

Weekly Influenza Surveillance Report



Week 44 2004

**Week starting Monday 25th October 2004 &
ending Sunday 31st October 2004**

Report produced: 4/11/2004

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

Summary

During week 44 2004, influenza activity remained at low levels in Ireland. Two specimens tested positive for influenza A (unsubtyped). The non-sentinel influenza positive from week 43 was subtyped as A (H3N2). One sentinel and six non-sentinel respiratory specimens were positive for RSV. Increasing RSV levels were reported by a number of European countries over the past two weeks.

Clinical data

During week 44 (week ending 31st October 2004), ten ILI cases were reported by sentinel general practices, corresponding to an ILI consultation rate of 9.9 per 100,000 population (figure 1). This is similar to the updated rate of 9.7 per 100,000 population for week 43. Nine of the ILI cases were in the 15-64 age group and one was in the 5-14 age group (figure 2). Returns were received from 34 out of 35 sentinel GP practices, giving a population coverage of 2.6% (93.9% of the total possible reporting GP patient population). Seven practices reported ILI.

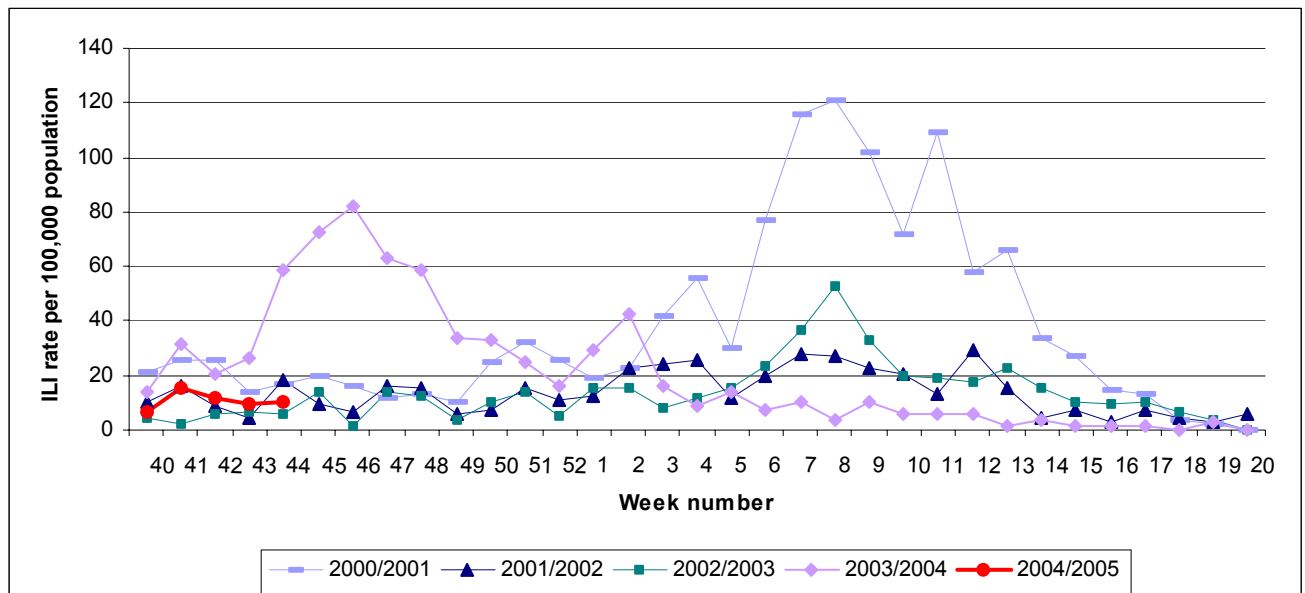


Figure 1. GP consultation rate for ILI per 100,000 population by week, during the 2000/2001, 2001/2002, 2002/2003, 2003/2004 & 2004/2005-influenza seasons.

