

# HPA Weekly National Influenza Report

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



15 October 2008 (Week 42)

\*Incorporating data from the Royal College of General Practitioners (RCGP) (England and Wales), The National Public Health Service for Wales (NPHS), Health Protection Scotland (HPS), Communicable Disease Surveillance Centre Northern Ireland (CDSC Northern Ireland), the Office for National Statistics (ONS) (England and Wales), Medical Officers of Schools Association (MOSA) (England) and NHS Direct (England and Wales).

## Covered in this report:

Data, except that from ONS, MOSA and non-UK sources: 29/09/08 - 12/10/08 (Weeks 40 and 41, 2008)

Data from ONS, MOSA and non-UK sources: 29/09/08 - 05/10/08 (Week 40, 2008)

## Summary

During weeks 40/08 and 41/08, influenza activity across the UK remained at low levels. Activity is still at baseline levels in England, Scotland and Wales; thresholds have not been set for Northern Ireland. Of the samples referred to the Centre for Infections' Respiratory Virus Unit (RVU) during weeks 40/08 and 41/08, one was positive for influenza A/H1 and one influenza A/H3. During week 40, two outbreaks of respiratory illness were reported, one of which was laboratory confirmed RSV infection coupled with rhinovirus. Influenza activity was at low levels throughout Europe.

The 2007/08 UK annual influenza report was published in Health Protection Report on 10 October 2008 and is available at <http://www.hpa.org.uk/hpr/archives/Infections/2008/respiratory.htm#ann0708>.

The World Health Organization (WHO) has not confirmed any new cases of human infection with A(H5N1) avian influenza since 10 September 2008; the total number of confirmed human infections worldwide with H5N1, since December 2003, is 387 of which 245 (63%) have died.

## Antiviral drug susceptibility test

Neuraminidase inhibitors (oseltamivir and zanamivir) susceptibility testing on 3 out of 4 A/H3 isolates since week 36/08 showed that all of them are sensitive.

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

### England and Wales

#### Royal College of General Practitioners

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

The overall influenza-like illness incidence rate\*\* remained low at 6.2 per 100,000 persons in week 41/08, similar with that of 6.8 per 100,000 in week 40/08. The rate remains below the baseline activity threshold of 30 per 100,000 (Figure 1).

Rates of influenza-like illness remained low in all regions in weeks 40/08 and 41/08 with the south region having the highest rate at 7.9 per 100,000 in week 41/08. The rate was highest in the 15-44 years age groups at 10.1 per 100,000 (Figure 2).

The rate for acute bronchitis increased from 78.1 per 100,000 in week 40/08 to 91.5 per 100,000 in week 41/08. The episode incidence rate was highest in the 65 and over age group at 181.1 per 100,000 in week 41/08.

