

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 44 2005 (31st Oct to 6th Nov 2005)

Summary

During week 44 2005, influenza activity was at low levels in Ireland, with ten 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-nine 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 38^oC 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

Ten ILI cases were reported from sentinel GPs during week 44 2005, corresponding to an ILI consultation rate of 9.8 per 100,000 population, an increase from the updated rate of 5.8 per 100,000 population during week 43 2005 (figure 1).

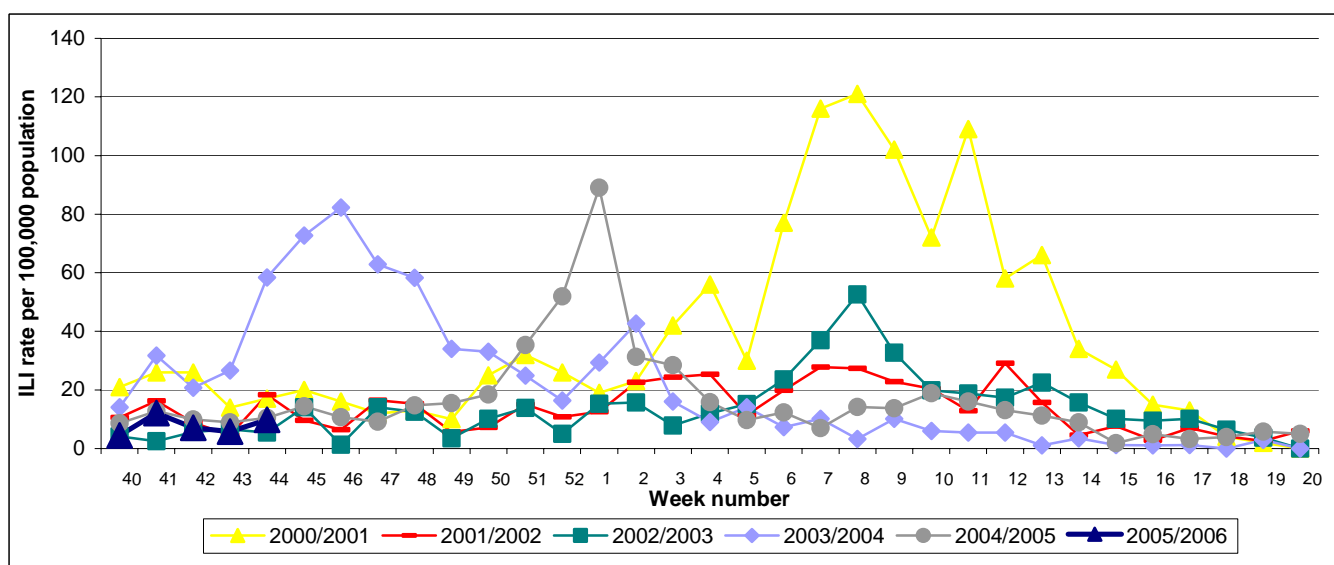


Figure 1: GP consultation rate for ILI per 100,000 population by week, during the 2000/2001, 2001/2002, 2002/2003, 2003/2004, 2004/2005 & 2005/2006 influenza seasons.

Results (continued)

Nine ILI cases were aged between 15 and 64 years of age (13.0 per 100,000 population) and one case was of unknown age (figure 2). Thirty-two (82.1%) sentinel general practices reported during week 44 2005, with seven reporting ILI.