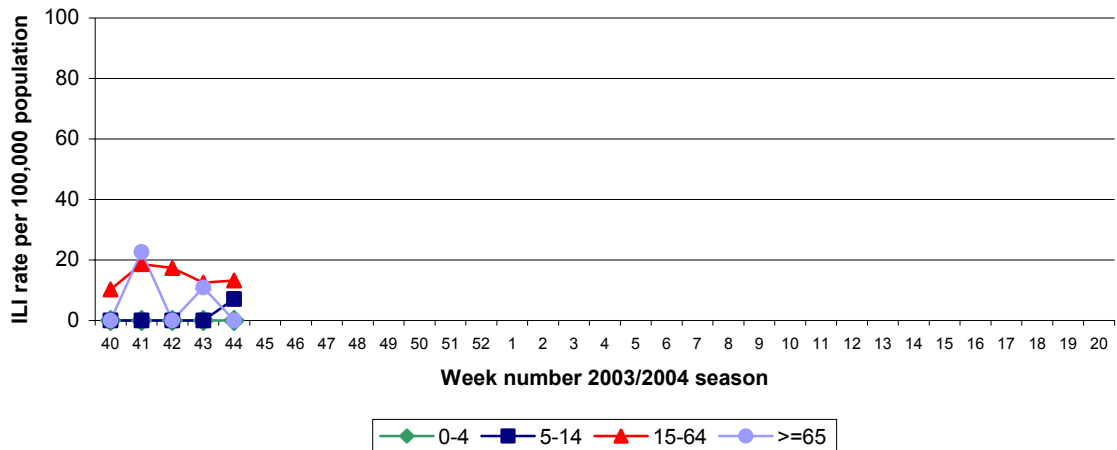


Figure 2. Age specific GP consultation rate* for ILI per 100,000 population by week for the 2004/2005-influenza season

* 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 44, the National Virus Reference Laboratory (NVRL) received seven swabs from sentinel GPs. One tested positive for influenza A (unsubtyped) and one tested positive for RSV (table 1). The influenza A positive is undergoing subtyping and antigenic characterisation.

The NVRL also tested 27 respiratory non-sentinel specimens from hospitals, during week 44. One specimen was positive for influenza A and six were positive for RSV. The non-sentinel influenza A positive detected during week 43 was thought to be travel-associated and was subtyped as A (H3N2). Of the influenza A positives detected in the 2004/2005 season to date, two were in the 15-64 age group, one was in the 0-4 age group and one was in the over 65 age group.

Table 1: Total number of sentinel specimens tested for influenza and positive results by type and subtype for week 44 and for the 2004/2005 season to date

Week number	Total specimens	Influenza positive specimens	% Influenza positive	Influenza A (Unsubtyped)	Influenza A (H3N2)	Influenza B	RSV
44	7	1	14.3	1	0	0	1
Total	26	2	7.7	2	0	0	1

Table 2: Total number non-sentinel* respiratory specimens and positive results for week 44 and for the 2004/2005 season to date

Week number	Total specimens	Influenza positive specimens	% Influenza positive	Influenza A (Unsubtyped)	Influenza A (H3N2)	Influenza B	RSV
44	27	1	3.7	1	0	0	6
Total	134	3	2.2	2	1	0	18

* 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 44 and the 2004/2005 season to date

Week number	Total specimens	Influenza positive specimens	% Influenza positive	Influenza A (Unsubtyped)	Influenza A (H3N2)	Influenza B	RSV
44	34	2	5.9	2	0	0	7
Total	160	5	3.1	4	1	0	19

* 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 44 and the 2004/2005 season to date

	Week 44 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	0	0	0	1	0	1
NEHB	0	0	0	0	0	0
NWHB	1	0	1	1	0	1
SEHB	0	0	0	2	0	2
SHB	1	0	1	1	0	1
WHB	0	0	0	0	0	0
Total	2	0	2	5	0	5

* 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.