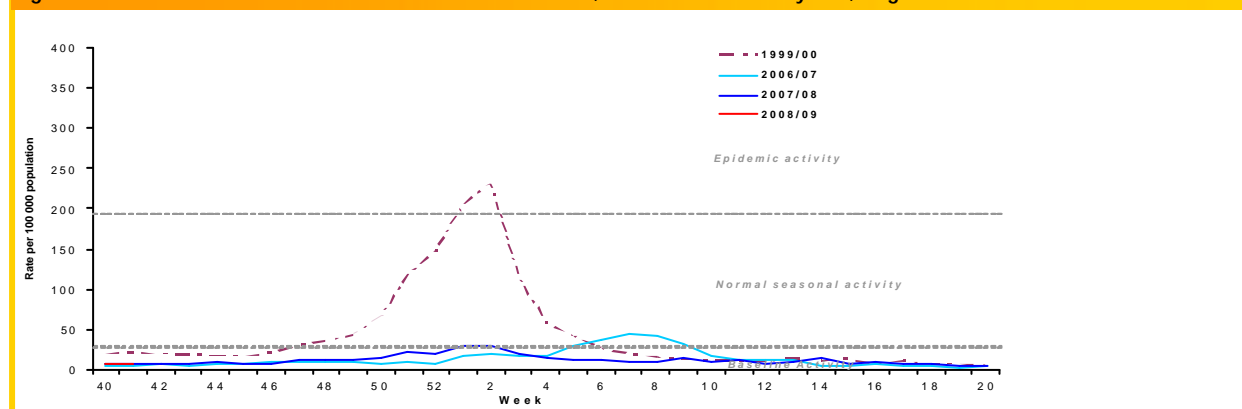
### Scotland

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

#### Health Protection Scotland

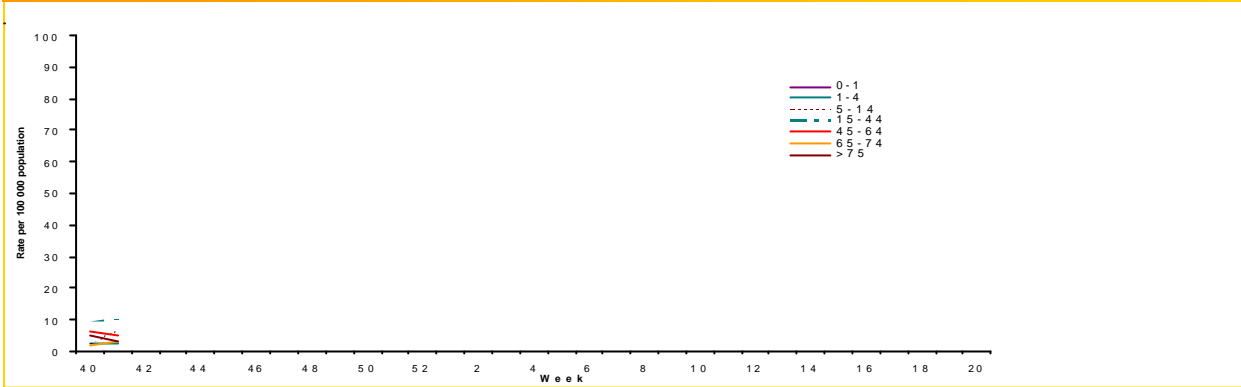
GP consultation rates for influenza-like illness decreased from 8 per 100,000 in week 40/08 to 6 per 100,000 in week 41/08. Activity remains below the Scottish baseline threshold of 50 consultations per 100,000 (Figure 3).

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



\*\* RCGP incidence rates in this report only refer to first or new episodes of infection diagnosed by a GP.

Figure 2 RCGP Episode incidence rates for influenza-like illness (ILI) by age group, England and Wales.



**Wales**

**National Public Health Service**

<http://www.wales.nhs.uk/sites/home.cfm?OrgID=368>

GP consultation rates for influenza increased from 0.8 per 100 000 in week 40/08 to 2.96 per 100,000 in week 41/08. Both figures are well below the baseline threshold of 25 consultations per 100,000 (Figure 3).

