

# Weekly Influenza Surveillance Report



**Week 47 2004**

**Week starting Monday 15<sup>th</sup> November 2004 &  
ending Sunday 21<sup>st</sup> November 2004**

**Report produced: 25/11/2004**

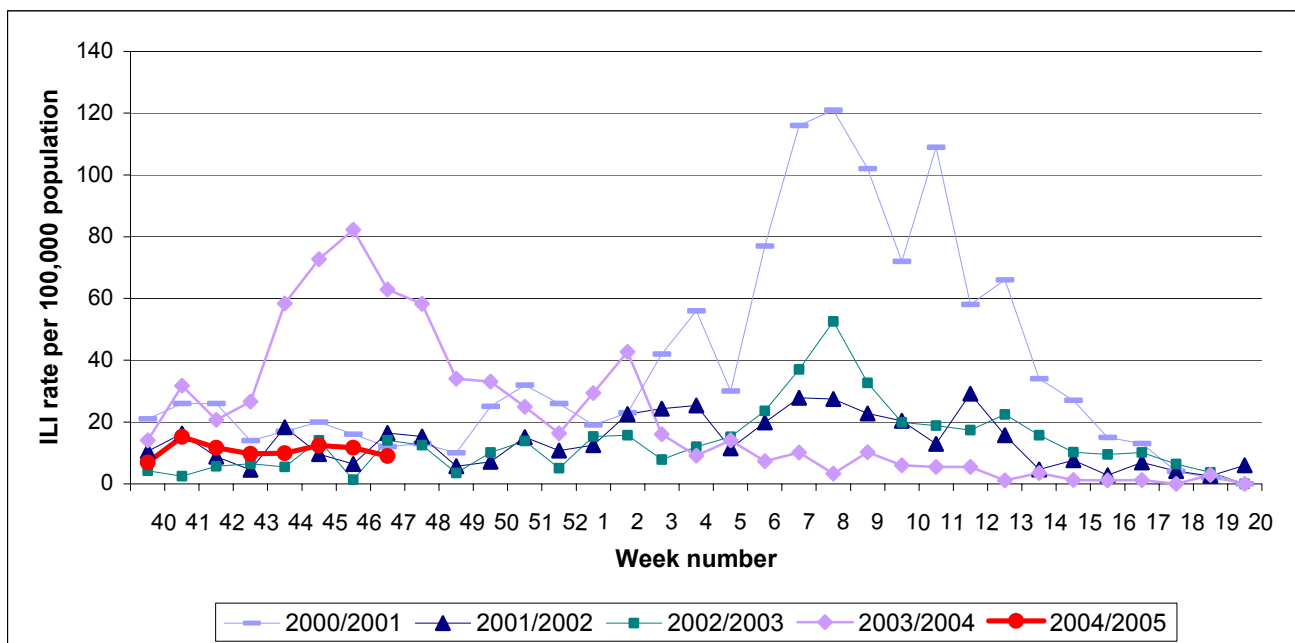
**This report is produced in collaboration with the Departments of Public Health**