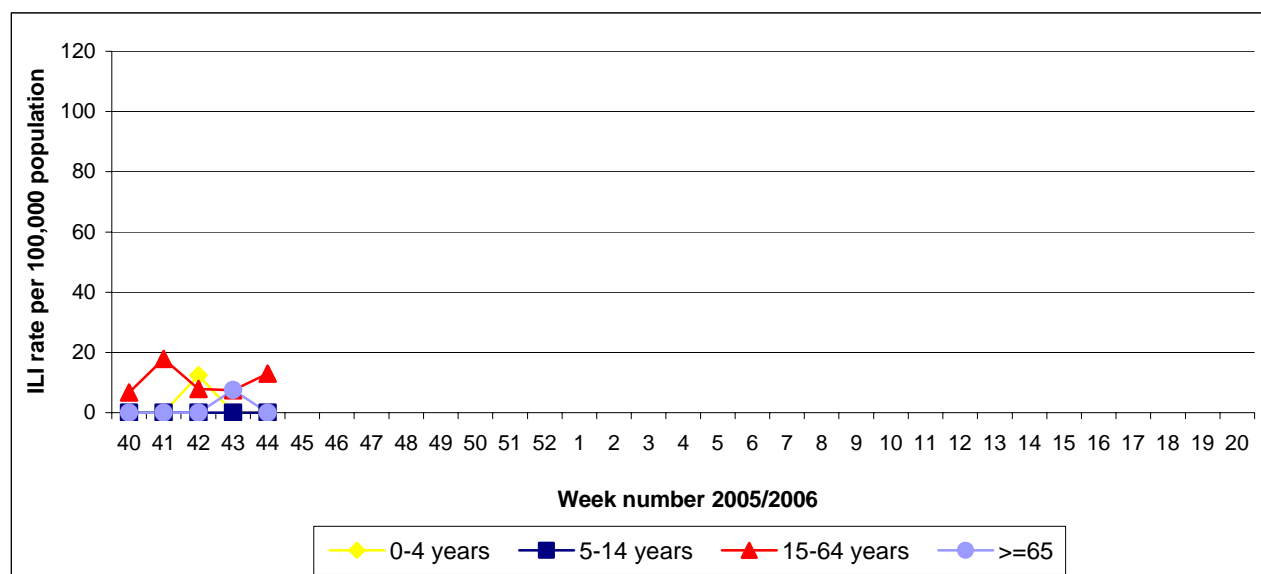


Figure 2: Age specific GP consultation rate* for ILI per 100,000 population by week during the 2005/2006 influenza season. *Please note the denominator used in the age specific consultation rate is from the 2002 census data; this assumes that the age distribution of the sentinel general practices is 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 seven specimens taken by sentinel GPs during week 44 2005, all seven specimens were negative for influenza virus. The NVRL also tested 39 non-sentinel specimens, taken during week 44 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), one was positive for parainfluenza virus (PIV) type 1 and one was positive for PIV-3. 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 44 2005 and the 2005/2006 season to date

Week Number	Specimen Type	Total Specimens	No. Influenza Positive	% Influenza Positive	Influenza A	Influenza B	RSV
44 2005	Sentinel	7	0	0.0	0	0	NA
	Non-Sentinel	39	0	0.0	0	0	5
	Total	46	0	0.0	0	0	5
40-44 2005	Sentinel	31	0	0.0	0	0	NA
	Non-Sentinel	160	0	0.0	0	0	20
	Total	191	0	0.0	0	0	20

*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.

