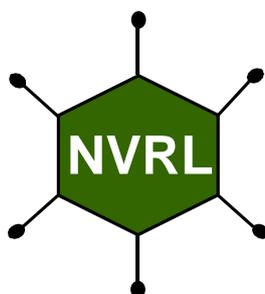


Weekly Influenza Surveillance Report



Week 42 2003

Report produced: 23/10/2003

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

Summary

GP consultation rates for influenza-like illness decreased during week 42 in Ireland, but remain at higher levels than the same week last season. Nine influenza A viruses were detected during week 42. Three school outbreaks of influenza have been reported since September 2003. Laboratory confirmations of influenza virus started earlier this season than previous seasons. It is however too early to predict whether this early activity will be sustained. Three influenza specimens this season have been confirmed as A/Fujian/411/2002 (H3N2)-like. A/Fujian-like viruses were first detected in very low numbers during the 2002/2003-influenza season in Europe and also in viruses circulating in Australia and New Zealand during July and August 2003 and most recently in the UK. Although the A/Fujian-like viruses are antigenically drifted from the A/Panama-like strain included in the current influenza vaccine, they are still related and there will be some cross protective immunity from the current vaccine.

Clinical data

During week 42 2003 (the week ending the 19th of October 2003), 18 influenza-like illness (ILI) cases were reported from sentinel general practices, corresponding to an ILI consultation rate of 24.1 per 100,000 population, decreasing from 35.5 per 100,000 in week 41. Twenty-seven of the 34 (79.4%) sentinel practices reported during week 42, with 9 reporting ILI (figure 1). The majority of ILI cases (16/18) were reported from sentinel GPs in the northeast, east and southeastern parts of the country. Sixteen ILI cases were in the 15-64 year age group and 2 cases were aged 65 years or older.

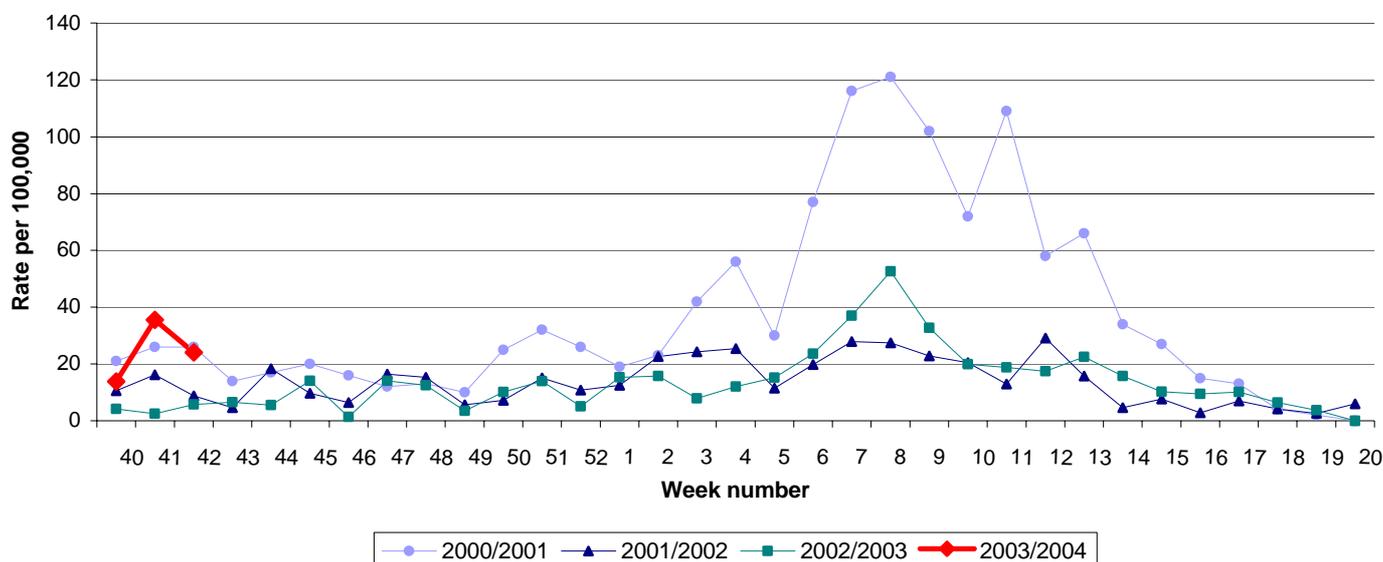


Figure 1: GP consultation rate for influenza-like illness per 100,000 population by report week, during the 2000/2001, 2001/2002, 2002/2003 & 2003/2004-influenza seasons.

