

# Weekly Influenza Surveillance Report



**Week 19 2004**

**Week starting Monday 3<sup>rd</sup> May 2004 &  
ending Sunday 9<sup>th</sup> May 2004**

**Report produced: 13/05/2004**

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

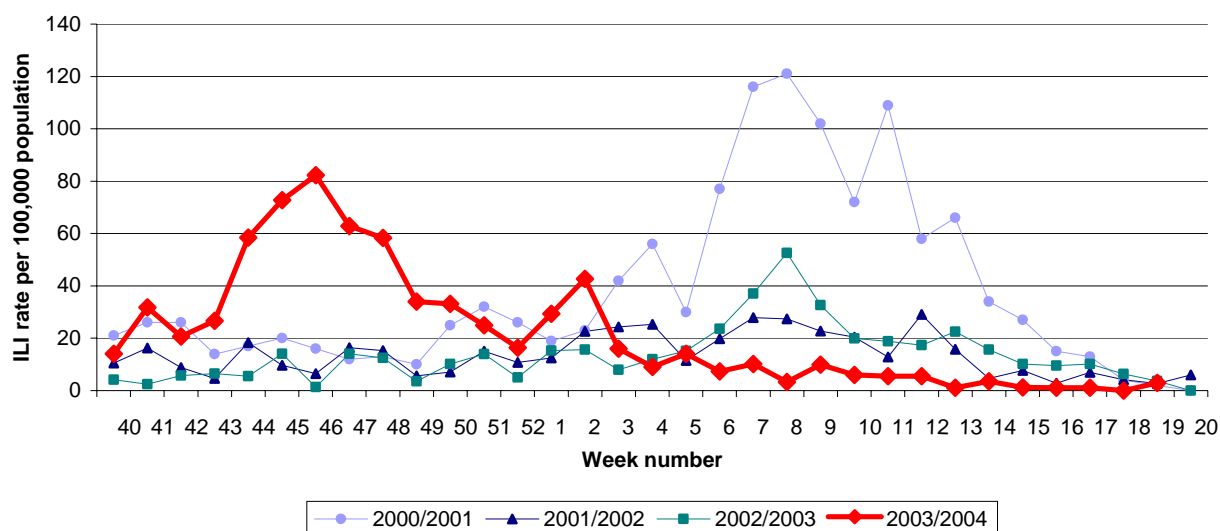
## Summary

GP consultations for influenza-like illness remain at low levels with no influenza virus positive specimens detected by the NVRL during week 19.

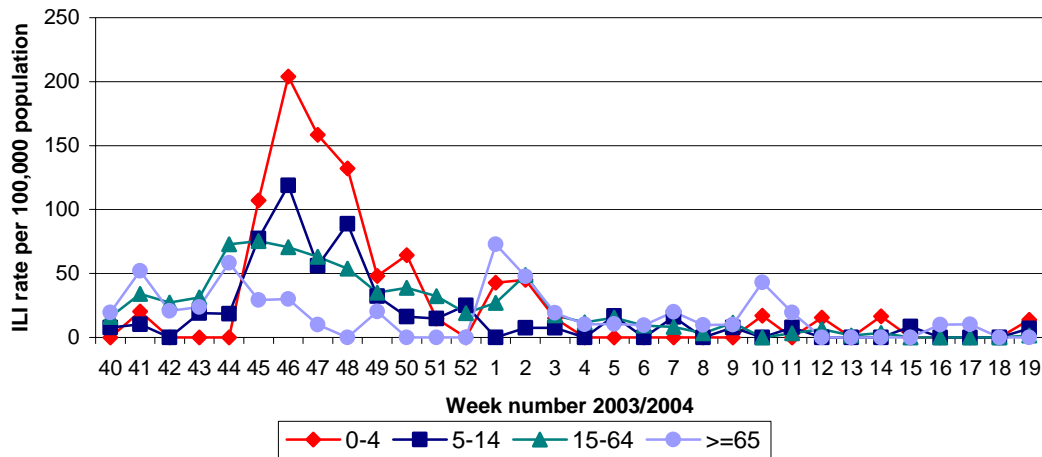
## Clinical data

During week 19 2004 (the week ending the 9<sup>th</sup> of May 2004), 3 influenza-like illness (ILI) cases were reported from sentinel general practices, corresponding to a consultation rate of 2.9 per 100,000 population, a slight increase on recent weeks (figure 1). Thirty-three of the sentinel general practices reported during week 19, with 2 reporting ILI cases.

