

Influenza Weekly Surveillance Report



A REPORT BY THE HEALTH PROTECTION SURVEILLANCE CENTRE IN COLLABORATION WITH THE IRISH COLLEGE OF GENERAL PRACTITIONERS, THE NATIONAL VIRUS REFERENCE LABORATORY & THE DEPARTMENTS OF PUBLIC HEALTH.

Week 43 2005 (24th to 30th Oct 2005)

Summary

During week 43 2005, influenza activity was at low levels in Ireland, with three influenza-like illness (ILI) cases reported by sentinel GPs. To date this season, no positive influenza specimens have been detected by the NVRL.

Background

This is the sixth season of influenza surveillance using computerised sentinel general practices in Ireland. The Health Protection Surveillance Centre (HPSC) is working in collaboration with the Irish College of General Practitioners (ICGP), the National Virus Reference Laboratory (NVRL) and the Departments of Public Health on this sentinel surveillance project. Thirty-eight sentinel general practices have been recruited to report on the number of patients with ILI on a weekly basis. ILI is defined as the sudden onset of symptoms with a temperature

of 38⁰C or more, with two or more of the following: headache, sore throat, dry cough and myalgia.

Sentinel GPs send a combined nasal and throat swab, to the NVRL, on at least one patient per week where a clinical diagnosis of ILI is made. This report includes data on ILI cases reported by sentinel GPs, influenza test results from the NVRL, influenza notifications, registered deaths attributed to influenza, and regional influenza activity reported by the Departments of Public Health.

Results

Clinical Data

Three ILI cases were reported from sentinel GPs during week 43 2005, corresponding to an ILI consultation rate of 3.6 per 100,000 population, a decrease from the updated rate of 7.3 per 100,000 population during week 42 2005 (figure 1).

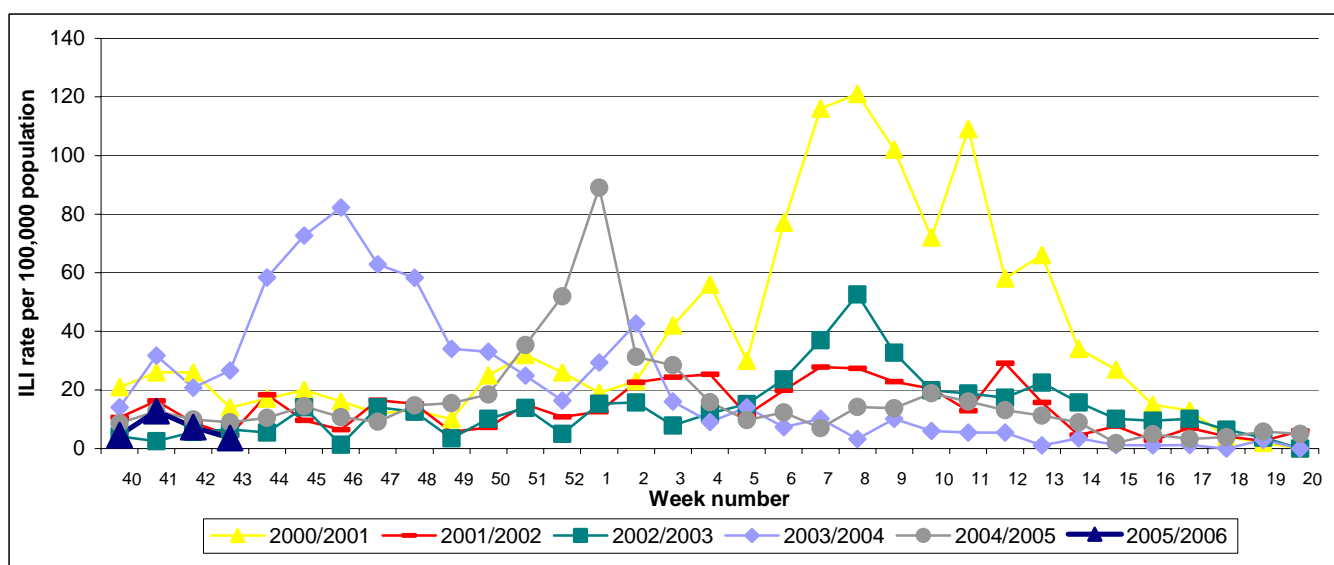


Figure 1: GP consultation rate for ILI per 100,000 population by week, during the 2000/2001, 2001/2002, 2002/2003, 2003/2004, 2004/2005 & 2005/2006 influenza seasons.