## Summary

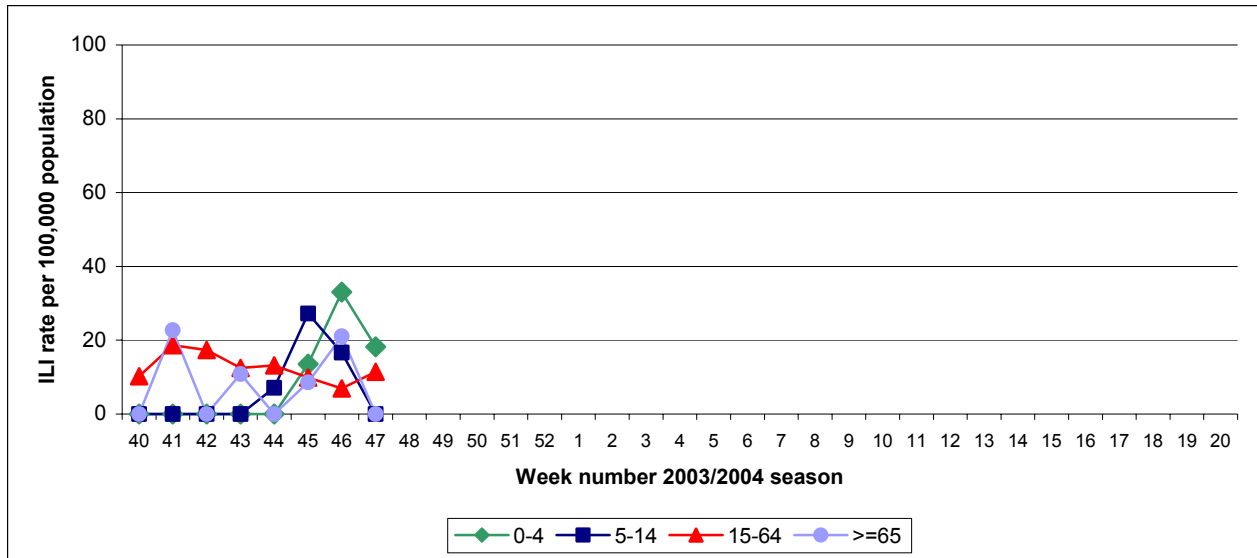
During week 47 2004, influenza activity remained at low levels in Ireland. However, the percentage of sentinel specimens testing positive for influenza has increased over the past three weeks. To date this season, seven influenza A (H1N1), one influenza A (H3N2) and five influenza A (unsubtyped) viruses have been detected. RSV levels continued to increase, with sixteen non-sentinel specimens testing positive for RSV in week 47.

## Clinical data

During week 47 (week ending 21<sup>st</sup> November 2004), seven cases of ILI were reported by sentinel general practices, corresponding to an ILI consultation rate of 9 per 100,000 population (figure 1). This is a decrease from the updated rate of 11.7 per 100,000 population for week 46. One ILI case was in the 0-4 age group and six were in the 15-64 age group (figure 2). Returns were received from 27 out of 35 sentinel GP practices, giving a population coverage of 2.0% (74.1% of the total possible reporting GP patient population). Four practices reported ILI.



**Figure 1.** GP consultation rate for ILI per 100,000 population by week, during the 2000/2001, 2001/2002, 2002/2003, 2003/2004 & 2004/2005-influenza seasons.



**Figure 2.** Age specific GP consultation rate\* for ILI per 100,000 population by week for the 2004/2005-influenza season

\* Please note the denominator used in the age specific consultation rate is from the 2002 census data; this assumes that the age distribution of the sentinel general practices is similar to the national age distribution.

### Virological data from the National Virus Reference Laboratory

During week 47 the National Virus Reference Laboratory (NVRL) received eight swabs from sentinel GPs. Two were positive for influenza A (unsubtyped) and none were positive for RSV (tables 1&3). The NVRL also tested 52 respiratory non-sentinel specimens from hospitals, during week 47. No specimens were positive for influenza and sixteen were positive for RSV (tables 2&3, figure 3).

To date this season, seven influenza A (H1N1), one influenza A (H3N2) and five influenza A (unsubtyped) viruses have been detected (table 3). Two of these were in the 0-4 age group, two were in the 5-14 age group, seven were in the 15-64 age group and two were aged over 65 years. Of the RSV detections, 39 were aged 6 months or less, 19 were aged between 7 and 12 months and 5 were aged between 1 and 4 years.

### Antigenic characterisation

One influenza A (H1N1) isolate has been antigenically characterised as A/New Caledonia/20/99-like. The current seasons vaccine contains an A/New Caledonia/20/99(H1N1)-like virus and should provide good protection against this strain. The first influenza A (H3N2) positive of the season has been sent to Mill Hill (WHO reference centre in the UK) for antigenic characterisation and results are awaited.