Virological data

During week 42, the National Virus Reference Laboratory (NVRL) received 14 swabs from sentinel GPs (table 1). Seven swabs were positive for influenza A (unsubtyped); 2 were aged between 5 and 14 years of age and 5 were aged between 15 and 64 years

of age. The NVRL also tested 14 respiratory specimens mainly from hospitals, 2 were positive for influenza A (unsubtyped). Influenza positive cases were detected in 5 health boards, the majority of cases being located in the eastern regional and southeastern health boards.

Table 1: Total number of sentinel swabs tested for influenza by week and positive results by type, subtype and report week for the 2003/2004-influenza season

Week number	Total swabs	Positive swabs	Percentage positive	Influenza A (unsubtyped)	Influenza A (H1)	Influenza A (H3N2)	Influenza B
40	9	0	0.0	0	0	0	0
41	12	4	33.3	0	0	4	0
42	14	7	50.0	7	0	0	0
Total	35	11	31.4	7	0	4	0

School outbreak reports

Influenza A (H3N2) specimens from a boarding school outbreak in South County Dublin in mid September have been characterized as A/Fujian/411/2002. <http://www.eurosurveillance.org/ew/2003/031002.asp> Three patient samples were sequenced at the NVRL and phylogenetic analysis was carried out at Mill Hill laboratories; all were identical. A second earlier school outbreak of influenza occurred during the first week of September in County Kildare. A total of 160 pupils and 4 teachers were reported ill, with 23 pupils hospitalised. Influenza A (H3N2) was detected by the NVRL in 12/15 cases. The NVRL have sent viral cultures to Millhill for antigenic characterisation and are awaiting results. <http://www.eurosurveillance.org/ew/2003/031023.asp>

A third school outbreak of ILI was reported from the SEHB during week 42 2003. Increased absenteeism in pupils and staff associated with this outbreak were reported. Influenza virus has been detected in one case and further tests are being conducted.

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 41, 4 health boards reported sporadic influenza activity (ERHA, MWHB, NEHB and SEHB); all other health boards reported no influenza activity (figure 2).

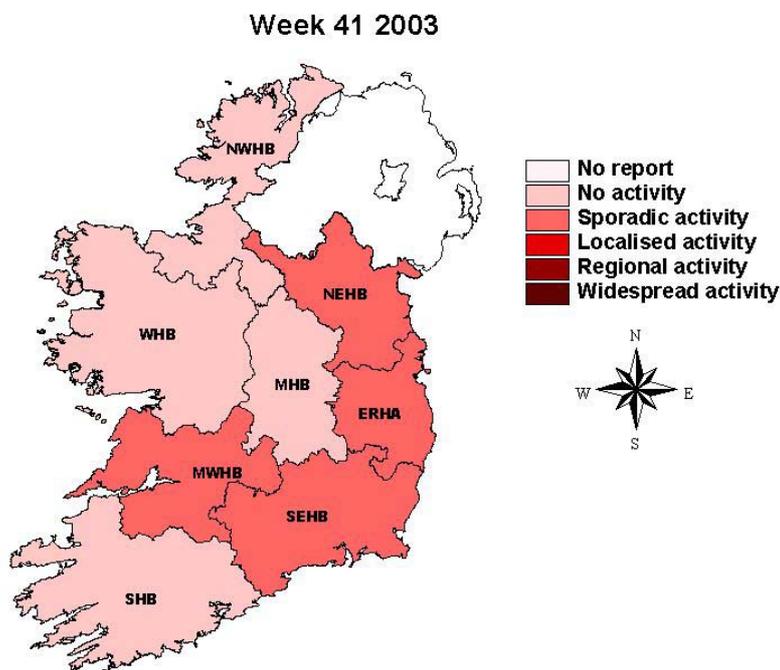


Figure 2: Map of influenza activity by health board during week 41 2003.