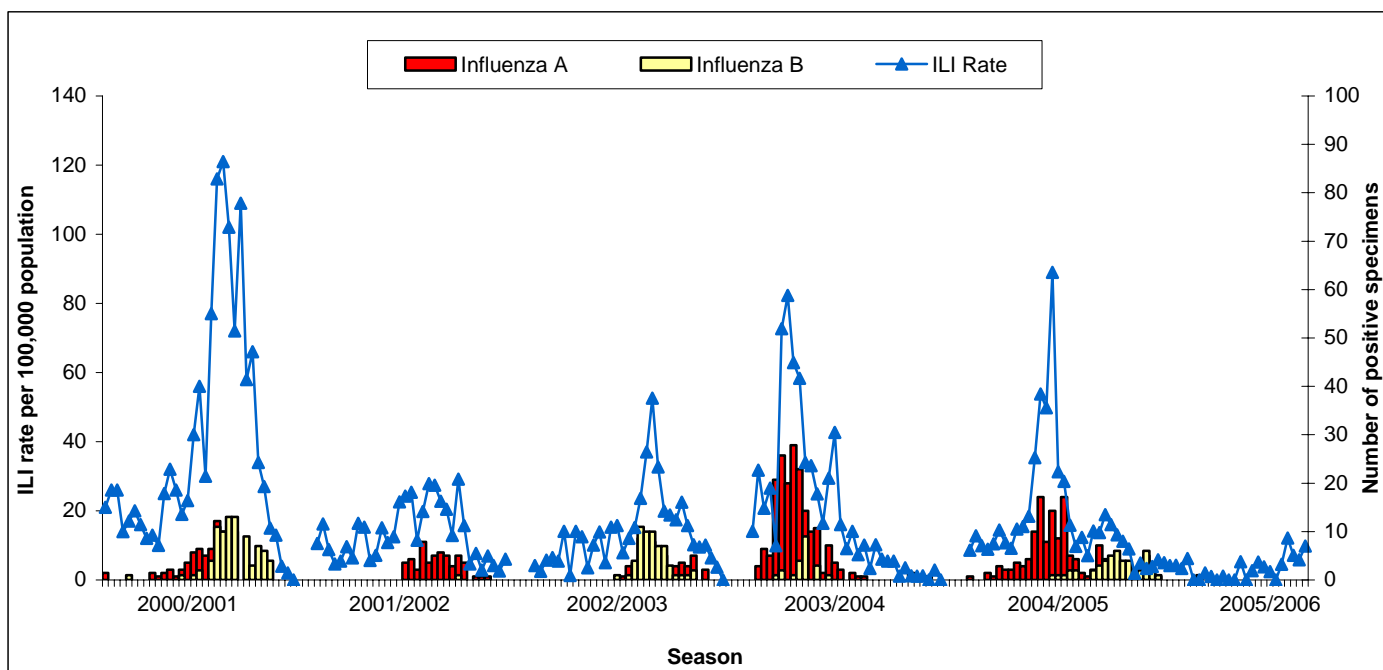


Figure 3: ILI rate per 100,000 population and the number of positive influenza specimens detected by the NVRL during the 2000/2001, 2001/2002, 2002/2003, 2003/2004 & 2004/2005 seasons, summer 2005 and the 2005/2006 season.

Weekly Influenza Notifications

No influenza notifications were reported to HPSC during week 44 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.

