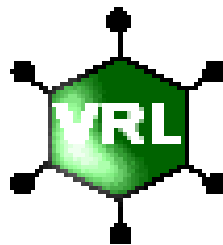


Weekly Influenza Surveillance Report



Week 40 2002

Report produced: 09/10/2002

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

Background to the sentinel influenza surveillance scheme

Welcome to the first influenza surveillance report of the 2002/2003 influenza season. This is the third year of influenza surveillance using computerised sentinel general practices in Ireland. The National Disease Surveillance Centre (NDSC) is working in collaboration with the National Virus Reference Laboratory (NVRL) and the Irish College of General Practitioners (ICGP) on the sentinel surveillance project.

Sentinel GPs

Thirty-three general practices have been recruited to report electronically, on a weekly basis, the number of patients with influenza-like illness (ILI). 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. Patients are those attending for the first time with these symptoms. In total, the 33 sentinel general practices cover an estimated total practice population size of 89,859, representing 2.5% of the population. Practices are located in all health boards with their location based on the population of each health board.

Sentinel GPs send a combined nasopharyngeal and throat swab, to the NVRL, on one patient per week where a clinical diagnosis of ILI is made. The NVRL report on a weekly basis, positive or negative results by PCR and/or Shell Vial by influenza type and subtype to NDSC.

Regional influenza activity

The Departments of Public Health send an influenza activity index (no report, no activity, sporadic-, localised-, regional- or widespread activity) for each health board/authority every week, to NDSC. The activity index is analogous to that used by the WHO global influenza surveillance system and the European Influenza Surveillance Scheme. The index is based on sentinel GP ILI consultation rates, laboratory confirmed cases of influenza, sentinel hospital admissions data and/or sentinel school absenteeism levels. Sentinel hospital data are based on: total admissions per week, total A & E admissions per week and total respiratory admissions per week (the definition of respiratory illness in this instance includes upper respiratory tract infection, lower respiratory tract infection, pneumonia, asthma, chronic bronchitis, and exacerbations of chronic obstructive airways disease). One sentinel hospital is located in each health board. Sentinel primary and secondary schools in each health board are located in close vicinity to the sentinel GPs. Each sentinel school reports absenteeism data to the Departments of Public Health on a weekly basis. The activity index by health board is included in a map of Ireland in the weekly influenza surveillance report.

Weekly influenza surveillance report

NDSC is responsible for producing a weekly influenza report, which is sent to all those involved in influenza surveillance and also posted on the NDSC website every Thursday www.ndsc.ie. Results of clinical and virological data are reported, along with a map of influenza activity, and a summary of influenza activity worldwide.

The influenza surveillance period runs from week 40 in October to week 20 in May, with the week running Monday to Sunday.

Clinical data from sentinel GPs

During week 40, 3 influenza-like illness (ILI) cases were reported from sentinel general practices, corresponding to an ILI consultation rate of 4.5 per 100,000 population (figure 1). Twenty-four sentinel GPs reported during week 40 with only one sentinel GP reporting ILI cases.

