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Influenza Weekly Surveillance Bulletin Northern Ireland, Week 3 (15–21 January 2011)

Summary

- GP consultation rates for combined flu/ FLI decreased from 190.6/100,000 population (updated) in week 2 to 126.2/100,000 in week 3 (34% decrease).
 - flu/FLI rates continue to remain above the Northern Ireland threshold (70/100,000 population).
 - o flu/FLI rates are now highest in the 0–4 year age group.
- Out-of-hours flu/FLI call rates decreased from 47.4 (updated) per 100,000 population in week 2 to 30.4 per 100,000 in week 3 (36% decrease). Out-of-hours Flu/FLI rates remain highest in the 1–4 year age group.
- The number of influenza A (H1N1) 2009 detections decreased from 86 (updated) in week 2 to 41 in week 3 (52% decrease).
- In 0–4 year olds, the number of new influenza A (H1N1) 2009 detections decreased from 27 in week 2 to 12 in week 3.
- 33 influenza B detections in week 3 compared with 32 (updated) in week 2 (3% increase).
- Respiratory syncytial virus (RSV) weekly detections decreased by 21% compared with week 2.
- Two swine flu related deaths were reported in week 3 (Saturday 15 January to Friday 21 January).
- The total number of swine flu related deaths reported up to noon, Wednesday 26 January 2011, is 23. Of these, 20 patients had an underlying health problem, 2 did not, and 1 is not yet known.

Key messages

- If the current trend continues, the peak of this year's flu season has passed.
- Both consultation rates and numbers of new cases have decreased.
- People with underlying health problems remain at much greater risk of developing serious complications of flu.
- People without underlying health problems can also be affected.



Sentinel GP consultation data

Figure 1: Sentinel GP consultation rate for combined flu and flu-like illness and number of virology flu detections from week 40 2009

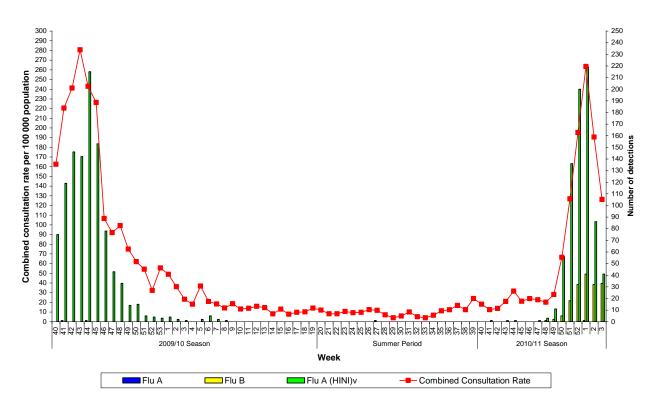
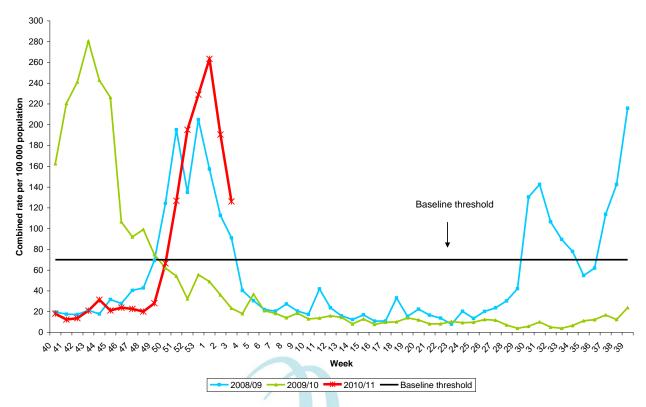


Figure 2: Sentinel GP consultation rate for combined flu and flu-like illness 2008/09-2010/11





The GP consultation rate decreased again this week from 190.6 (updated) per 100,000 population in week 2 to 126.2 per 100,000 population in week 3 (34% decrease). Rates continue to remain higher than previous years and above the Northern Ireland threshold (Figures 2 and 4).

