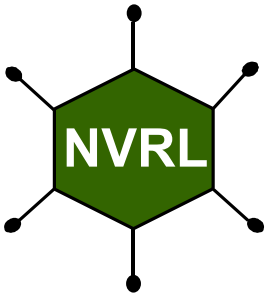
Weekly Influenza Surveillance Report



Week 8 2003

Report produced: 27/02/2003

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

Summary
The GP consultation rate for influenza–like illness continued to increase during week 8. In Ireland and Western Europe, the dominant circulating virus type is influenza B, mainly in younger age groups. Influenza A (H5N1) has been detected in 2 cases in Hong Kong, however the risk of human-to-human transmission is low, therefore an epidemic is unlikely.

Clinical data from sentinel GPs
During week 8 2003 (the week ending the 23rd of February 2003), 42 influenza-like illness (ILI) cases were reported from sentinel general practices, corresponding to an ILI consultation rate of 49.6 per 100,000 population. The consultation rate has increased from 37.0 per 100,000 in week 7 2003. The ILI consultation rate has increased each week since week 2 2003. Thirty of the 34 (88.2%) sentinel practices reported during week 8 2003, with 11 reporting ILI (figure 1). ILI cases were mainly among younger age groups, with 22 of the 42 cases (52.4%) aged between 0 and 14 years of age. No ILI cases were aged over 65 years of age.

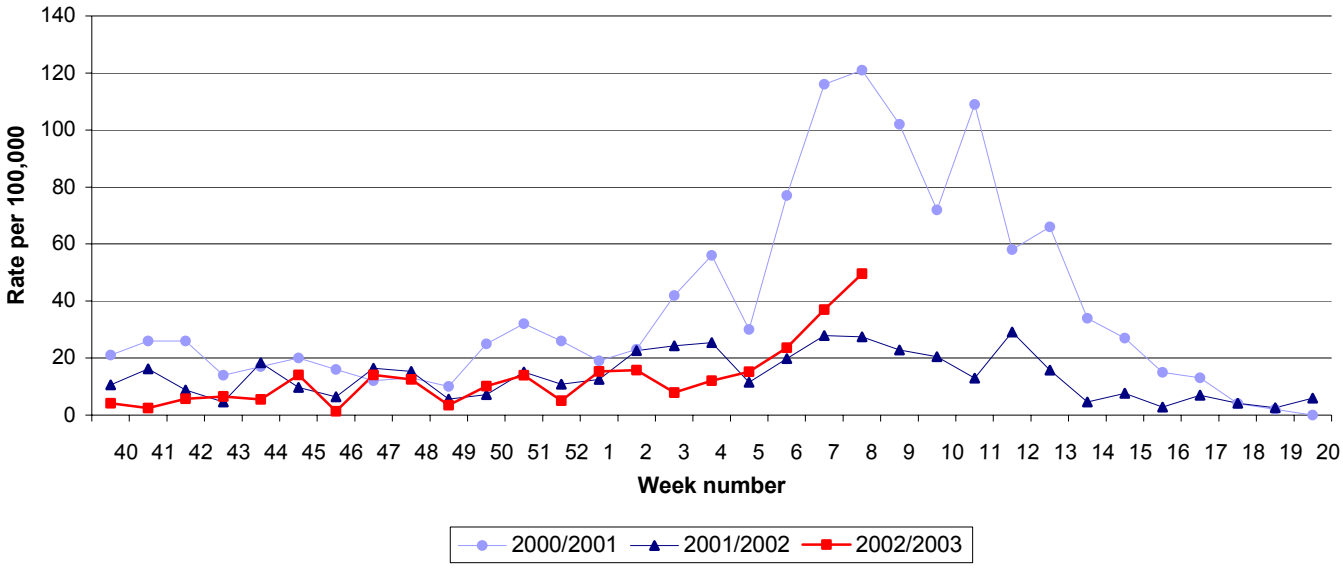


Figure 1: GP consultation rate for influenza-like illness per 100,000 population by report week, during the 2000/2001, 2001/2002 and 2002/2003 influenza seasons.

Virological data
During week 8, the National Virus Reference Laboratory (NVRL) received 20 swabs from sentinel GPs. Eight swabs were positive for influenza B virus and one was positive for influenza A (table 1). All 8 influenza B cases were aged between 8 and 19 years of age. Influenza-like illness due to influenza B tends to occur mostly in younger age groups, particularly in school aged children. The NVRL also tested 27 non-sentinel respiratory specimens mainly from hospitals during week 8; 2 were positive for RSV (RSV; figure 2).

