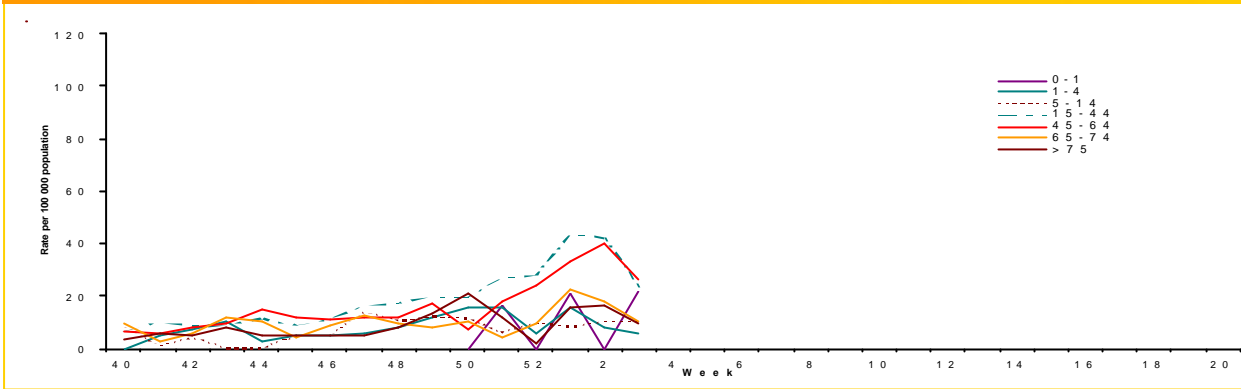
GP consultation rates for influenza-like illness decreased from 50 per 100 000 in week 02/08 to 36 per 100 000 in week 03/08. Activity has now fallen below the Scottish baseline threshold of 50 consultations per 100 000 (Figure 3).

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 consultation rates for influenza remained stable at 6.1 per 100,000 in week 02/08 and 7.8 per 100,000 in week 03/08. Both figures are below the baseline threshold of 25 consultations per 100 000 (Figure 3).

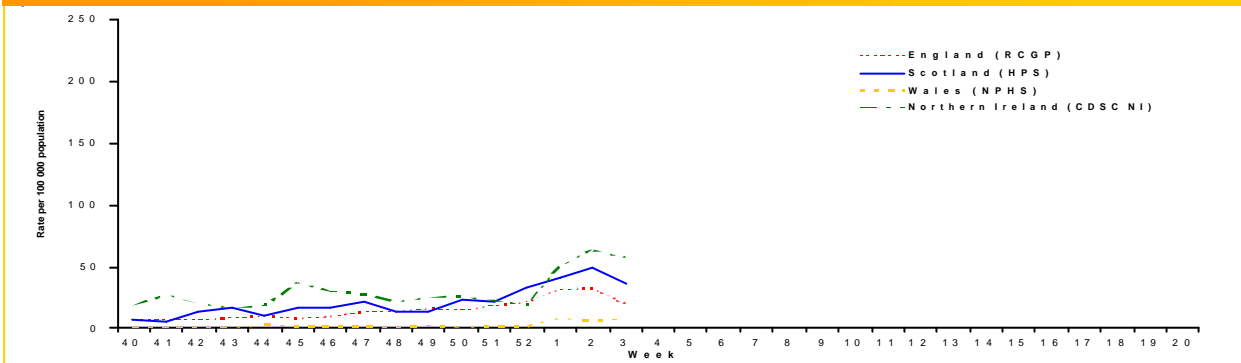
**Northern Ireland**

**CDSC Northern Ireland**

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

The combined rate for influenza and influenza-like illness decreased from the updated rate of 63.4 per 100,000 in week 02/08 to 57.3 per 100,000 in week 03/08 (Figure 3). Thresholds for this scheme are not yet available.