Figure 3: Sentinel GP age-specific consultation rates for combined flu and flu-like illness from week 40 2009

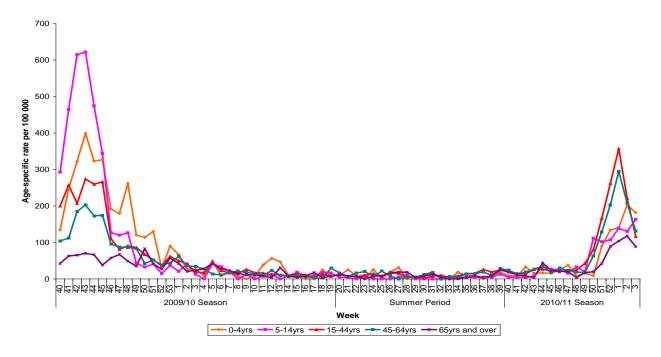
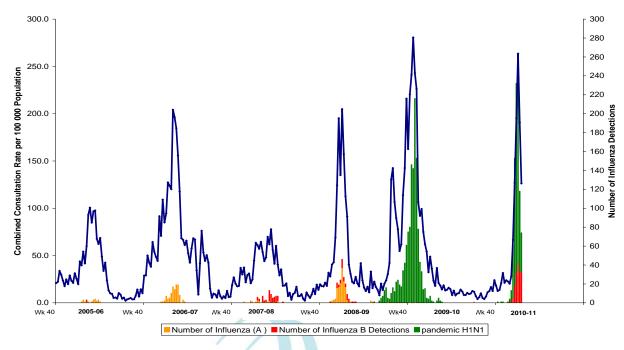


Figure 4: Sentinel GP combined consultation rate and number of influenza positive detections 2005/06 to present.



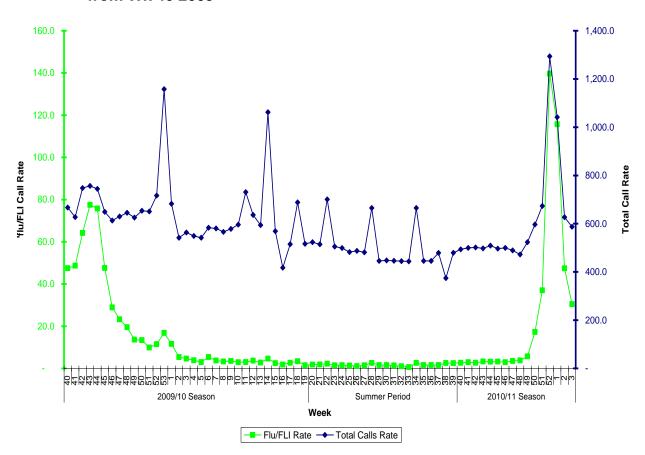


All age-specific consultation rates decreased in week 3 with the exception of the 5–14 year age group. The highest age-specific combined rates were in the 0–4 and 5–14 year age groups (Figure 3).

From the start of the current flu season 18% of flu detections are influenza B in contrast to the pandemic period when all flu detections were influenza A (H1N1) 2009 (Figure 4).

Out-of-hours (OOH) centres call data

Figure 5: OOH total call rate (all diagnoses) and call rate for flu and flu-like illness from Wk 40 2009





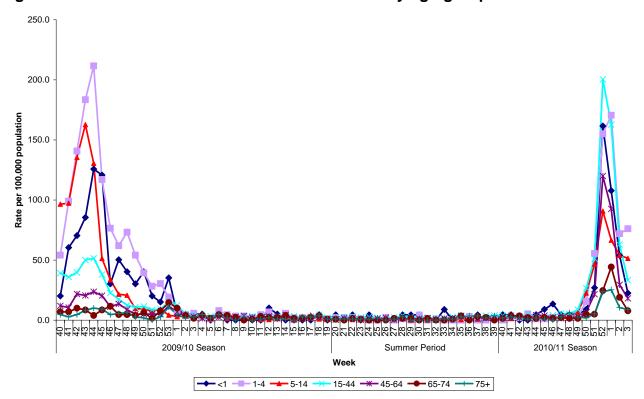


Figure 6: OOH call rates of flu and flu-like illness by age-group from week 40 2009

The number of calls to OOH centres (all diagnoses) in week 3 decreased by 6% compared with week 2. OOH call rates for flu/FLI also decreased from 47.4 per 100,000 population in week 2 to 30.4 per 100,000 population in week 3 (36% decrease). The highest age-specific rates are in the 1–4 year age group followed by the 5–14 year age group (Figure 6).