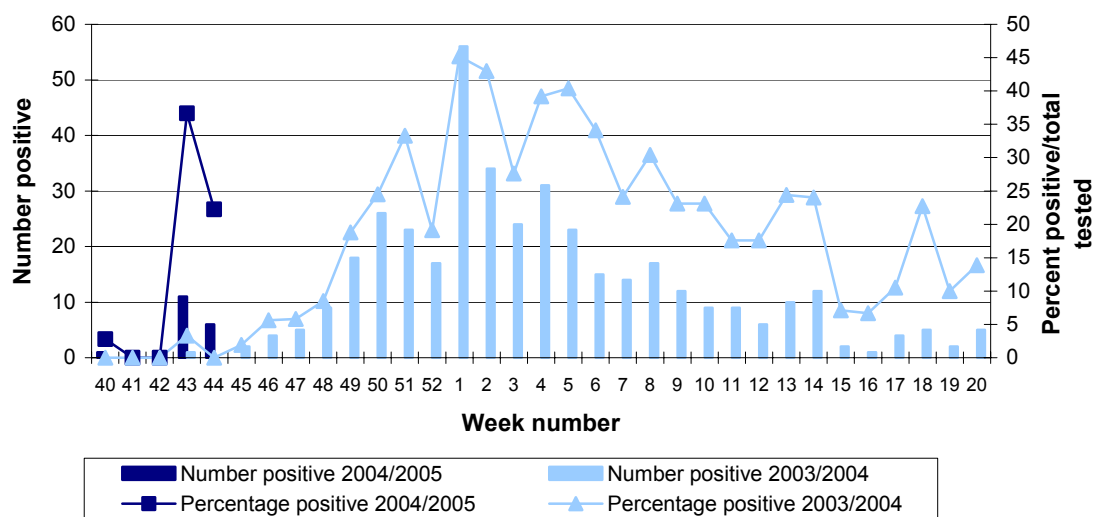


Figure 3. Number and percentage of non-sentinel RSV positive specimens detected during the 2004/2005 and 2003/2004 influenza seasons.

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 43, three health boards reported sporadic activity and five health boards reported no activity.

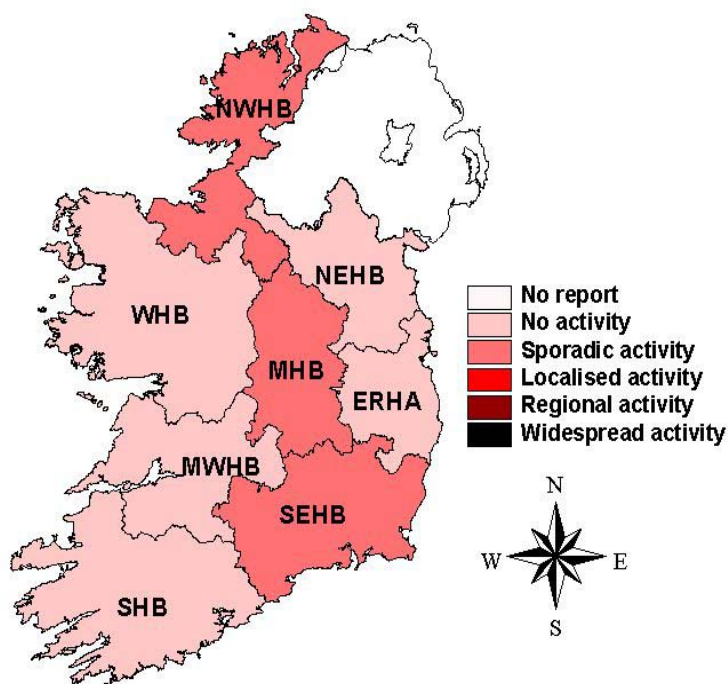


Figure 3: Map of influenza activity by health board/authority during week 43 2004

Influenza activity in Northern Ireland

The ILI rate increased during week 44 in Northern Ireland but remained at low levels. Returns were received from 21 out of 23 sentinel GP practices, giving a population coverage of 7.9%. Thirty-one cases of ILI were reported, corresponding to an ILI consultation rate of 23 per 100,000 population. Two sentinel and 23 non-sentinel swabs were submitted for testing. One of the non-sentinel specimens tested positive for influenza A (H3N2) and one tested positive for RSV. Sequencing of the influenza A positive is underway. This case is considered travel-associated as the patient had returned from South-East Asia prior to becoming ill.