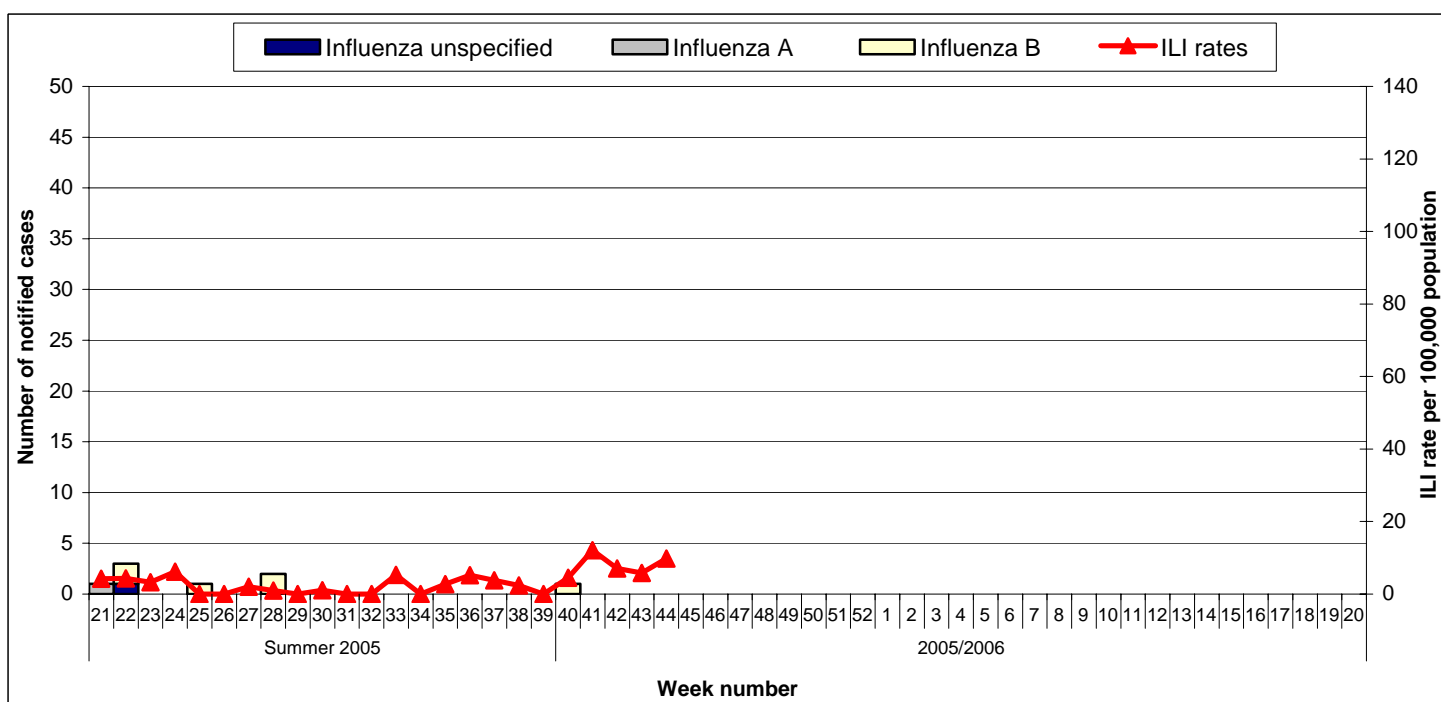


Figure 4: Number of notifications* of influenza (possible & confirmed) by type and by week of notification compared to sentinel GP ILI consultation rates per 100,000 population during the summer of 2005 and the 2005/2006 influenza season.
 *Notification data are provisional and were extracted from [CIDR](#) on the 09/11/2005 at 12.42

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.

Hospital Admissions

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. No significant increases in hospital admissions were reported to HPSC to date this season.

School Absenteeism

Sentinel primary and secondary schools have been established in each HSE-Health Area in close proximity to the sentinel GPs, reporting absenteeism data on a weekly basis. School absenteeism increased in several sentinel schools during weeks 42 and 43 2005, however this was due to school mid-term breaks.

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. Five HSE-Health Areas reported sporadic influenza activity during week 43 2005 (figure 5), based on isolated cases of ILI. A sporadic case of ILI was reported from a nursing home in HSE-NEA during week 43.

