www.publichealth.hscni.net

Influenza Weekly Surveillance Bulletin Northern Ireland, Week 49 (4–10 December 2010)

Summary

- Evidence of increasing influenza virus activity over the past two week though flu/flu-like illness (FLI) consultation rates are at relatively low levels.
- GP consultation rates for combined flu/ FLI increased from 20.1/100,000 (updated) population in week 48 to 29.2/100,000 in week 49.
 - flu/FLI rates remain well below the Northern Ireland threshold (70/100,000 population);
 - o flu/FLI rates are at low levels in all age groups.
- Ten new influenza A (H1N1) 2009 detections.
- Two influenza B detections.
- Respiratory syncytial virus (RSV) weekly detections continue to rise with 18 reported in week 49.
- Out-of-hours flu/FLI call rates remain low but appear to be increasing.
- As influenza activity is increasing the publication of the bulletin will now be on a weekly basis.

Introduction

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).



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 20 2010

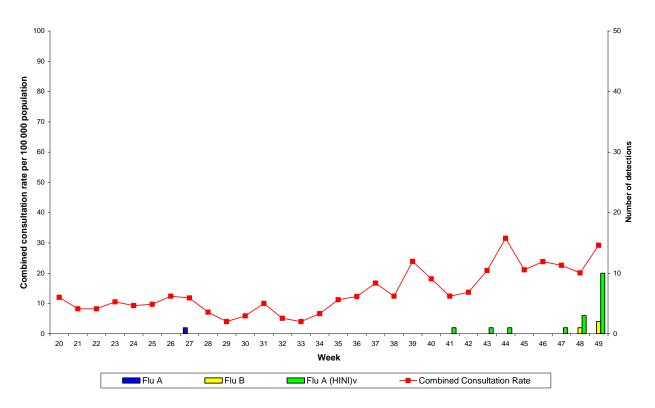


Figure 2: Sentinel GP consultation rate for combined flu and flu-like illness 2008/09-2010/11

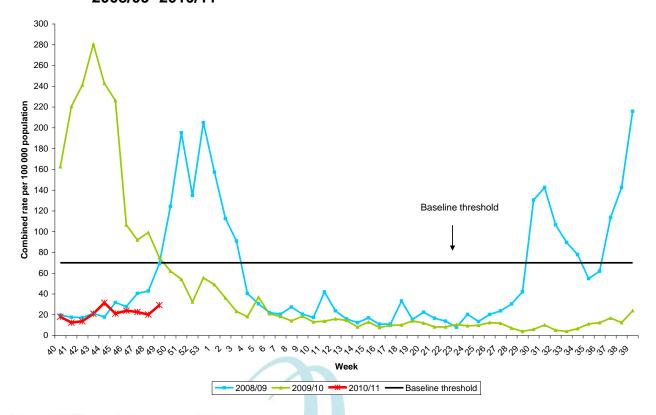
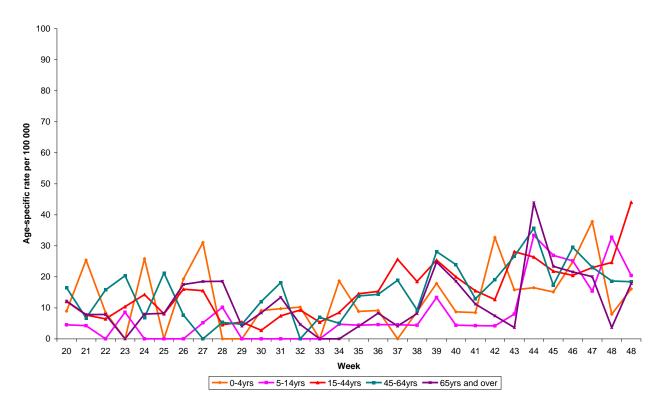




Figure 3: Sentinel GP age-specific consultation rates for combined flu and flu-like illness from week 20 2010



Comments

The GP consultation rate has increased from 20.1 per 100,000 population in week 48 to 29.2 per 100,000 population in week 49 (45% increase). Rates are below those for the same period in 2008/09 and continue to remain well below the Northern Ireland threshold (Figure 2).