During week 19, one ILI case was reported in the 0 to 4 year age group, corresponding to a rate of 13.7 per 100,000. One ILI case was reported in both the 5-14 and 15-64 year age groups, corresponding to rates of 6.9 and 1.4 per 100,000, respectively. No ILI cases were reported in those aged 65 years or older (figure 2). Age specific GP ILI consultation rates per 100,000 population by week for the 2003/2004-influenza season are detailed in figure 2. It is important to note that 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.



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



**Figure 2:** Age specific GP consultation rate for ILI per 100,000 population by week for the 2003/2004-influenza season.

### Virological data from the National Virus Reference Laboratory

During week 19, the National Virus Reference Laboratory (NVRL) received one swab from sentinel GPs (table 1), which was negative for influenza virus. The total number of positive influenza swabs from sentinel GPs for the 2003/2004 season to date is 149: 6 influenza A (unsubtyped), 136 influenza A (H3N2) and 7 influenza B viruses (figure 3).

The NVRL tested 20 respiratory non-sentinel specimens mainly from hospitals and some GPs during week 19, no specimens were positive for influenza A or B, 2 specimens were positive for respiratory syncytial (RSV) virus, 5 were positive for parainfluenza virus (PIV) type-3 (table 2). Between weeks 40 2003 and 19 2004, a total of 1821 respiratory non-sentinel specimens have been tested by the NVRL, 97 were positive for influenza A, 14 for influenza B, 391 RSV, 8 adenovirus, 6 PIV-1, 5 PIV-2 and 32 PIV-3. Of the 97 influenza A positive non-sentinel specimens detected this season, 64 cases were in the 0 to 4 year age group, 6 were 5-14, 23 were 15-64, one was aged 65 years or older and three were of unknown age group. The total number of RSV positive specimens for the 2003/2004 season is represented in figure 4. 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.

The total number of influenza positive specimens from all sources (sentinel and non-sentinel) this season is 260: 239 influenza A and 21 influenza B (table 3). Influenza positive specimens by health board are detailed in table 4. Seventy-five influenza positive cases this season were in the 0 to 4 year age group and 31 were in the 5-14 year age group. Detection of influenza in younger age groups is not unexpected as there has been very little influenza in circulation for the last few seasons, therefore the opportunity for development of immunity has been limited. One hundred and forty-four influenza positive specimens this season were in cases aged between 15 and 64 years of age, 6 cases were 65 years or older and 4 cases were of unknown age group.

**Table 1:** Total number of sentinel specimens tested for influenza and positive results by type and subtype for week 19 and the 2003/2004 season to date.

Week number	Total specimens	Influenza positive specimens	% Influenza positive	Influenza A (unsubtyped)	Influenza A (H3N2)	Influenza B
19	1	0	0.0	0	0	0
Total	350	149	42.6	6	136	7

**Table 2:** Total number of non-sentinel\* respiratory specimens and positive results for week 19 and the 2003/2004 season to date.

Week number	Total specimens	Influenza positive specimens	% Influenza positive	Influenza A	Influenza B	RSV
19	20	0	0.0	0	0	2
Total	1821	111	6.1	97	14	391**

**Table 3:** Total number of sentinel and non-sentinel\* respiratory specimens and positive results for week 19 and the 2003/2004 season to date.