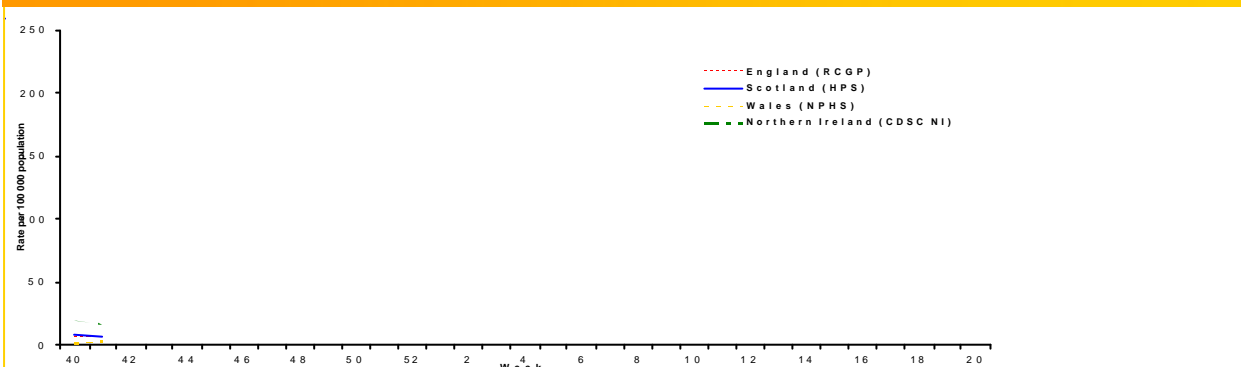
**Northern Ireland**

**CDSC Northern Ireland**

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

The combined rate for influenza and influenza-like illness decreased from 19.6 per 100,000 (updated rate) in week 40/08 to 16.2 per 100,000 in week 41/08 (Figure 3).

Figure 3 GP Consultation rates for influenza/influenza-like illness in the U.K



**QSurveillance**

**HPA and Nottingham University Division of Primary Care.**

This primary care surveillance system uses QSurveillance, a database of general practice derived data. During weeks 40/08 and 41/08, approximately 3200 practices reported from England, Wales, Scotland and Northern Ireland covering a population of around 21 million. The rate of influenza-like illness remained similar in week 41/08 as in week 40/08 (6.7 vs 6.0 per 100,000). In week 41/08, the highest rates were in London, N. Ireland and West Midlands. In week 40/08, the rate was highest in London.

**NHS Direct total call activity**

**England and Wales**

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

Cold/flu and fever calls were low and within the baseline levels during weeks 40/08 and 41/08. Fever calls were slightly increased in week 41/08 compared with those in week 40/08.

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

During week 40/08, 17 schools reported data. 11 new episodes of influenza like illness were reported with the rate of 2.7 per 1000 population. 29 new episodes of upper respiratory tract infection were reported equalling the rate of 7 per 1000 population.

**Other reports (UK)**

**Mortality Data**

**Office for National Statistics**

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

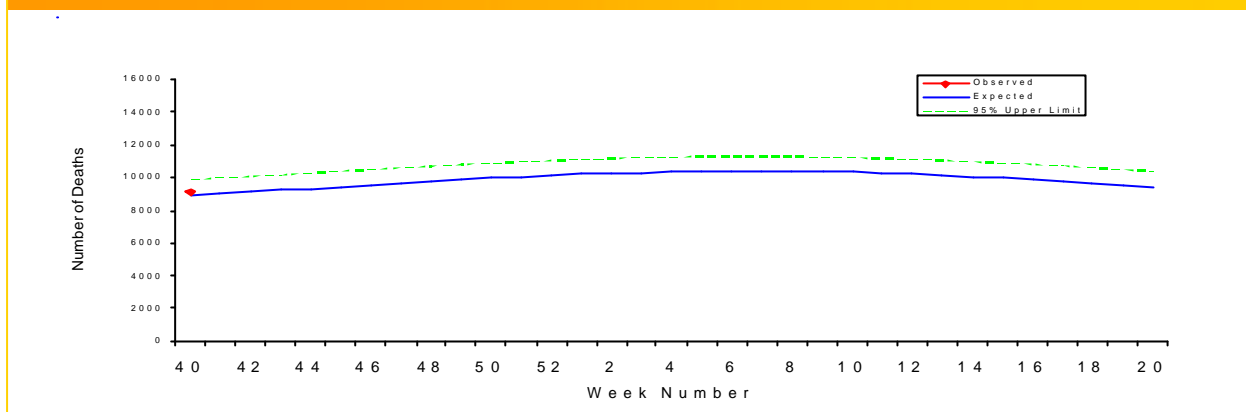
The number of deaths registered in England and Wales decreased from 9,328 in week 39/08 to 9,106 in week 40/08. Deaths due to all respiratory diseases (as underlying cause) slightly decreased from 1,015 (updated figure) to 1,001 during these same weeks. The weekly all cause registered deaths are shown in Figure 4.