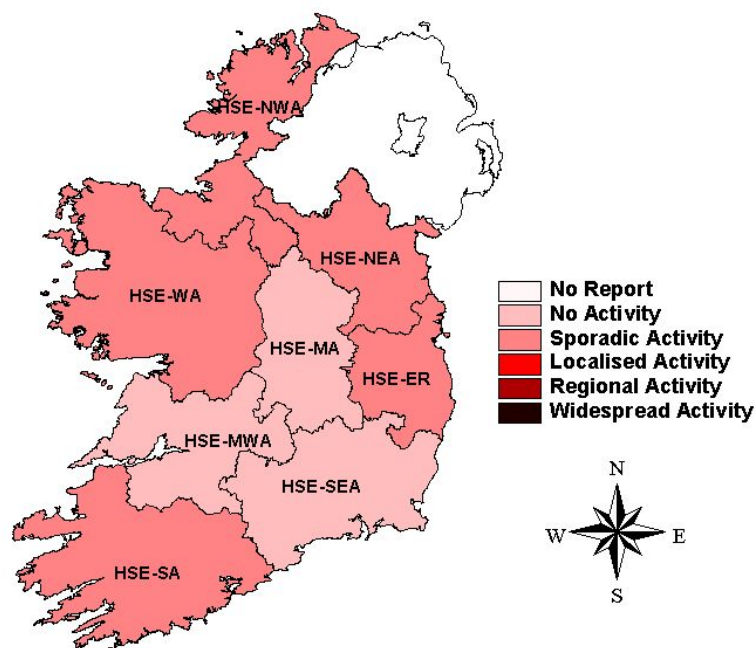


Figure 5: Map of influenza activity by HSE-Health Area during week 43 2005

Influenza Activity in Northern Ireland

Thirty-five influenza and ILI cases were reported from sentinel GPs in Northern Ireland during week 44 2005, corresponding to a rate of 27.8 per 100,000 population, a decrease from the updated rate of 31.2 per 100,000 in week 43. 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 England, Scotland and Wales remained low during week 44 2005. GP consultations for ILI remain at baseline levels with the highest rates of ILI recorded amongst those aged 0–4 years. Detections of influenza and other respiratory viruses from specimens sent from hospital and community sources remain within expected levels for this time of year. No detections of influenza were made from samples sent to the Respiratory Virus Unit at the HPA Centre for Infections, NHS or HPA laboratories during week 44 2005. http://www.hpa.org.uk/infections/topics_az/influenza/flureports0506.htm

Influenza Activity in Europe

The intensity of clinical influenza activity in Europe during week 43 2005 was low. One country, Latvia, reported an increase in clinical activity compared to week 42 2005, but the incidence of ILI was low and at baseline levels. All other countries reported either stable or decreasing levels of clinical activity. Sporadic laboratory confirmed cases of influenza have been detected since week 36 2005: five in the Czech Republic, four in Scotland, two in Estonia, Wales and Poland, and one in England. Although the number of laboratory confirmed cases of influenza is slowly increasing, the numbers remain low. No viruses have been antigenically and/or genetically characterised during the 2005/2006 season. No human cases of influenza A (H5N1) have been reported in Europe. <http://www.eiss.org/index.cgi>

Influenza Activity in Canada

During week 43 2005, localised influenza activity was reported in one health region of Manitoba, while the rest of the Canada reported no influenza activity. The ILI rate was reported as 13 per 1000 patient visits in week 43, which is below the expected range for this week. The Public Health Agency of Canada received 1015 reports of laboratory tests for influenza, with one positive detection of influenza A during week 43 2005. During week 43, one new outbreak was reported in a long-term care facility in Manitoba. The National Microbiology Laboratory has antigenically characterised five influenza viruses this season: four A/California/07/04-like and one B/Shanghai/361/02-like, which are the strains included in the 2005/2006-influenza vaccine. <http://www.phac-aspc.gc.ca/fluwatch/index.html>

Influenza Activity in the United States

During week 43 2005, 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. Fourteen states and Puerto Rico reported sporadic influenza activity, and 36 states, New York City, and the District of Columbia reported no influenza activity. During week 43 2005, three (0.4%) specimens were positive for influenza: 1 influenza A (H3N2) virus and 2 influenza A (unsubtyped). Since October 1, 2005, CDC has antigenically characterised one influenza virus. The influenza A (H3N2) virus was characterised as A/California/07/2004-like, which is the influenza A (H3N2) component recommended for the 2005/2006 influenza vaccine. <http://www.cdc.gov/flu/>

Influenza Activity Worldwide

During week 43 2005, Australia (2 B), China (1 A H1, 1 A unsubtyped & 4 B), Mexico (1 A unsubtyped) and Mongolia all reported sporadic influenza activity. One influenza A (H3) virus was reported from Japan during week 43 2005. <http://gamapserv.who.int/GlobalAtlas/home.asp>

Avian Influenza

As of the 9th of November 2005, 125 confirmed human cases and 64 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/>

Northern Hemisphere Influenza Vaccine for the 2005/2006 Season

The members of the WHO Collaborating Centres on Influenza recommended that influenza vaccines for the 2005/2006 influenza season in the Northern Hemisphere contain the following strains:

- an A/New Caledonia/20/99(H1N1)-like virus
- an A/California/7/2004(H3N2)-like virus^a
- a B/Shanghai/361/2002-like virus^b

a Candidate vaccine viruses are being developed (for further information please see WHO update at <http://www.who.int/influenza>)

b The currently used vaccine viruses are B/Shanghai/361/2002, B/Jiangsu/10/2003 and B/Jilin/20/2003.
<http://www.who.int/csr/disease/influenza/vaccinerecommendations1/en/>
www.emea.eu.int

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

Acknowledgements

HPSC, ICGP and NVRL wish to thank the sentinel GPs who have participated in the GP sentinel surveillance system and who have contributed towards this report

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