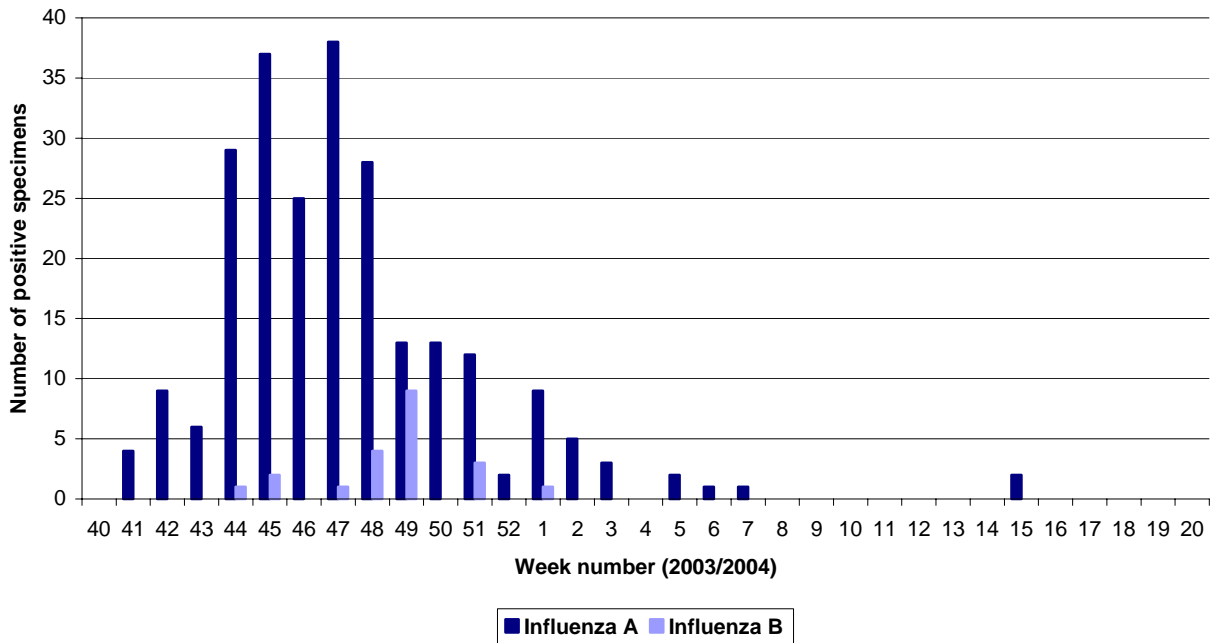
Week number	Total specimens	Influenza positive specimens	% Influenza positive	Influenza A	Influenza B	RSV
19	21	0	0.0	0	0	2
Total	2171	260	12.0	239	21	391**

**Table 4:** Total number of sentinel & non-sentinel\* influenza A and B positive specimens by health board for week 19 2004 and the 2003/2004 season to date

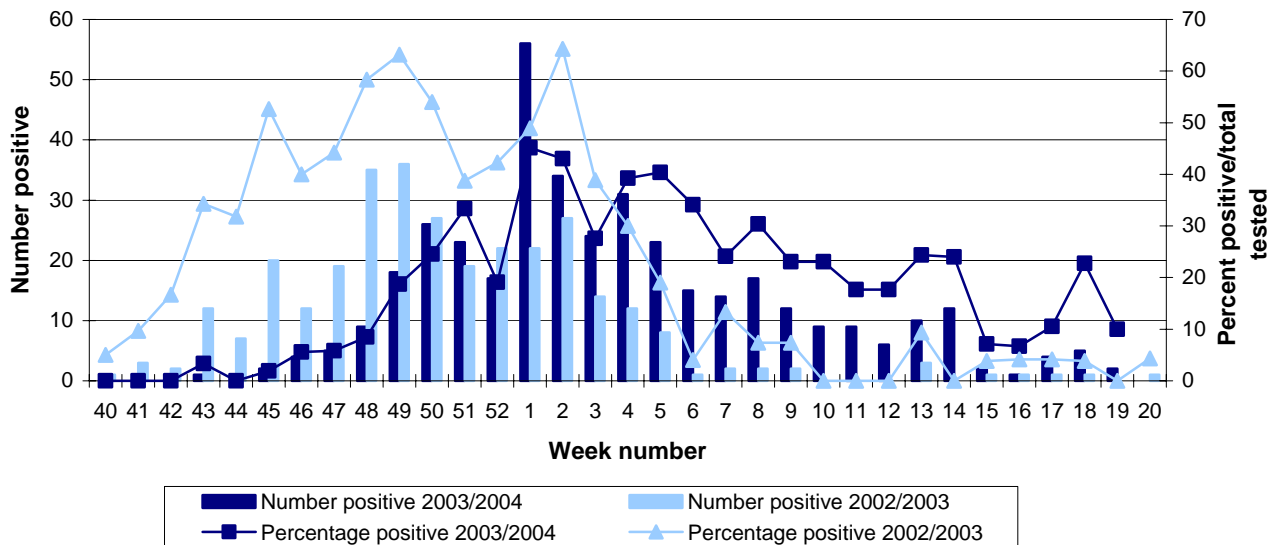
	Week 19 2004			Season to date		
	Flu A	Flu B	Total	Flu A	Flu B	Total
ERHA	0	0	0	117	9	126
MHB	0	0	0	9	2	11
MWHB	0	0	0	22	1	23
NEHB	0	0	0	35	3	38
NWHB	0	0	0	16	0	16
SEHB	0	0	0	20	3	23
SHB	0	0	0	11	0	11
WHB	0	0	0	9	3	12
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>239</b>	<b>21</b>	<b>260</b>