Age specific rates remain low with the highest age specific combined rates in week 49 in the 15–44 year age group. In week 49 the consultation rate for the 15–44 year age group was 44.0 per 100,000 population compared to 24.6 in week 48 (79% increase).



Out-of-Hours (OOH) Centres Call Data

Figure 4: OOH total call rate (all diagnoses) and call rate for flu and flu-like illness from Week 40 2009

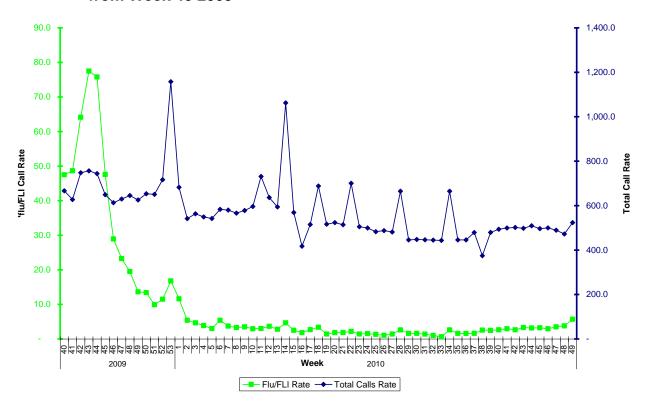
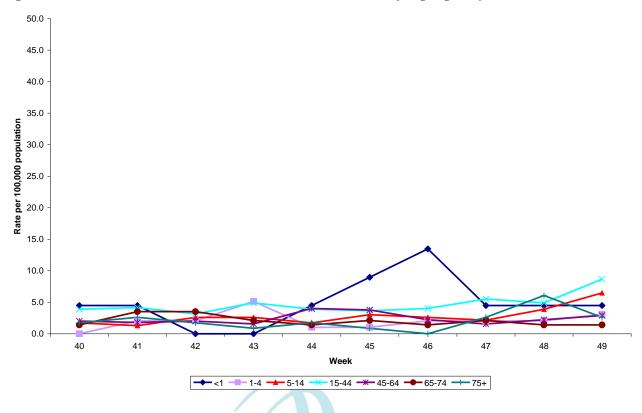


Figure 5: OOH call rates of flu and flu-like illness by age-group from Week 40 2010





Comments

OOH call rates for flu/FLI remain low but appear to be increasing. In week 49 the call rate was 5.7 per 100,000 population compared to 3.8 per 100,000 population in week 49 (50% increase). The highest age-specific flu/FLI rate for week 49 was in the 15-44 year age group.

Note:

- Data from week 15 onwards represents all 7 OOH databases.
- OOH charts in previous bulletins were based on numbers or proportions of calls whereas these are based on rates of calls per 100,000 population.

Respiratory Outbreaks

There were no further respiratory outbreaks reported to the PHA during week 49.

Virology Data

Table 1. Virus activity in Northern Ireland Wk 49 2010								
Source	Specimens Tested	(H1N1) 2009	Influenza B	RSV	Total influenza Positive	% Influenza Positive		
Sentinel	6	1	0	0	1	17%		
Non-sentinel	99	9	2	18	11	11%		
Total	105	10	2	18	12	11%		

Table 2. Cumulative total week 40 - week 49 2010							
	(H1N1) 2009	Flu B	RSV	Total			
0-4	1	1	52	54			
5-14	1	1	1	3			
15-64	15	1	2	18			
65+	0	0	0	0			
Unknown	0	0	0	0			
All ages	17	3	55	75			



Table 3. Cumulative total week 40 - week 49 2010								
AGE	Sentinel				Non-sentinel			
	(H1N1) 2009	Flu B	RSV	Total	(H1N1) 2009	Flu B	RSV	Total
0-4	0	0	0	0	1	1	52	54
5-14	0	0	0	0	1	1	1	3
15-64	3	0	1	4	12	1	1	14
65+	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0
All ages	3	0	1	4	14	3	54	71

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.