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



**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 02/08, approximately 3300 practices reported from England, Wales, Scotland and Northern Ireland covering a population of around 22.2 million. The rate of influenza-like illness decreased from 19.8 per 100 000 in week 02/08 to 13.9 per 100 000 in week 03/08. The highest rates were in Northern Ireland.

**NHS Direct total call activity**

**England and Wales**

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

The NHS Direct threshold values being used this winter are: cold/flu calls (all ages) - 1.2% of total calls; fever calls (5-14yrs) - 9% of total calls. Due to a technical problem there has been no data since week 51/07.

**Medical Officers of Schools Association (MOSA)**

Of the schools participating in the MOSA scheme, 10 supplied a return but no episodes were reported.

**Other reports (U.K)**

**Outbreak Reports:**

Samples from the outbreak in a residential home in Essex reported last week have been confirmed as influenza A(H3). Three other outbreaks have also been reported in Essex; one had samples positive for RSV, one for influenza B and results are pending for the third. We are currently awaiting further details on these three additional outbreaks.

The Centre for Infections would welcome any documented reports of influenza outbreak investigations. Please e-mail [respcdsc@hpa.org.uk](mailto:respcdsc@hpa.org.uk)

**Mortality Data**

**Office for National Statistics**

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

The number of deaths registered in England and Wales increased from 10,412 in week 01/08 to 11,489 in week 02/08. Deaths due to all respiratory diseases (as underlying cause) increased from 1,922 to 2,067. We currently have no death data for week 02/08.

## Laboratory indices of acute respiratory illness

### RVU (Cfl) Influenza Reference Laboratory

There were 21 positives for influenza A(H1) in week 03/08 (down from 34 in week 02/08), one A(H3), three Bs and one respiratory syncytial virus (RSV) (Table 1). Since week 40/07, 230 community samples have tested positive for influenza (64% in the 15-44 age group). There have been 134 positive hospital samples (56% in the <5 years age group) during this same period.

Of the influenza viruses characterised since week 40/07, there have been 135 A/Solomon Island/3/2006 (H1) like viruses, 36 A/Solomon Island/3/2006 (H1N1) like viruses, two A/Wisconsin/67/05 (H3N2) like viruses and eight B/Florida/4/2006-like viruses.

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 Detections by PCR and Isolation				
Influenza type ( subtype)	A (H1)	A (H3)	B	RSV*
Week 02/08	21	2	3	2
<b>Cumulative to date (week 40/07 – 02/08)</b>				
Northern England	44	1	12	9
Central England	86	2	7	8
Southern England	192	7	5	6
Wales	1	0	0	0
Scotland	0	0	1	0
Northern Ireland	0	0	0	0
<b>Cumulative Total</b>	<b>329</b>	<b>10</b>	<b>25</b>	<b>23</b>

\* RSV detection is by PCR only

### Virological data from Northern Ireland

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

Of the 45 specimens tested (33 non sentinel and 12 sentinel), there were three influenza A detections and three influenza B detections.

### Other NHS and HPA laboratories (England and Wales)

During week 03/08, 42 samples were positive for influenza A and nine for influenza B. The number of RSV detections decreased from 325 in week 02/08 to 170 in week 03/08 (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 03/08	42	9	170
<b>Cumulative to Date (week 40/07 - 03/08)</b>			
Northern England	39	9	942
Central England	91	12	1207
Southern England	39	8	856
Wales	2	1	137
<b>Cumulative Total</b>	<b>171</b>	<b>30</b>	<b>3142</b>