\*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.

\*\*Data for week 18 was updated: 5 RSV positive specimens were detected (not 4 as previously reported)



**Figure 3:** Number of positive influenza A and B sentinel and non-sentinel specimens tested by the NVRL by week number for the 2003/2004 season



**Figure 4:** Number and percentage of non-sentinel RSV positive specimens detected during the 2003/2004 and 2002/2003 influenza seasons.

**Antigenic characterisation**

To date this season, 8 influenza A (H3N2) samples were sequenced at the NVRL and phylogenetic analysis was carried out at Mill Hill laboratories. All 8 samples were characterized as A/Fujian/411/2002-like strains. This year some antigenic drift has been detected in the A (H3N2) strains circulating in Europe, America, Australia and New Zealand. The A/Fujian-like strains are related to the A/Panama-like strain included in the current 2003/2004 vaccine and antibodies induced against this vaccine

strain cross-react with A/Fujian-like strains, but generally to a reduced level. The current vaccine should give good protection against the virus strains in the vaccine, and it is also likely to give significant protection against the A/Fujian strain. The current vaccine is the best protection for those aged 65 years and over and in at risk groups.

#### **School outbreak reports & sentinel school absenteeism data**

To date this season, a total of 4 school outbreaks associated with ILI have been reported to NDSC. No increased absenteeism associated with ILI was reported to NDSC for weeks 18 or 19.

#### **Sentinel hospital admissions data**

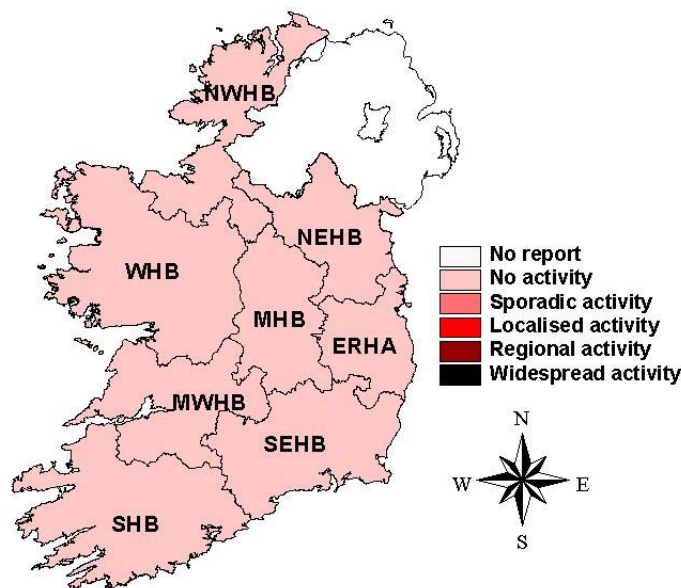
There was a slight increase in respiratory admissions from a sentinel hospital in the SEHB during week 18, compared to recent weeks.

#### **Mortality data**

To date this season, two influenza-associated deaths in 0-4 year olds have been reported to NDSC, one in week 47 and one in week 48.