Influenza activity in Northern Ireland

In Northern Ireland during week 42, 20 of 23 sentinel general practices reported a GP consultation rate for combined influenza and ILI of 65.6 per 100,000 population, an increase from 42.2 per 100,000 in week 41. Of 7 sentinel specimens tested for influenza, 4 were positive for influenza A (H3). The influenza A (H3N2) positive sentinel specimen from week 41 has been characterised as A/Fujian/411/2002 (H3N2)-like. <http://www.cdscni.org.uk/>

Influenza activity in England, Scotland and Wales

Clinical indicators of influenza activity continued to rise in the UK during week 42 and are higher than this time last year, however still remain within baseline levels. In England, GP consultation rates for ILI increased from a rate of 13.9 per 100,000 in week 41 to a rate of 15.7 per 100,000 in week 42. In Wales, the GP consultation rates for ILI increased to 7.9 per 100,000 and remained unchanged in Scotland, at 23.0 per 100,000 in week 42. Influenza A viruses are circulating in the UK population. Three influenza A (H3N2) viruses typed to date have been confirmed as A/Fujian/411/2002 (H3N2)-like. Although Fujian-like strains are drifted from the Panama/2007/99, the Northern hemisphere A (H3N2) vaccine component, some cross protective immunity is still expected from the current vaccine.

http://www.hpa.org.uk/infections/topics_az/influenza/fluactivity0304.htm

Influenza activity in Europe

During week 41, sporadic influenza activity was reported in Portugal and Spain. Nine networks reporting to the European Influenza Surveillance Scheme (EISS) reported no influenza activity. Thirteen of 155 respiratory specimens collected by sentinel GPs in Europe were positive for influenza [12 influenza A (H3N2) and 1 influenza A (unsubtyped)]. <http://www.eiss.org> Iceland reported widespread influenza activity to the WHO during week 41, with 14 influenza A (unsubtyped) viruses detected. <http://rhone.b3e.jussieu.fr/flunet/www/>

Influenza activity in Canada

During week 41 in Canada, sporadic activity was reported in parts of Ontario and Saskatchewan and localised activity in Alberta. Sentinel physicians reported 54 cases of ILI per 1000 patient visits in week 41, which is above baseline rate for week 41. During week 41, Health Canada received 876 reports of laboratory tests for influenza, 42 (4.8%) were positive for influenza A. Influenza outbreaks were reported in 2 schools in week 41. <http://www.hc-sc.gc.ca/pphb-dgsp/fluwatch/index.html>

Influenza activity in the United States

During week 41, one state and territorial health department reported regional influenza activity, 3 states reported sporadic activity and 43 states reported no influenza activity. The proportion of patient visits to sentinel providers for ILI was less than the national baseline of 2.5%. WHO laboratories reported 502 specimens tested for influenza viruses; all of which were negative. <http://www.cdc.gov/ncidod/diseases/flu/fluvirus.htm>

Influenza activity Worldwide

No influenza activity was reported in Argentina and French Guiana during week 41. Sporadic influenza activity was reported in Hong Kong [10 A (unsubtyped), 31 (A H3N2) & 4 B], the Russian Federation, Australia [6 A (unsubtyped)] and Chile [2 A (unsubtyped) and 1 A (H3N2)]. Israel reported 5 influenza A (H3N2) and 2 influenza A (unsubtyped) virus detections during week 41. <http://rhone.b3e.jussieu.fr/flunet/www/>

Northern Hemisphere influenza vaccine for the 2003/2004

On February the 28th 2003, WHO published a recommendation on the composition of influenza vaccines for use in the 2003-2004 Northern Hemisphere influenza season.

- A/New Caledonia/20/99(H1N1)-like virus
- A/Moscow/10/99(H3N2)-like virus*
- B/Hong Kong/330/2001-like virus**

* The widely used vaccine strain is A/Panama/2007/99

** Currently used vaccine strains include B/Shandong/7/97, B/Hong Kong/330/2001, B/Hong Kong/1434/2002

<http://www.who.int/csr/disease/influenza/vaccinerecommendations1/en/>

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