Results (continued)

Two ILI cases were aged between 15 and 64 years of age (3.5 per 100,000 population) and one case was aged 65 years or older (10.7 per 100,000 population) (figure 2). Twenty-five of the 38 (65.8%) sentinel general practices reported during week 43 2005, with three reporting ILI.

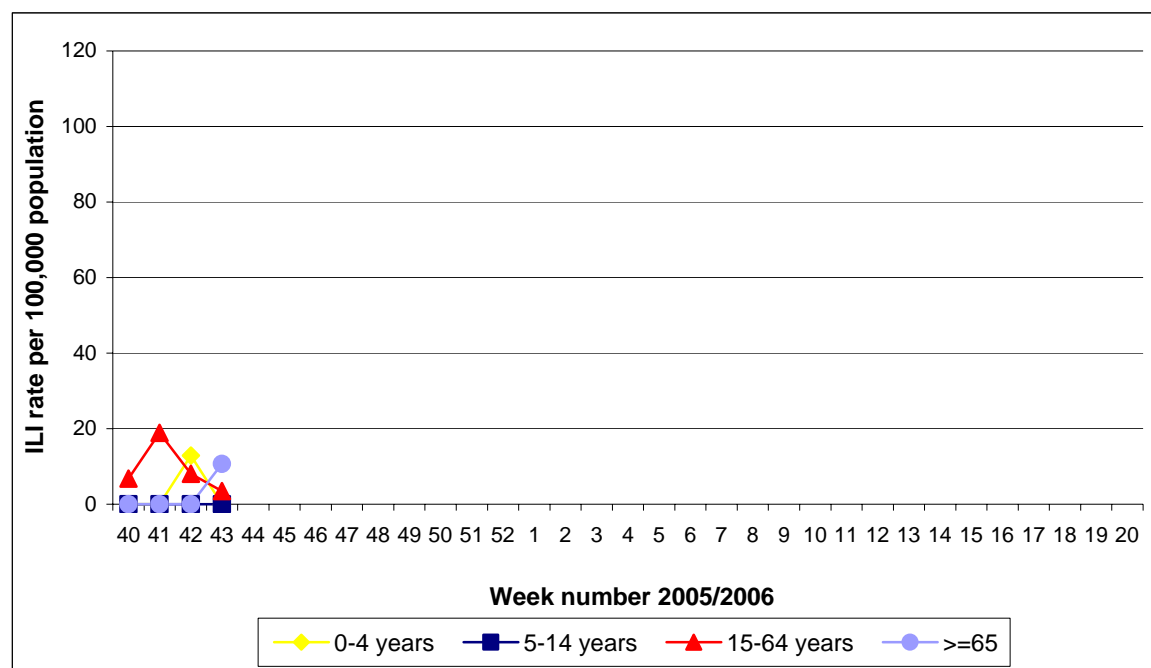


Figure 2: Age specific GP consultation rate* for ILI per 100,000 population by week during the 2005/2006 influenza season. *Please note the denominator used in the age specific consultation rate is from the 2002 census data; this assumes that the age distribution of the sentinel general practices is similar to the national age distribution.

Virological Data from the National Virus Reference Laboratory (NVRL)

To date this season, no positive influenza specimens have been detected by the NVRL (table 1). The NVRL tested five specimens taken by sentinel GPs during week 43 2005, all five specimens were negative for influenza virus. The NVRL also tested 27 non-sentinel specimens, taken during week 43 2005, mainly from hospitalised paediatric cases. All non-sentinel specimens were negative for influenza virus. Five non-sentinel specimens were positive for respiratory syncytial virus (RSV) and one was positive for Parainfluenza virus type 1. Figure 3 compares the ILI consultation rates by season and the number of positive influenza specimens tested by the NVRL.

Table 1: Total number of sentinel and non-sentinel* respiratory specimens and positive results for week 43 2005 and the 2005/2006 season to date

Week Number	Specimen Type	Total Specimens	No. Influenza Positive	% Influenza Positive	Influenza A	Influenza B	RSV
43 2005	Sentinel	5	0	0.0	0	0	NA
	Non-Sentinel	27	0	0.0	0	0	5
	Total	32	0	0.0	0	0	5
40-43 2005	Sentinel	23	0	0.0	0	0	NA
	Non-Sentinel	121	0	0.0	0	0	14
	Total	144	0	0.0	0	0	14

*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.