#### **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, and/or sentinel hospital admissions data, and/or sentinel school absenteeism data. During week 18, all health boards reported no influenza activity (fig. 5).



**Figure 5:** Map of influenza activity by health board/authority during week 18 2004.

### **Influenza activity in Northern Ireland**

Influenza activity in Northern Ireland remained at low levels during week 19. The GP combined ILI and clinical influenza consultation rate for week 19 was 4.0 per 100,000, a decrease on the updated rate of 5.9 per 100,000 for week 18. No influenza viruses have been detected in Northern Ireland since week 6.

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

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

During week 19, both clinical and virological indicators of influenza and other respiratory virus activity are currently low in England, Scotland and Wales. GP consultations for ILI in England, Scotland and Wales remain low and within baseline activity. [http://www.hpa.org.uk/infections/topics\\_az/influenza/fluactivity0304.htm](http://www.hpa.org.uk/infections/topics_az/influenza/fluactivity0304.htm)

### **Influenza activity in Europe**

The European Influenza Surveillance Scheme (EISS) produced its last weekly report for the 2003/2004 season during the week ending the 25<sup>th</sup> April 2004. Most countries will continue to monitor influenza activity and this surveillance data can be viewed via the national/regional websites (click [here](#)). The EISS weekly electronic bulletin will resume publication in October 2004, at the beginning of the 2004/2005 influenza season. <http://www.eiss.org/> Sporadic influenza activity was reported in Norway during week 18, associated with one influenza B virus detection. Denmark, Latvia, and Poland all reported no influenza activity during week 18.

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

### **Influenza activity in Canada**

Localised influenza activity was reported in Ontario, British Columbia and Alberta in Canada during week 18, with sporadic or no activity reported in the rest of the country. Across Canada, during week 18, sentinel physicians reported 8 cases of ILI per 1000 patient visits, which is below the expected range for this time of year. Health Canada reported 7 (0.56%) A and 2 (0.16%) B influenza virus detections during week 18. <http://www.hc-sc.gc.ca/pphb-dgspssp/fluwatch/index.html>

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

Influenza activity remained low during week 17 in the US. The percentage of patient visits for ILI has remained below the national baseline since the week ending January 17<sup>th</sup>. During week 17, mortality due to pneumonia and influenza remained below the epidemic threshold. Seven states, New York City and Puerto Rico reported sporadic activity; 43 states and the District of Columbia reported no influenza activity. WHO and NREVSS laboratories reported 311 specimens tested for influenza viruses, 2 (0.6%) of which were positive; both were influenza B viruses in week 17.

<http://www.cdc.gov/ncidod/diseases/flu/fluvirus.htm>

### **Influenza activity Worldwide**

During week 18, sporadic influenza activity was reported in Argentina (14 A H3 & 3 A untyped), Brazil (2 A untyped) and China (132 A H3, 3 A untyped & 4 B). A localised outbreak was reported in Chile associated with 62 A (untyped) and 3 B influenza virus detections. Two influenza A (untyped) virus detections were reported from New Caledonia. <http://rhone.b3e.jussieu.fr/flunet/www/>

## **Avian influenza**

### ***East and Southeast Asia***

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/)

### ***US***

Currently, there are detections of low pathogenic avian influenza in the eastern United States and a detection of highly pathogenic avian influenza in Texas. Each of these viruses is different from the strain of highly pathogenic avian influenza in Asia.

[http://www.aphis.usda.gov/lpa/issues/ai\\_us/ai\\_us.html](http://www.aphis.usda.gov/lpa/issues/ai_us/ai_us.html)

### ***Canada***

As of May 12<sup>th</sup>, ongoing surveillance in Canada has led to the detection of avian influenza on 40 commercial poultry farms and 10 backyard flocks in the Fraser Valley region, British Columbia (BC), all of which have now been depopulated. Two human cases of avian influenza A (H7) were reported in poultry workers. The symptoms of both cases have resolved. No additional confirmed human cases of H7 have been identified and follow-up is underway with individuals who have reported mild symptoms following possible exposure to avian influenza contaminated material.

Canada: <http://www.hc-sc.gc.ca/pphb-dgsp/fluwatch/index.html>

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/Influenza>

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