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

Week number	*Total swabs*	*Positive swabs*	*Percentage positive*	*A (unsubtyped)*	*A (H1N1)*	*A (H1N2)*	*A (H3N2)*	*B*
8	20	9	45%	1	0	0	0	8
Season Total	**159**	**40**	**25.2%**	**4**	**0**	**0**	**2**	**34**

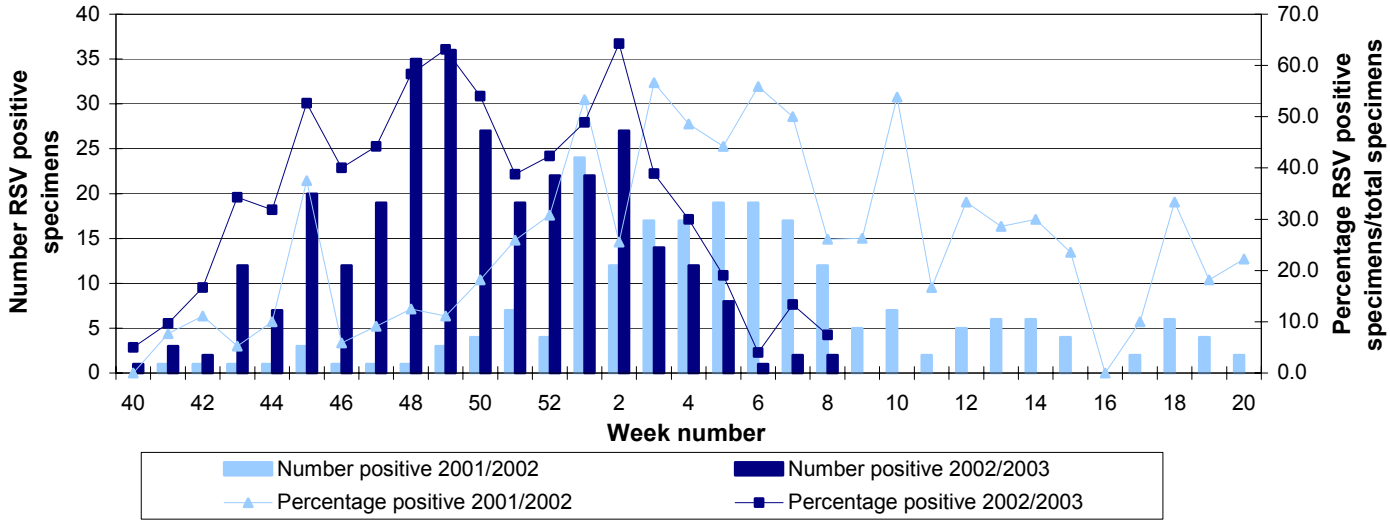


Figure 2: Number and percentage of non-sentinel RSV positive specimens detected during the 2001/2002 and 2002/2003 influenza seasons.

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, sentinel hospital admissions data, and/or sentinel school absenteeism data.

During week 7, the number of health boards with sporadic influenza activity increased to 6 (NWHB, NEHB, ERHA, SEHB, SHB & MWHB); the MHB and WHB reported no influenza activity (figure 3). Influenza B was the predominant circulating influenza type during week 7. Increased school absenteeism associated with ILI in some schools in the SEHB was reported during week 7. Increased absenteeism associated with gastrointestinal symptoms and headaches were also reported in a school in the SEHB. GI tract manifestations (nausea, vomiting, and diarrhoea) are uncommon for influenza in adults, but have been reported in children in school outbreaks of influenza B and A (H1N1).

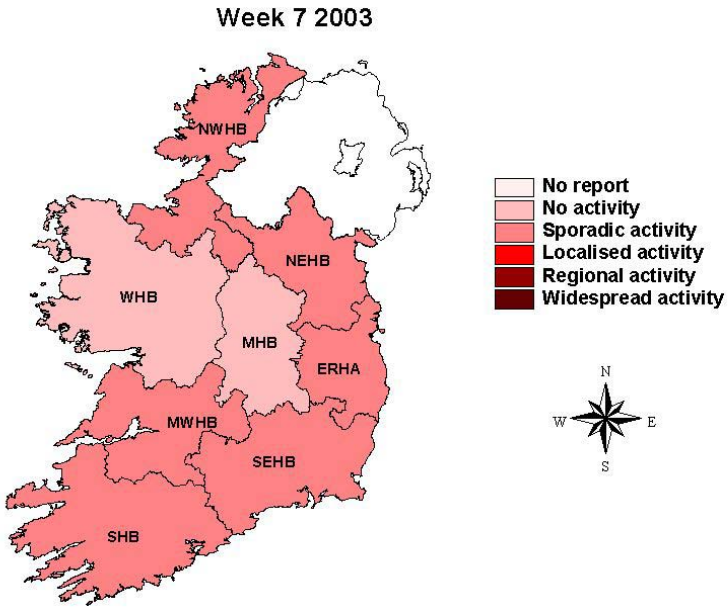


Figure 3: Map of influenza activity by health boards/authority during week 7 2003

Influenza activity in Northern Ireland
During week 8, 22/24 sentinel GPs reported a decreased combined ILI and clinical influenza rate of 42.5 per 100,000 in Northern Ireland, compared to 72.3 per 100,000 in week 7. Fourteen of 59 ILI cases were in 0-14 year olds. There were no positive influenza detections during week 8. http://www.cdscni.org.uk/