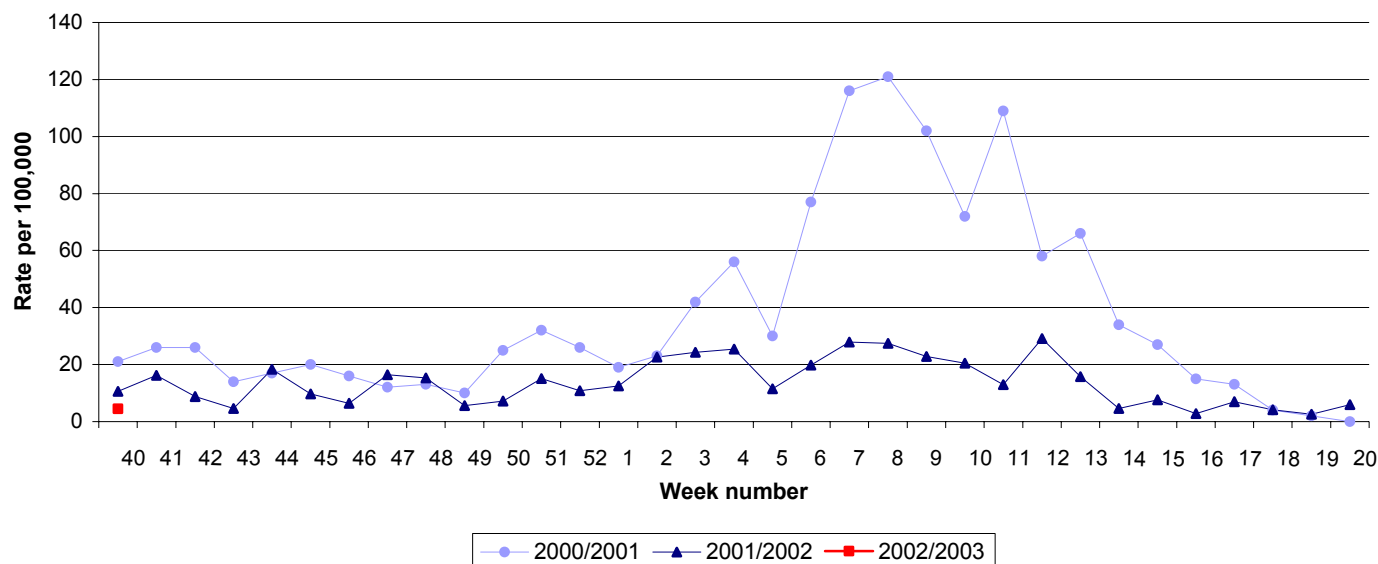


Figure 1: GP consultation rate for influenza-like illness per 100,000 population by report week, during the 2000/2001, 2001/2002 and 2002/2003 influenza seasons.

Virological data

The NVRL received 4 swabs from sentinel GPs during week 40; all 4 were negative for influenza virus (table 1).

The NVRL also tested 20 respiratory specimens from non-sentinel sources (hospitals and GPs) during week 40. One specimen was positive for respiratory syncytial virus (RSV) (figure 2).

Table 1: Sentinel influenza results by type, subtype and report week for 2002/2003

<i>Week number</i>	<i>Total swabs</i>	<i>Positive swabs</i>	<i>Percentage positive</i>	<i>A (unsubtyped)</i>	<i>A (H1N1)</i>	<i>A (H1N2)</i>	<i>A (H3N2)</i>	<i>B</i>
40	4	0	0%	0	0	0	0	0
Total	4	0	0%	0	0	0	0	0