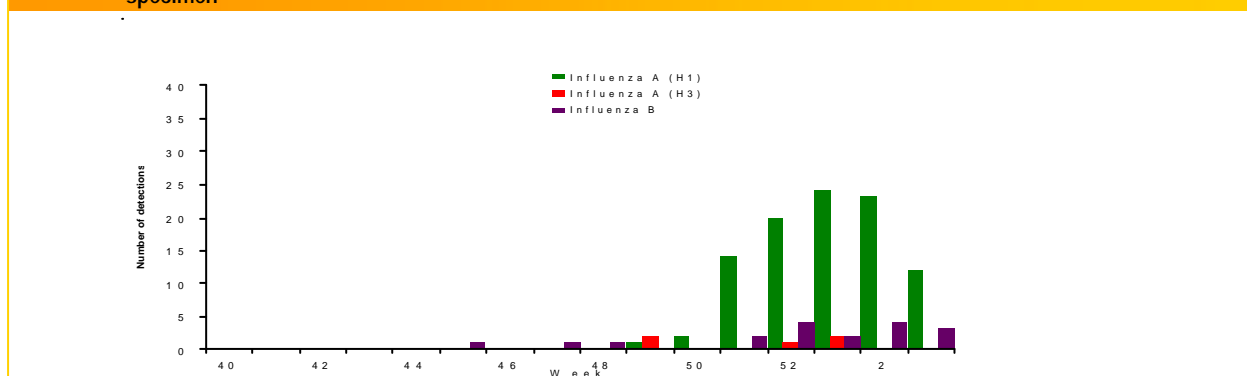
\*Detections of RSV by isolation are not included.

### Virological data from Scotland:

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

There is currently no virological data to report from Scotland. This report will be updated once the data is available.

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



## Avian Influenza (H5N1)

The Ministry of Health of Indonesia has announced two deaths of human infection of H5N1 avian influenza:

An 8-year-old male from Tangerang District, Banten Province developed symptoms on 7 January 2008, was hospitalized on 16 January and died in an AI referral hospital on 18 January. Investigations into the source of his infection are ongoing, however initial reports indicate the case lived in close proximity to a chicken slaughter house.

A previously confirmed case of H5N1 infection has died. The 16-year-old female from West Java Province died on 15 January 2008.

Of the 119 cases confirmed to date in Indonesia, 97 have been fatal.

According to the World Health Organization (WHO), the total number of confirmed human infections worldwide with H5N1, since December 2003, is 351 of which 219 (62%) have died.

### Useful link:

Situation updates from WHO (human):

[http://www.who.int/csr/disease/avian\\_influenza/en/](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](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](http://www.eiss.org)

During week 02/08 there was increased influenza activity (but within expected seasonal limits) in the following, mainly western, European countries: Austria, Bulgaria, France, Hungary, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Slovenia, Spain and Switzerland. The total number of positive specimens has increased from around 200 per week in week 50/07 to 714 positive specimens in week 02/08. In the rest of Europe low levels of influenza activity were reported.

The total number of respiratory specimens collected by sentinel physicians in week 02/08 was 1196, of which 399 (33%) were influenza virus positive; 191 (48%) type A not subtyped, 121 (31%) type A subtype H1 [of which 46 were A(H1N1)], one type A subtype H3 and 85 (21%) type B. In addition, 315 influenza virus detections were reported from non-sentinel sources (e.g. specimens collected for diagnostic purposes in hospitals), of which 193 (61%) were type A not subtyped, 73 (23%) type A subtype H1 [of which 14 were A(H1N1)] and 49 (16%) type B.

Of the total virus detections since week 40/2007 (N=2379), 82% were influenza A of which about 99% were of the H1 subtype.

### Ireland

#### Health Protection Surveillance Centre (HPSC)

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

During week 03/08, 77 ILI cases were reported from sentinel GPs, corresponding to an ILI consultation rate of 49.4 per 100,000 population, a slight increase from 46 per 100,000 during week 02/08.

Fourteen sentinel specimens were tested during week 03/08; two were positive for influenza A and one was positive for influenza B. Seventy-one non-sentinel specimens were tested during week 03/08; one was positive for influenza A and 11 were positive for RSV. To date this season, 58 sentinel and non-sentinel specimens (n=1340) have tested positive for influenza: 44 A (22 A untyped, 21 A H1 and 1 A H3) and 14 B.