**Outbreak Reports:**

Two outbreak reports of respiratory infections were received, one of which was laboratory confirmed as due to RSV infections coupled with rhinovirus infections. No specimens were taken for the other one. Both occurred in residential care homes in East England.

Cfl would welcome any reports of influenza outbreak investigations (e-mail [respcdsc@hpa.org.uk](mailto:respcdsc@hpa.org.uk))

Figure 4 : Weekly all cause registered deaths in England and Wales



## Laboratory indices of acute respiratory illness

### Respiratory Virus Unit (RVU) Influenza Reference Laboratory, Cfl

41 community specimens and 3 hospital specimens were tested during weeks 40/08 and 41/08. Two specimens tested positive for influenza A viruses in week 41/08 (Table 1), and they were further characterised as one being A/H1 and the other A/H3 (Figure 5).

Neuraminidase inhibitor susceptibility testing on 3 out of 4 A/H3 isolates since week 36/08 showed that all of them are sensitive. Three influenza B isolates have been received, but testing for these is in still progress.

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 40/08                                     | 0        | 0        | 0        | 0        |
| Week 41/08                                     | 1        | 1        | 0        | 1        |
| <b>Cumulative to date (week 40/08 – 41/08)</b> |          |          |          |          |
| Northern England                               | 0        | 0        | 0        | 0        |
| Central England                                | 0        | 0        | 0        | 0        |
| Southern England                               | 1        | 1        | 0        | 1        |
| Wales  | 0        | 0        | 0        | 0        |
| Scotland                                       | 0        | 0        | 0        | 0        |
| Northern Ireland                               | 0        | 0        | 0        | 0        |
| <b>Cumulative Total</b>                        | <b>1</b> | <b>1</b> | <b>0</b> | <b>1</b> |

\* RSV detection is by PCR only

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

A small number of positives for RSV, influenza A and B were detected during weeks 40/08 and 41/08. (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

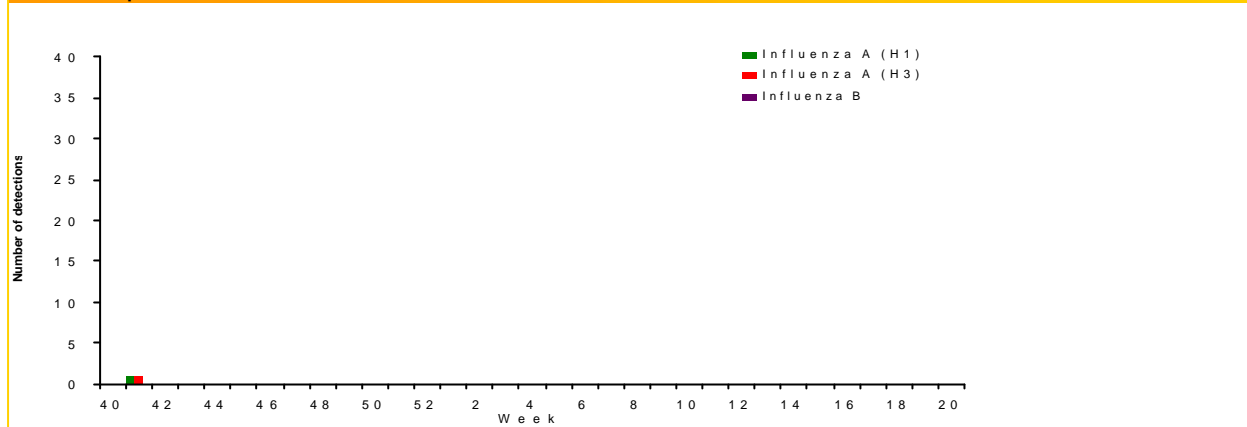
|  | Detection (isolates, DIF and PCR) |             |           |
|--|-----------------------------------|-------------|-----------|
|  | Influenza A                       | Influenza B | RSV*      |
| Week 40/08                                     | 0                                 | 0           | 23        |
| Week 41/08                                     | 2                                 | 1           | 38        |
| <b>Cumulative to Date (week 40/08 - 41/08)</b> |                                   |             |           |
| Northern England                               | 0                                 | 1           | 32        |
| Central England                                | 1                                 | 0           | 5         |
| Southern England                               | 1                                 | 0           | 23        |
| Wales  | 0                                 | 0           | 1         |
| <b>Cumulative Total</b>                        | <b>2</b>                          | <b>1</b>    | <b>61</b> |