**Table 1:** Total number of sentinel specimens tested for influenza and positive results by type and subtype for week 47 and for the 2004/2005 season to date

Week number	Total specimens	Influenza positive specimens	% Influenza positive	Influenza A (Unsubtyped)	Influenza A (H3N2)	Influenza A (H1N1)	Influenza B	RSV
47	8	2	25.0	2	0	0	0	0
Total	56	9	16.1	3	0	6	0	2

**Table 2:** Total number non-sentinel\* respiratory specimens and positive results for week 47 and for the 2004/2005 season to date

Week number	Total specimens	Influenza positive specimens	% Influenza positive	Influenza A (Unsubtyped)	Influenza A (H3N2)	Influenza A (H1N1)	Influenza B	RSV
47	52	0	0	0	0	0	0	16
Total	266	4	1.5	2	1	1	0	61

\* Please note that non-sentinel specimens include all specimens referred to the NVRL, these specimens are mainly from hospitals and some GPs and may include more than one specimen from each case.

**Table 3:** Total number of sentinel and non-sentinel\* respiratory specimens and positive results for week 47 and the 2004/2005 season to date

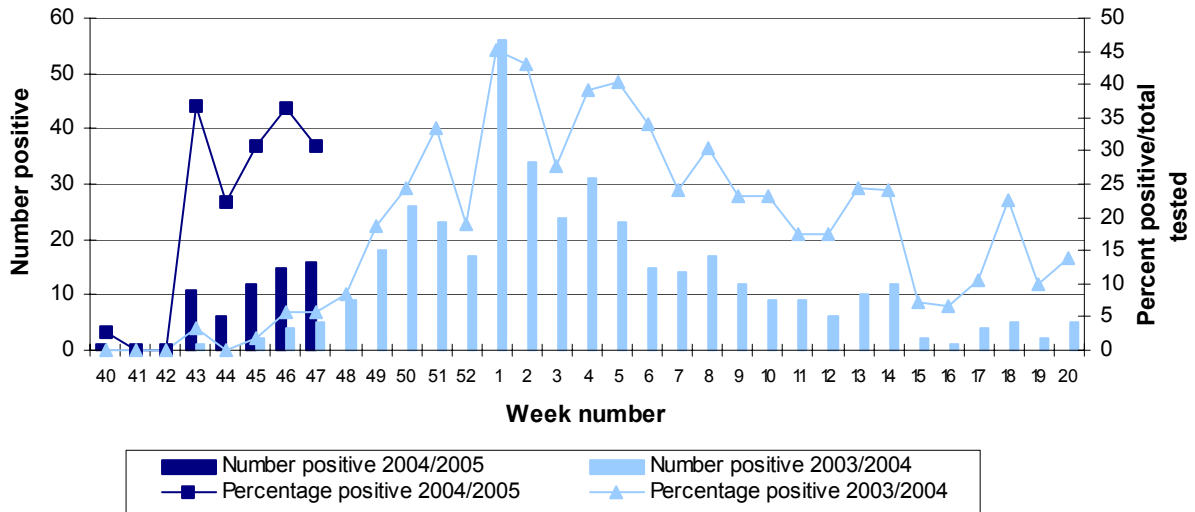
Week number	Total specimens	Influenza positive specimens	% Influenza positive	Influenza A (Unsubtyped)	Influenza A (H3N2)	Influenza A (H1N1)	Influenza B	RSV
47	60	2	3.3	2	0	0	0	16
Total	322	13	4	5	1	7	0	63

\* Please note that non-sentinel specimens include all specimens referred to the NVRL, these specimens are mainly from hospitals and some GPs and may include more than one specimen from each case.