Influenza activity in England, Scotland and Wales
In England, the GP consultation rate for ILI changed little from a rate of 26.15 per 100,000 in week 7 to a rate of 23.4 per 100,000 in week 8. In Wales, the GP consultation rate for ILI also changed little, with a rate of 4.19 per 100,000 in week 8. The consultation rate in Scotland increased to a rate of 19 per 100,000 in week 8. Eighteen positive detections of influenza were referred to the ERNVL in week 8: 3 A (H3N untyped) and 15 B viruses. The majority of viruses antigenically characterised to date in England are similar to the 2002/2003 vaccine strains, however a very small number of H3N2 viruses isolated in recent weeks show reduced reactivity to A/Panama/2007/99. http://www.phls.co.uk/topics_az/influenza/fluactivity0203.htm

Influenza activity in Europe
The Czech Republic, France, Germany, Italy and Switzerland all reported widespread influenza activity in week 7. Belgium and Spain reported regional activity and Denmark reported local activity. Sporadic activity was reported in England, Lithuania, Norway, Romania, Scotland, the Slovak Republic and Slovenia and no activity was reported in Portugal, the Netherlands, Scotland and Wales. Ten networks reported increasing clinical morbidity rates in week 7, particularly among 0-14 year olds. The percentage of sentinel specimens positive for influenza increased to 32.2%, from 23.4% in week 6, ranging from 0% to 71.4% (in Ireland). Influenza A was the dominant influenza type circulating in week 7; influenza B was the dominant type

circulating up to week 6. During week 7, influenza B was more common in Western Europe (Portugal, Spain, France, Belgium, Ireland, England and Scotland) and influenza A in central Europe (Germany, Italy, Slovenia and the Czech Republic). Germany and Italy reported influenza A (H3N2) as the dominant virus subtype and Norway and Switzerland reported a co-circulation of influenza A and B. http://www.eiss.org/index.cgi

Influenza activity in Canada
Widespread influenza activity was reported in British Columbia during week 7. Localised activity was reported in Alberta, Quebec, and one region in New Brunswick, 8 provinces and territories reported sporadic or no influenza activity. Sentinel physicians reported 27 cases of ILI per 1000 patient visits, which is below the expected rate for the time of year. Health Canada received 1861 reports of laboratory tests for influenza: 109 influenza A and 17 influenza B. All viruses identified to date are closely related to the current vaccine strains.
http://www.hc-sc.gc.ca/pphb-dgspsp/fluwatch/index.html

Influenza activity in the United States
During week 7, the proportion of patient visits to sentinel providers for ILI was 3.0%, which is above the national baseline. Eleven state and territorial health departments reported widespread activity, 23 reported regional activity, and 13 reported sporadic activity. The WHO and NREVSS laboratories reported 2527 specimens tested for influenza virus, of which 451 were positive: 44 A (H1), 8 A (H3N2), 155 A (unsubtyped) and 244 B viruses. http://www.cdc.gov/ncidod/diseases/flu/fluvirus.htm

Influenza activity Worldwide
During week 7, no influenza activity was reported in Argentina and Croatia. Sporadic influenza activity was reported in Hong Kong with 55 influenza A (H3N2) and 56 influenza B viruses detected. Regional influenza activity was reported in Israel with influenza B predominating. The Russian Federation reported widespread influenza activity with school children being the most affected group. http://oms2.b3e.jussieu.fr/flunet/.

The cause of the acute respiratory syndrome in the Guangdong Province of China; which caused a total of 305 cases and 5 deaths from November 16th 2002 to February 9th 2003, remains unknown. It was previously reported as being *Chlamydia pneumoniae*. There is currently no evidence to link these cases to the influenza A (H5N1) cases in Hong Kong. http://www.promedmail.org

Influenza A (H5N1) in Hong Kong: As of the 20th of February 2003, the Department of Health in Hong Kong confirmed that a 33-year-old man, who died in hospital in Hong Kong on the 17th February, was infected with influenza A (H5N1) virus. The 33-year-old man is the second confirmed case of influenza A (H5N1) virus related to this outbreak. He is the father of a 9-year-old boy who also tested positive for influenza A (H5N1) on the 19th of February. Both cases had travelled to Fujian Province (China) in January. Two other members of the family who accompanied the cases to Fujian have also been unwell. The mother made a full recovery; the other affected member of the family (an 8-year-old girl) died on the 4th of February 2003 in Fujian Province. The health authorities in Hong Kong are continuing laboratory and epidemiological investigations to determine the source of this outbreak. The results of

laboratory tests show that the influenza virus that infected these two cases contained no human genes (the virus genes were purely avian in origin), therefore the risk of human-to-human transmission is very low and unlikely to lead to an epidemic.[2] A similar virus caused an outbreak in Hong Kong in 1997, with 18 cases detected and six deaths. Since then, authorities have maintained intensive surveillance of influenza in humans and birds in Hong Kong. In the current situation, the World Health Organization is in close contact with the health authorities in Beijing, China and Hong Kong. NDSC will continue to monitor the information arising from Hong Kong and the WHO. http://www.who.int/csr/don http://www.promedmail.org

This report was produced by Dr Lisa Domegan, NDSC.