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

Influenza activity in England, Scotland and Wales

Low levels of influenza activity were reported throughout the UK during week 44 (week ending 31/10/2004). Rates of influenza-like-illness in England were similar to week 44 and within baseline levels. Influenza activity in Scotland and Wales was also well within baseline levels. During week 44, three specimens tested positive for

influenza B in Scotland and there were no influenza detections in England or Wales. Levels of RSV increased, with RSV detected in non-sentinel specimens in England (57) and Wales (4), and in sentinel and non-sentinel specimens in Scotland (8) during week 44.

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

HPA: http://www.hpa.org.uk/infections/topics_az/influenza/flu.htm

Influenza activity in Europe

During week 44, influenza activity remained at low levels in Europe. One sentinel isolate in France tested positive for influenza A (unsubtyped) and two specimens tested positive for influenza B in Spain. RSV was detected in specimens in France (18) and Latvia (1). Four influenza viruses have been antigenically and/or genetically characterised in Europe since week 40 2004. Three were A/Wellington/1/2004 (H3N2)-like (from France, Norway and Sweden) and one was A/Fujian/411/2002 (H3N2)-like (from Germany). <http://www.eiss.org/>

Influenza activity in Canada

During week 43 (week ending 23/10/2004), localised activity was reported in British Columbia, with an outbreak in a long-term care facility. Elsewhere in Canada ILI rates were low and the sentinel GP network reported an ILI rate of 10 cases per 100,000 population. In week 43, there were two influenza A and one influenza B detections. Since the start of the 2004/2005 influenza season, 13 influenza viruses have been antigenically characterised. Twelve were influenza A/Fujian/411/02(H3N2)-like and one was influenza B/Shanghai/361/02.

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

Influenza activity in the United States

Low levels of influenza activity were seen in the US during week 42 (week ending 23/10/2004). WHO and NREVSS laboratories tested 1,009 specimens for influenza. Two were positive for influenza A (H3N2), three were positive for influenza A (unsubtyped) and influenza B was detected in two samples. Since October 1st, one influenza virus has been antigenically characterised as influenza A/Fujian/411/02(H3N2)-like. <http://www.cdc.gov/flu/weekly/fluactivity.htm>

Influenza activity Worldwide

During week 44, sporadic influenza activity was reported in Brazil (2 B), China (2 A(H3), 1 A(H1), 3 A(not subtyped) and 7 B), France (1 (not subtyped) and the Ukraine (4 A(H3)). <http://rhone.b3e.jussieu.fr/flunet/www/>

Influenza activity in New Zealand continued to decrease in week 43 (week ending 22/10/2004), with sentinel GPs reporting an ILI consultation rate of 10.3 per 100,000 population. Influenza activity in New Zealand in 2004 peaked in week 38, with an ILI consultation rate of 127.5 per 100,000 population. The influenza A/Fujian/411/2002 (H3N2)-like virus remains the predominant circulating strain.

http://www.surv.esr.cri.nz/virology/influenza_weekly_update.php

Avian influenza

On October 29th, the WHO issued a warning that domestic ducks might be acting as a silent reservoir for the H5N1 virus. A recent laboratory study showed that domestic ducks were shedding the virus for longer time periods than in 2003 and that most showed no symptoms of illness. This report, and other recent evidence, indicates that the H5N1 virus circulating in some parts of Asia has increased its pathogenicity in chickens and mice and expanded its host range to include mammals such as felines. To date, no evidence has linked human H5N1 cases to exposure to asymptomatic ducks.

Thailand

On October 25th, the Ministry of Public Health in Thailand confirmed an additional fatal case of human infection with H5N1 avian influenza. The patient was a 14-year-old girl from Sukhothai Province. She developed symptoms on the 8th October and died 11 days later. Chickens at her household died suddenly in late September. Since the beginning of 2004, Thailand has reported 17 laboratory confirmed cases of human infection with avian influenza A (H5N1). Twelve of these have been fatal. There is no evidence that efficient and sustained human-to-human transmission is currently occurring in Thailand.

Viet Nam

Since January 2004, Viet Nam has reported 27 laboratory confirmed cases of human infection with avian influenza A (H5N1). Twenty of these have been fatal. 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/

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^a
- a B/Shanghai/361/2002-like virus^b

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

^b 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

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/>