**Table 4:** Total number of sentinel and non-sentinel\* influenza A and B positive specimens by health board for week 47 and the 2004/2005 season to date

	Week 47 2004			Season to date		
	Flu A	Flu B	Total	Flu A	Flu B	Total
ERHA	0	0	0	0	0	0
MHB	0	0	0	0	0	0
MWHB	1	0	1	3	0	3
NEHB	0	0	0	0	0	0
NWHB	0	0	0	2	0	2
SEHB	0	0	0	3	0	3
SHB	1	0	1	4	0	4
WHB	0	0	0	1	0	1
<b>Total</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>13</b>	<b>0</b>	<b>13</b>

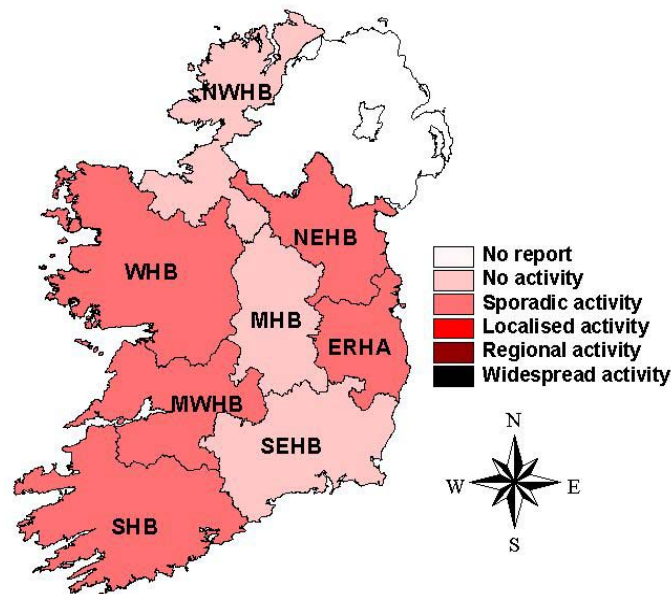
\* Please note that non-sentinel specimens include all specimens referred to the NVRL, these specimens are mainly from hospitals and some GPs and may include more than one specimen from each case.



**Figure 3.** Number and percentage of non-sentinel RSV positive specimens detected during the 2004/2005 and 2003/2004 influenza seasons.

**Influenza activity by health board/authority**

Influenza activity is reported on a weekly basis from the Departments of Public Health. Influenza activity is based on sentinel GP ILI consultation rates, laboratory confirmed cases of influenza, sentinel hospital admissions data and/or sentinel school absenteeism data. During week 46, five health boards reported sporadic activity and three health boards reported no activity.



**Figure 3:** Map of influenza activity by health board/authority during week 46 2004/5

## **Influenza activity in Northern Ireland**

Influenza activity levels decreased in Northern Ireland during week 47. Twenty-one cases of ILI and two cases of clinical influenza were reported. These figures correspond to a rate of 1.8 per 100,000 population for clinical influenza and a rate of 19.2 per 100,000 population for influenza-like illness. Returns were received from 19 out of 23 sentinel GP practices, giving a population coverage of 6.4%. Two sentinel swabs and 50 non-sentinel swabs were tested. None were positive for influenza and two were positive for RSV-B.

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

## **Influenza activity in England, Scotland and Wales**

Low levels of influenza activity were reported in the UK during week 47. Rates of ILI in England (12.8 per 100,000 population), Scotland (16 per 100,000 population) and Wales (0 per 100,000 population) were similar to those in week 46 and well within baseline levels. There were no influenza detections in the UK during week 47. Levels of RSV continued to increase, with RSV detected in sentinel and non-sentinel specimens in England (202) and in non-sentinel specimens in Scotland (13) during week 47.

<http://www.show.scot.nhs.uk/scieh/infectious/respiratory/influenzasurveillance/influenzasurveillance.htm>

[http://www.hpa.org.uk/infections/topics\\_az/influenza/flu.htm](http://www.hpa.org.uk/infections/topics_az/influenza/flu.htm)

## **Influenza activity in Europe**

Influenza activity remained low in Europe during week 47, with sporadic activity reported by Ireland, England, France and Belgium and no activity reported by all other countries. Influenza A (unsubtyped) was detected in Belgium (2), Switzerland (1) and France (1) and two specimens in Sweden tested positive for influenza A (H3). RSV levels have been increasing in Western Europe, as expected for the time of year. RSV was detected in France (58), the Czech Republic (1), the Netherlands (30), Luxembourg (2) and Romania (3) during week 47.