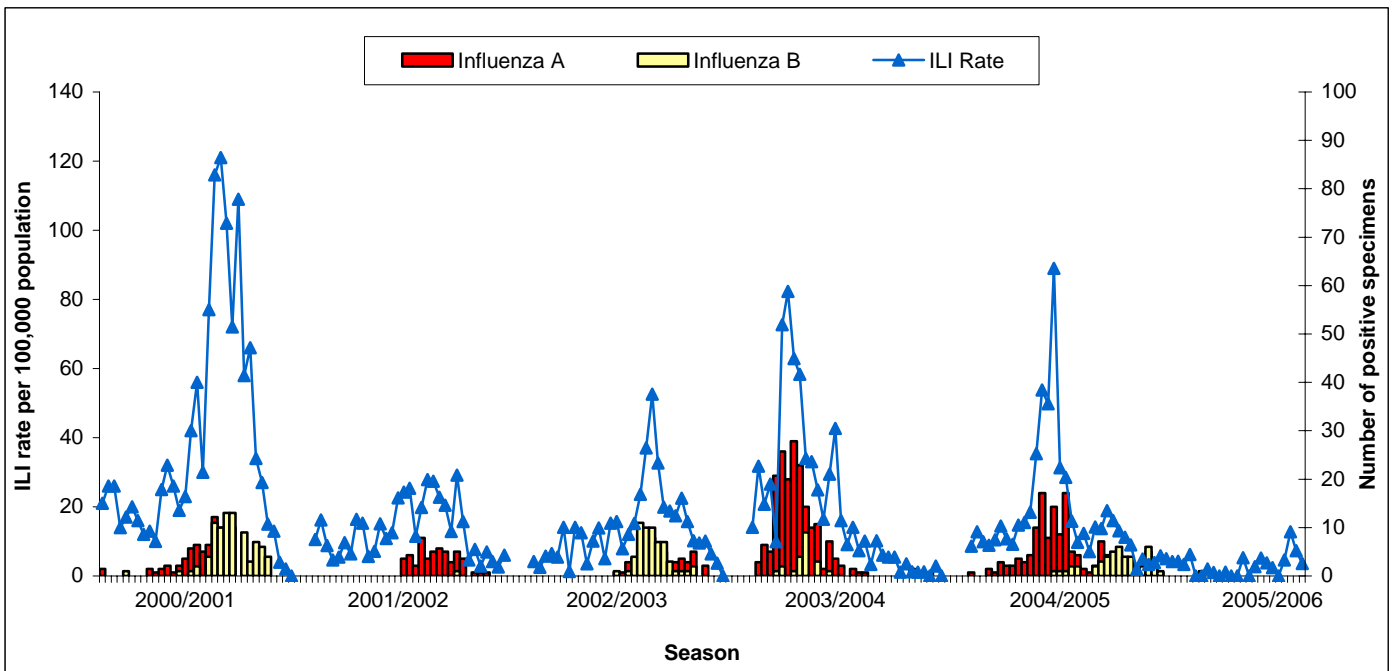


Figure 3: ILI rate per 100,000 population and the number of positive influenza specimens detected by the NVRL during the 2000/2001, 2001/2002, 2002/2003, 2003/2004 & 2004/2005 seasons, summer 2005 and the 2005/2006 season.

Weekly Influenza Notifications

No influenza notifications were reported to HPSC during week 43 2005. One influenza B case was notified to HPSC during week 40 2005, however this was a late notification from April 2005. Influenza cases notified to HPSC during the summer of 2005 and during the 2005/2006 influenza season are shown in figure 4, and compared to ILI consultation rates.