The proportion of total calls due to flu/FLI decreased from 7.6% in week 2 to 5.2% in week 3 (32% decrease).

Note:

Data from week 15 onwards represents all seven OOH databases.



Virology data

Table 1. Virus activity in Northern Ireland Week 3 2011								
Source	Specimens tested	(H1N1) 2009	Influenza B	RSV	Total influenza positive	% Influenza positive		
Sentinel	31	10	7	1	17	55%		
Non-sentinel	345	31	26	52	57	17%		
Total	376	41	33	53	74	20%		

Table 2. Cumulative total Week 40 – Week 3 2011								
	(H1N1) 2009	AH3 Flu B		RSV	Total			
0–4	149	0	33	300	482			
5–14	54	0	35	7	96			
15–64	498	0	80	26	604			
65+	55	1	16	15	87			
Unknown	1	0	0	2	3			
All ages	757	1	164	350	1272			

Table 3. Cumulative total Week 40 – Week 3 2011									
Age	Sentinel				Non-sentinel				
	(H1N1) 2009	Flu B	RSV	Total	(H1N1) 2009	АН3	Flu B	RSV	Total
0–4	3	1	1	5	146	0	32	299	477
5–14	15	4	0	19	39	0	31	7	77
15–64	73	16	3	92	425	0	64	23	512
65+	0	0	0	0	55	1	16	15	87
Unknown	0	0	0	0	1	0	0	2	3
All ages	91	21	4	116	666	1	143	346	1156



Note

All virology data is provisional. Positive specimens refer to the date of specimen, however number of specimens tested refers to the date of laboratory reports and not the date the specimen was received by the laboratory. Sentinel samples are tested for influenza including influenza A (H1N1) 2009, flu B, and RSV. Non-sentinel samples are tested for the above, plus: bocavirus, coronavirus, metapneumovirus, parainfluenza, respiratory adenovirus and rhinovirus.

Please note that cumulative virology figures can include updated figures for previous weeks due to laboratory results that may have arrived after publication of the bulletin.

Comments

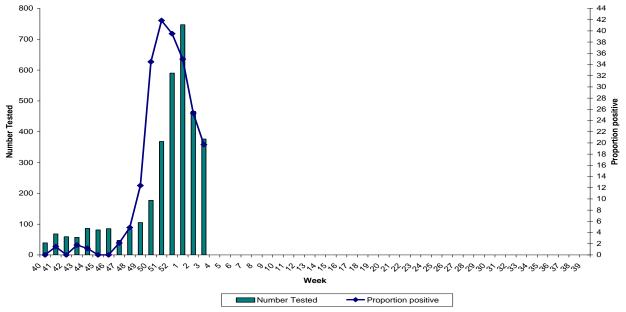
In week 3 there were 376 specimens (31 sentinel) submitted for testing to the Regional Virus Laboratory. There were 74 positive influenza specimens in this period; 41 influenza A (H1N1) 2009 and 33 influenza B. As in previous weeks the majority of influenza detections remain in the 15-64 year age group.

The median age for influenza A (H1N1) 2009 is 29 years with the median age for influenza B being 20 years.

The proportion of influenza B detections has been steadily increasing from 8% in week 50 to 45% in week 3.