Seven influenza viruses have been antigenically and/or genetically characterised in Europe since week 40 2004. Four were A/Wellington/1/2004 (H3N2)-like (from England, France, Norway and Sweden), one was A/Fujian/411/2002 (H3N2)-like (from Germany) and two were A/New Caledonia/20/99 (H1N1)-like (from England and Ireland).

To date this season, influenza A (H3N2), influenza A (H1N1) and influenza B have been detected in Europe, with most of the positive detections being in Western Europe. It is not yet possible to determine which types and strains will be dominant.

<http://www.eiss.org/>

## **Influenza activity in Canada**

During week 46 (week ending 13/11/2004), localised activity was reported in British Columbia and Ontario, due to outbreaks in a hospital and long-term care facility, respectively. Elsewhere in Canada ILI rates were low. During week 47, there were eight influenza A detections and one influenza B detection. Since the start of the 2004/2005 influenza season, 22 influenza viruses have been antigenically characterised. Twenty-one were influenza A/Fujian/411/02(H3N2)-like and one was influenza B/Shanghai/361/02-like, both of which, are covered by the current vaccine.

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

### **Influenza activity in the United States**

Influenza activity remained low in the US during week 46 (week ending 20/11/2004). However, in the Mid-Atlantic region there were increases in both the proportion of patient visits to sentinel providers for ILI and the percentage of laboratory specimens testing positive for influenza. Two states reported widespread activity (Alaska and Delaware), and New York State and New York City reported regional activity. WHO and NREVSS laboratories tested 1,118 specimens for influenza. Nine were positive for influenza A (H3N2), 18 were positive for influenza A (unsubtyped) and nine were positive for influenza B. Since October 1<sup>st</sup>, nine influenza A (H3N2) and two influenza B viruses have been antigenically characterised by the CDC. All of the influenza A viruses were influenza A/Fujian/411/2002-like and both of the influenza B viruses were influenza B/Shanghai/361/02-like.

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

### **Influenza activity Worldwide**

During week 47, sporadic influenza activity was reported by China (2 A(H3) and 5 B) and the Ukraine (2 A(H3) and 1 A(H1)). Japan also reported an influenza A(H3) detection.

<http://rhone.b3e.jussieu.fr/flunet/www/>

### **Avian influenza**

There have been no new human cases of avian influenza reported by Thailand or Viet Nam this week. Since the beginning of 2004, Thailand and Viet Nam have reported 44 laboratory confirmed cases of human infection with avian influenza A (H5N1). Thirty-two of these were fatal. Although the avian influenza virus is highly pathogenic in humans, there is no evidence of efficient and sustained human-to-human transmission. For further information on the avian influenza outbreaks please consult the following websites:

NDSC: <http://www.ndsc.ie/DiseaseTopicsA-Z/AvianInfluenza/>

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

### **Northern Hemisphere influenza vaccine for the 2004/2005**

The WHO has published its recommendations on the composition of influenza vaccines for use in the 2004-2005 Northern Hemisphere influenza season.

- an A/New Caledonia/20/99(H1N1)-like virus
- an A/Fujian/411/2002(H3N2)-like virus<sup>a</sup>
- a B/Shanghai/361/2002-like virus<sup>b</sup>

<sup>a</sup> The currently used vaccine virus is A/Wyoming/3/2003. A /Kumamoto/102/2002 is also available as a vaccine virus.

<sup>b</sup> Candidate vaccine viruses include B/Shanghai/361/2002 and B/Jilin/20/2003, which is a B/Shanghai/361/2002-like virus.

<http://www.who.int/csr/disease/influenza/vaccinerecommendations1/en/>  
[www.emea.eu.int](http://www.emea.eu.int)

**Weekly influenza reports and further information on influenza are available on the NDSC website:**

<http://www.ndsc.ie/Publications/InfluenzaWeeklySurveillanceReport/>

<http://www.ndsc.ie/DiseaseTopicsA-Z/InfluenzaFlu/>