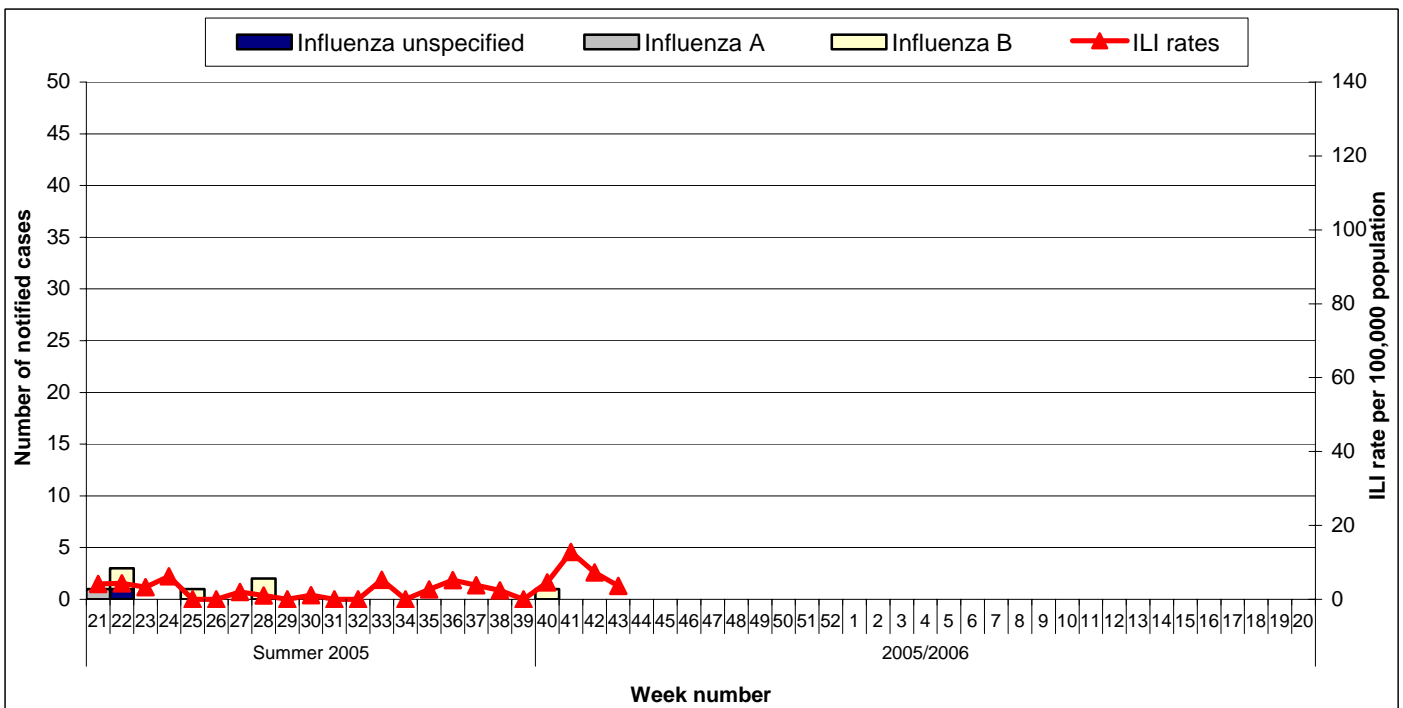


Figure 4: Number of notifications* of influenza (possible & confirmed) by type and by week of notification compared to sentinel GP ILI consultation rates per 100,000 population during the summer of 2005 and the 2005/2006 influenza season.
 *Notification data are provisional and were extracted from [CIDR](#) on the 02/11/2005 at 13.46

Mortality Data

No deaths registered to date this season were attributed to influenza.

Outbreak Reports

No influenza/ILI outbreaks were reported to HPSC to date this season.

Regional Influenza Activity by HSE-Health Area

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 influenza cases and influenza/ILI outbreaks. Each Department of Public Health has established one sentinel hospital in each HSE-Health Area, to report total hospital admissions, accident and emergency admissions and respiratory admissions data on a weekly basis. Sentinel primary and secondary schools were also established in each HSE-Health Area in close proximity to the sentinel GPs, reporting absenteeism data on a weekly basis.

Four HSE-Health Areas reported sporadic influenza activity during week 42 2005 (figure 5), based on isolated cases of ILI. No significant increases in hospital admissions were reported to HPSC to date this season. School absenteeism increased in several sentinel schools during weeks 42 and 43 2005, however this was due to school mid-term breaks.

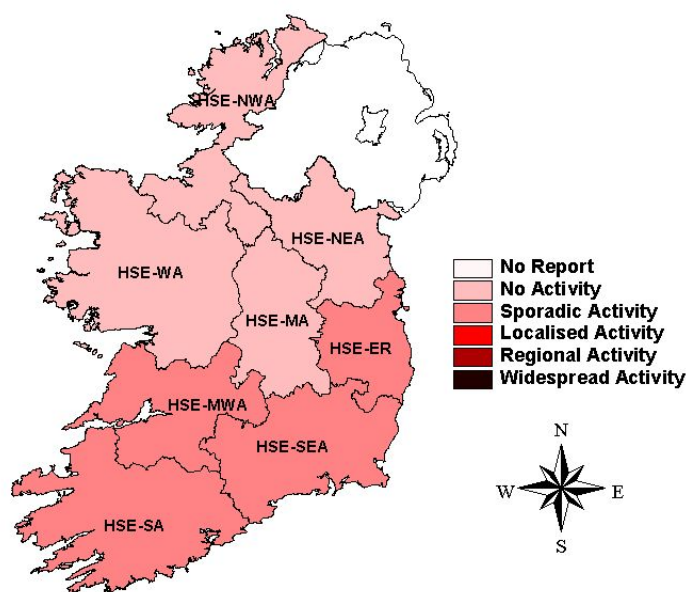


Figure 5: Map of influenza activity by HSE-Health Area during week 42 2005

Influenza Activity in Northern Ireland

Forty-seven ILI cases were reported from sentinel GPs in Northern Ireland during week 43 2005, corresponding to a rate of 34.7 per 100,000 population, an increase from the rate of 33.8 per 100,000 in week 42. There have been no laboratory detections of influenza to date this season in Northern Ireland. <http://www.cdscni.org.uk>