From week 46 not all specimens will be tested for 'other' respiratory viruses, this may lead to a reduction in the numbers being tested for these viruses. However, this will not affect the numbers being tested for influenza or RSV.

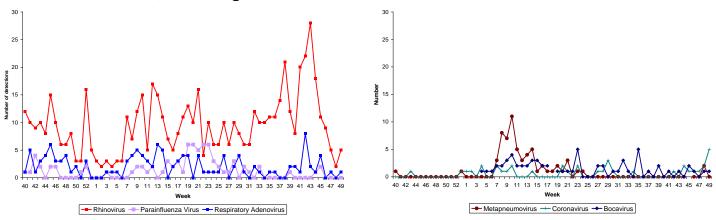
Comments

In week 49 there were 105 specimens (6 sentinel) submitted for testing to the Regional Virus Laboratory. There were 12 positive influenza specimens in this period; 10 influenza A (H1N1) 2009 and two influenza B.



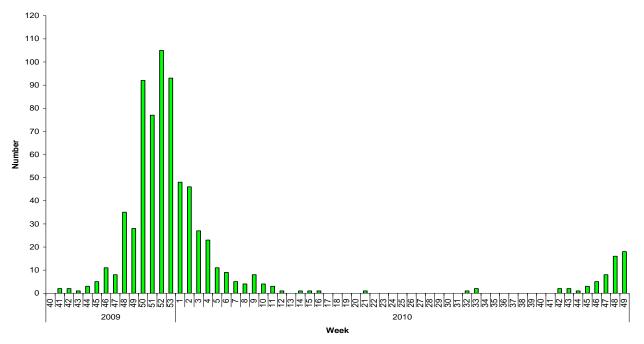
Other respiratory viruses

Figure 6: Weekly cases of other respiratory viruses in Northern Ireland from Wk 40 2009, excluding RSVs



Note - Bocavirus was not part of the standard respiratory panel prior to 2010

Figure 7: Weekly cases of RSV viruses in Northern Ireland from Wk 40 2009



Comments

There were 30 other respiratory viruses (excluding influenza) recorded in week 49. RSV detections have increased with 18 detections in week 49 compared to 16 in week 48 (13% increase).

During week 49 RSV predominated and accounted for 60% (n=18) of all detections. There were also five rhinovirus, five coronavirus, one respiratory adenovirus, and one bocavirus detections in week 49.



Mortality Data

During last year's pandemic, additional data collection was undertaken to identify deaths related to the H1N1 2009 pandemic (swine flu) virus and these deaths were reported in the bulletin. Now that the pandemic has been declared over by WHO, we have returned to customary reporting of seasonal flu mortality as detailed below. Although a death from H1N1 2009 may occasionally be reported in the media, there will be no cumulative total of deaths from any of the types of influenza viruses, as additional data is no longer collected and any figures would be incomplete and misleading.

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, 2009-10 175 75% Registered deaths with keywords 150 Proportion of all 60% registered deaths with Proportion of Deaths with Keywords keywords Weekly Registered Deaths 30% 25 0 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 49 2009 2010 Week

Figure 8: Weekly registered deaths

Comments

The proportion of deaths related to respiratory keywords has remained relatively stable at 30% compared to 31% in week 48. In week 49 there were 301 registered deaths of which 89 related to these specific respiratory infections.



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:

Paul Cabrey Information Officer Public Health Agency 028 90263386 Cathriona Kearns Epidemiological Scientist Public Health Agency 028 90263386

Email: flusurveillance@hscni.net

Acknowledgements

Public Health Agency wish to thank NISRA, the sentinel GPs, Out-of-Hours Centres, Regional Virus Laboratory and all who have contributed to the surveillance system and who have contributed towards this report.

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