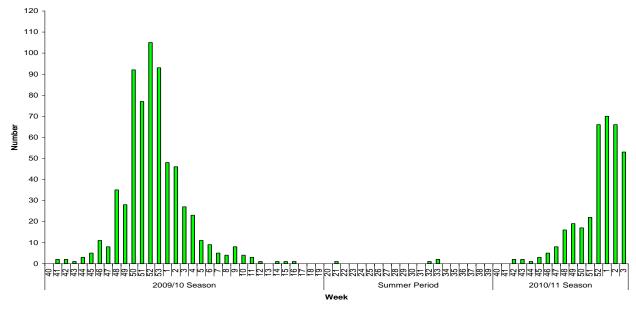
Figure 7: The number of samples tested (sentinel and non-sentinel) for influenza in Northern Ireland from week 40 2010 with the proportion positive.



The proportion of samples (sentinel and non-sentinel) that tested positive for all flu types decreased from 25% in week 2 to 20% (11% influenza A and 9% influenza B) in week 3.

Other respiratory viruses

Figure 8: Weekly cases of RSV viruses in Northern Ireland from week 40 2009



Comments

RSV detections decreased by 21% compared with week 2 with 86% of all RSV detections in the 0-4 year age group.



Mortality data

Weekly mortality data is provided from Northern Ireland Statistics and Research Agency. The data relates to the number of deaths from selected respiratory infections (some of which may be attributable to influenza, and other respiratory infections or complications thereof) registered each week in Northern Ireland. This is not necessarily the same as the number of deaths occurring in that period. Searches of the medical certificates of the cause of death are performed using a number of keywords that could be associated with influenza (bronchiolitis, bronchitis, influenza and pneumonia). Death registrations containing these keywords are presented as a proportion of all registered deaths.

Deaths due to influenza, bronchitis, bronchiolitis, pneumonia and proportion of all deaths with keywords mentioned by week of registration, from week 40 2009 75% Registered deaths with keywords 150 Proportion of all 60% registered deaths with Proportion of Deaths with Keywords keywords Weekly Registered Deaths 15% 25 40 42 44 46 48 50 52 1 3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 49 51 1 2009

Figure 9: Weekly registered deaths

Comments

The proportion of deaths related to respiratory keywords increased from 29% in week 2 to 34% in week 3. In week 3 there were 355 registered deaths of which 120 related to these specific respiratory infections.

Two swine flu related deaths were reported in week 3 (Saturday 15 January to Friday 21 January). This does not necessarily mean the deaths occurred during the reporting period.

The total number of swine flu related deaths reported up to noon, Wednesday 26 January 2011, is 23. Of these, 20 patients had an underlying health problem, two did not, and one is not yet known.



Note: The definition of a swine flu related death is: "Death caused directly by swine flu (Part I of the death certificate); Swine flu contributed to death (Part II of death certificate) and/or patient tested positive for swine flu".

Vaccine uptake

As at the end of December 2010, the proportion of people in Northern Ireland aged 65 years and over who had received the 2010/11 seasonal influenza vaccine was 69.8%, while the uptake in those aged under 65 in an at risk group was 62.7% (provisional data). This compares with 77% uptake in the over 65 years, and 81.8% in the under 65 at risk group for the same period last year.

Data sources

Data to monitor influenza activity in Northern Ireland is collected from the following sources:

- GP sentinel surveillance representing 11.6% of the Northern Ireland population;
- GP out-of-hours surveillance system;
- Virological reports from the Regional Virus Laboratory (RVL);
- Mortality data from Northern Ireland Statistics and Research Agency (NISRA).

Note

The figures for previous weeks included in this bulletin are updated with data from returns received after the production of the last bulletin. The current bulletin reflects the most up-to-date information available.

Further information

Further information on influenza is available at the following websites:

http://www.hpa.org.uk http://www.publichealth.hscni.net

http://www.who.int http://ecdc.europa.eu

http://euroflu.org

Detailed Influenza weekly reports can be found at the following websites:

England, Scotland and Wales:

http://www.hpa.org.uk/Topics/InfectiousDiseases/InfectionsAZ/SeasonalInfluenza/EpidemiologicalData/

Republic of Ireland: http://www.ndsc.ie/hpsc/



For further information on the Enhanced Surveillance of Influenza in Northern Ireland scheme or to be added to the circulation list for this bulletin please contact:

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This report was compiled by Cathriona Kearns, Paul Cabrey, and Dr. Brian Smyth.