Influenza Activity in England, Scotland & Wales

Influenza activity in the United Kingdom remained low during weeks 42 and 43 2005. GP consultations for ILI in England, decreased with the highest rates of ILI recorded amongst those aged 0–4 years. GP consultations for influenza and ILI continue to rise in Scotland, with influenza activity remaining at low levels in Wales. Detections of influenza from specimens sent from hospital and community sources remain within expected levels for this time

of year. The Respiratory Virus Unit at the HPA Centre for Infections made no positive detections of influenza from specimens referred to the unit during weeks 42 and 43 2005. Of those samples, sent to NHS and HPA laboratories during weeks 42 and 43 2005; one tested positive for influenza B during week 42 2005.

http://www.hpa.org.uk/infections/topics_az/influenza/flureports0506.htm

Influenza Activity in Europe

The intensity of influenza activity in Europe was low during week 42 2005. Only two countries, Poland and Hungary, reported an increase in clinical activity in week 42 2005, but in both countries the incidence of ILI was low and remained at baseline levels. To date this season (week 36-42 2005), there have been eight influenza virus detections reported to the European Influenza Surveillance Scheme. Four cases of influenza A (unsubtyped) were reported in Wales (two), the Czech Republic (one) and England (one) and four cases of influenza B were reported in Wales (two) and Poland (two). No viruses have been antigenically and/or genetically characterised.

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

Influenza Activity in Canada

During week 42, no influenza activity was reported in Canada. The Public Health Agency of Canada received 1057 reports of laboratory tests for influenza during week 42, with no positive influenza virus detection. The ILI rate was 16 per 1000 patient visits in week 42, which is in the expected range for this week. During week 42, no new laboratory confirmed influenza outbreaks were reported. To date this season, one outbreak in a long-term care facility has been reported in Saskatchewan. Since the start of the 2005/2006 influenza season, the National Microbiology Laboratory has antigenically characterised five influenza viruses; four A/California/07/04-like viruses and one B/Shanghai/361/02-like. <http://www.phac-aspc.gc.ca/fluwatch/index.html>

Influenza Activity in the United States

During week 42, influenza activity was low in the United States. The proportion of patient visits to sentinel providers for ILI and the proportion of deaths attributed to pneumonia and influenza were below baseline levels. One state reported regional influenza activity; 12 states, New York City, and Puerto Rico reported sporadic influenza activity; and 37 states and the District of Columbia reported no influenza activity. Nine (1.1%) specimens tested by U.S. WHO and NREVSS collaborating laboratories were positive for influenza virus: one influenza A (H3N2) virus, five influenza A (unsubtyped) and 3 influenza B viruses. Since October 2, WHO and NREVSS laboratories have tested a total of 2,837 specimens for influenza viruses and 28 (1.0%) were positive. Among the 28 influenza viruses, 23 (82.1%) were influenza A viruses and 5 (17.9%) were influenza B viruses. Eleven (47.8%) of the 23 influenza A viruses have been subtyped and all were influenza A (H3N2) viruses. <http://www.cdc.gov/flu/>

Influenza Activity Worldwide

During week 42 2005, China (5 AH1, 1 A unsubtyped & 5 B), Madagascar, Mexico (2 A unsubtyped) and Mongolia all reported sporadic influenza activity. No influenza activity was reported in Brazil and the Philippines for week 42 2005. <http://gamapserver.who.int/GlobalAtlas/home.asp>

Avian Influenza

As of the 1st of November 2005, 122 confirmed human cases and 62 deaths of avian influenza A (H5N1) cases have been reported to the WHO from Indonesian, Vietnam, Thailand and Cambodia.

Further information on avian influenza is available on the following websites:

WHO http://www.who.int/csr/disease/avian_influenza/en/

HPSC <http://www.hpsc.ie/A-Z/Respiratory/AvianInfluenza/>

ECDC <http://www.ecdc.eu.int/>

Further information on influenza can be found on the [HPSC website](#)

Acknowledgements

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This report was produced by Dr Lisa Domegan & Dr Joan O'Donnell, HPSC