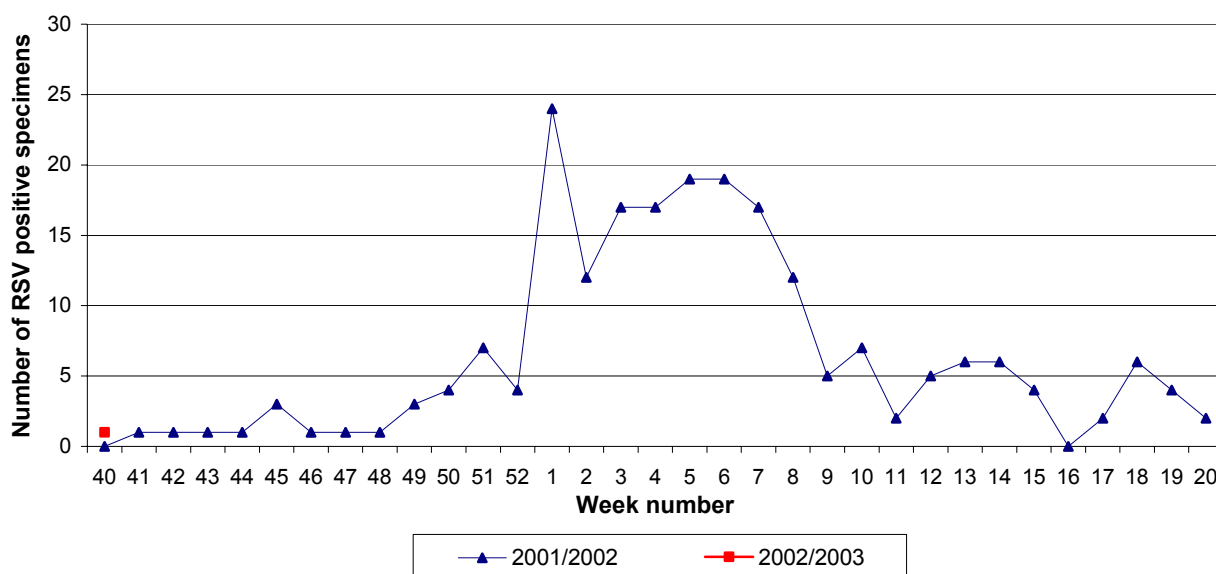


Figure 2: Non-sentinel RSV positive specimens detected during the 2001/2002 and 2002/2003 influenza seasons.

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, hospital admissions data, and/or school absenteeism data. The first map of influenza activity will be produced in the week 41 influenza report.

2002-2003 influenza vaccine

The EU recommendation for the influenza trivalent vaccine composition for the 2002-2003 season is as follows:

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

The complete text of the EU recommendations can be located at:

<http://www.emea.eu.int/pdfs/human/bwp/085202en.pdf>

Influenza activity in Northern Ireland

Twenty-four spotter (sentinel) GPs are participating in the influenza surveillance scheme in Northern Ireland this season. During week 40, 19 general practices reported, covering 6.9% (117,531) of the population. The rate during week 40 for influenza and ILI was 25.5 and 5.1 per 100,000, respectively. There were no influenza virus detections or isolations from sentinel specimens or routine laboratory specimens during week 40.

Influenza activity in England, Scotland and Wales

To date, influenza indicators are at low levels in England, Scotland and Wales. GP consultations for ILI were 8.9 per 100,000 in week 39. The ERNVL received no

sentinel specimens during week 39. CDSC has received 4 reports of influenza A from specimens taken in September 2002.

Influenza activity in Europe

During September 2002, Spain reported its first case of influenza B, whilst Sweden and Norway each reported an imported case of influenza A.

The first bulletin of the European Influenza Surveillance Scheme (EISS) will be posted on their website on the 25th of October 2002 <http://www.eiss.org/>. During April 2002, Ireland became a full member of EISS and Northern Ireland became an associate member.

Influenza activity in Canada

In Canada, influenza activity remained at very low levels throughout the summer. During week 37 and 38 2002, Health Canada received 976 reports of laboratory tests for influenza, none were positive for influenza A or B. Other respiratory viruses circulating in Canada during this 2-week period were also at low levels with 0.8% of tests positive for RSV, 1.5% for parainfluenza viruses and 0.7% for adenovirus. Influenza A/Panama/2007/99 (H3N2) was the strain associated with an outbreak of ILI in a long-term care facility in Ontario, which began on the 17th of August 2002.

Influenza activity in the United States

No influenza surveillance reports are available yet for the 2002/2003 season from the United States.

Influenza activity Worldwide

During week 39, sporadic influenza activity was reported in Argentina, with 9 influenza A (unsubtyped) viruses identified. In Hong Kong during week 39, sporadic influenza activity was also reported, with 4 influenza B, 5 A (unsubtyped), and 4 A (H3N2) viruses detected. In Brazil, an epidemic of acute respiratory illness affecting mainly children and young adults in cities of the centre east region of Brazil was reported during week 39. Influenza B was detected in specimens from one city.

This report was produced by Dr Lisa Domegan, Surveillance Scientist, NDSC.