\*Detections of RSV by isolation are not included.

### HPA Cfl Virological Surveillance of Influenza (England)

This parallel GP sentinel scheme reported two influenza A positive cases during weeks 40/08 and 41/08 (one for each week). Both patients were unvaccinated and one was in the risk group for receiving flu vaccine for the 2008/09 season.

Figure 5 : Total ( Community and Hospital) Influenza detections (PCR and Isolation) characterised by RVU,Cfl, by week of specimen



## Virological data from Northern Ireland

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

There were no laboratory confirmed respiratory infections reported during weeks 40/08 and 41/08.

## Virological data from Scotland

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

There were no laboratory confirmed respiratory infections reported during weeks 40/08 and 41/08.

## Flu Vaccination Campaign 2008/09 (England)

The weekly data on flu vaccination uptake in England have shown a steady increasing trend since the start of the campaign in September 2008 from a sample of GPs in England. The uptake rates for the 65 years and over age group increased from 7.4% in week 40/08 to 24.9% in week 41/08. The uptake rates for the under 65 years at risk group increased from 3.2% in week 40/08 to 10.7% in week 41/08. 9.4% and 9.6% general practices provided data for weeks 40/08 and 41/08, respectively.

## Avian Influenza

The WHO continues to monitor and report on new cases of human infection with A(H5N1) avian influenza when they occur.

There have been no new human cases since the last cases reported from Indonesia on 10 September 2008.

According to WHO, the total number of confirmed human infections worldwide with H5N1, since December 2003, is 387 of which 245 (63%) 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))

In week 40/08, low level of seasonal influenza activity was seen across all 21 European countries participating in the EISS.

Out of the total 105 respiratory specimens collected by sentinel physicians during week 40/08, only one specimen tested positive for influenza A in Spain.

### Ireland

#### Health Protection Surveillance Centre (HPSC)

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

Influenza activity in Ireland during week 40/08 was at low levels with 13 ILI cases reported and the ILI consultation rate was 8.9 per 100,000. Two sentinel specimens were tested with no positive results.

### Canada

#### Public Health Agency of Canada

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

During weeks 39 and 40/08, influenza activity remained low with the majority of the influenza surveillance regions reporting no activity and seven regions reported sporadic influenza activity.

During weeks 39 and 40/08, 2019 specimens were tested with three positive for influenza A and three for influenza B.

### United States of America

#### Centers for Disease Control and Prevention (CDC)

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

During week 40/08, sporadic influenza activity was reported from seven states: California, Connecticut, Florida, Hawaii, Idaho, New York and Wyoming. 41 states reported no activity and two states did not report.

During week 40/08, WHO and NREVSS laboratories reported 1123 specimens tested for influenza viruses, eight of which were positive: five influenza A and three influenza B with no subtype information available as yet.

**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:

Hongxin Zhao, Joy Field and Richard Pebody  
Respiratory and Systemic Infections 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: [respcdsc@hpa.org.uk](mailto:respcdsc@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)

If you wish to be included on our email notification list please send your address to: [respcdsc@hpa.org.uk](mailto:respcdsc@hpa.org.uk)