### Canada

#### Public Health Agency of Canada

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

During week 02/08, influenza activity levels in Canada remained fairly low overall; with most indicators having remained similar to, or decreased from the previous week. Seven influenza surveillance regions (in ON, SK, AB and BC) reported localized influenza activity, while the rest reported either no activity (n=26) or sporadic activity (n=23). The number of specimens that tested positive for influenza declined to 6.1% (260/4281). Of the influenza detections to date, 79% were influenza A and 21% were influenza B. Influenza A detections predominated in most provinces except in AB, MB, NB and NS. This week, the ILI consultation rate declined to 15 ILI consultations per 1,000 patient visits, which is below the expected range for this week. Note however that the sentinel response rate was also low at 60%. Six new influenza outbreaks were reported in week 02/08 from AB, BC and ON: five were in long term care facilities and one was in another type of facility.

The National Microbiology Laboratory (NML) has characterized 176 influenza viruses for the 2007-2008 influenza season: 119 A(H1N1), 12 A(H3N2) and 45 B viruses. All influenza A(H1N1) viruses were antigenically similar to A/Solomon Islands/3/2006. Of the 12 influenza A(H3N2) viruses characterized, five were antigenically similar to A/Wisconsin/67/2005 and seven were antigenically similar to A/Brisbane/10/2007. One of the five A/Wisconsin-like viruses had reduced titer to A/Wisconsin/67/2005 reference antiserum. Of the 45 influenza B isolates characterized, three were antigenically similar to B/Malaysia/2506/2004 and 42 were antigenically similar to B/Florida/4/2006 (belonging to the B/Yamagata lineage).

**United States of America**  
**Centers for Disease Control and Prevention**  
[\(http://www.cdc.gov/flu/weekly/\)](http://www.cdc.gov/flu/weekly/)

During week 02/08, influenza activity continued to increase in the United States but remains within expected seasonal limits. The proportion of deaths attributed to pneumonia and influenza was equal to the epidemic threshold. The proportion of outpatient visits for influenza-like illness (ILI) was above national baseline levels, and the proportion of outpatient visits for acute respiratory illness (ARI) was below national baseline levels. The East North Central, Mountain, Pacific, West North Central, and West South Central regions reported ILI above their region-specific baselines. Four states reported widespread influenza activity; 11 states reported regional influenza activity; the District of Columbia and 15 states reported local influenza activity; 19 states reported sporadic influenza activity; and one state reported no influenza activity.

During week 02/08, WHO and National Respiratory and Enteric Virus Surveillance System (NREVSS) laboratories reported 2,880 specimens tested for influenza viruses, 283 (9.8%) of which were positive, including 60 influenza A (H1) viruses, 17 influenza A (H3) viruses, 166 influenza A viruses that were not subtyped, and 40 influenza B viruses. The District of Columbia and 42 states from all nine surveillance regions have reported laboratory-confirmed influenza this season.

CDC has antigenically characterized 163 influenza viruses [67 influenza A (H1), 53 influenza A (H3), and 43 influenza B viruses] collected by U.S. laboratories since September 30, 2007.

**Other country reports can be obtained from the World Health Organisation:**  
<http://www.who.int/csr/disease/influenza/en/>

## Acknowledgements

Data for this report were collated by the Influenza/Respiratory Virus Team:

Piers Mook, Joy Field and Carol Joseph  
Respiratory Diseases Department  
HPA Centre for Infections, 61 Colindale Avenue  
London NW9 5EQ, United Kingdom  
Tel: (0)20 8327 7768; Fax: (0)20 8200 7868  
**E-mail:** [respdcsc@hpa.org.uk](mailto:respdcsc@hpa.org.uk)

Maria Zambon, Joanna Ellis, Alison Bermingham  
and Praveen Sebastianpillai  
Respiratory Virus Unit, Virus Reference Department  
HPA Centre for Infections, 61 Colindale Avenue  
London NW9 5HT, United Kingdom  
Tel: (0)20 8327 6239; Fax: (0)20 8205 8195  
E-mail: [ernvl@hpa.org.uk](mailto:ernvl@hpa.org.uk)

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