

Summary

- ❖ GP consultation rates for combined 'flu/ FLI increased slightly this week from 91.9 in Wk 47 to 99.2/100,000 population in Wk 48 (8% increase). Rates remain highest in the 0-4 year age group. However, this may be partly explained by the increased RSV activity in this age group.
- ❖ OOH calls for 'flu/FLI decreased from 324 in Wk 47 to 272 in Wk 48 (16% decrease).
- ❖ Thirty-three influenza detections A/H1N1v in Wk 48 compared to 43 in Wk 47 (23% decrease).
- ❖ A cumulative total of 1321 swine influenza detections in Northern Ireland as at noon 2nd December 2009.
- ❖ A cumulative total of 563 hospitalised swine flu cases as at noon on 2nd December 2009.
- ❖ The number of new hospitalised cases decreased from 17 in Wk 47 to 8 in Wk 48 (53% decrease).
- ❖ No new swine flu related deaths have been reported in Wk 48. The total number of swine flu related deaths remains at 13 as at 2nd December 2009.
- ❖ Antiviral prescriptions have decreased from 760 in Wk 47 to 586 in Wk 48 (23% decrease).

Sentinel GP Clinical Consultation Data

Figure 1. Consultation rates and virology for Influenza and Influenza-Like Illness

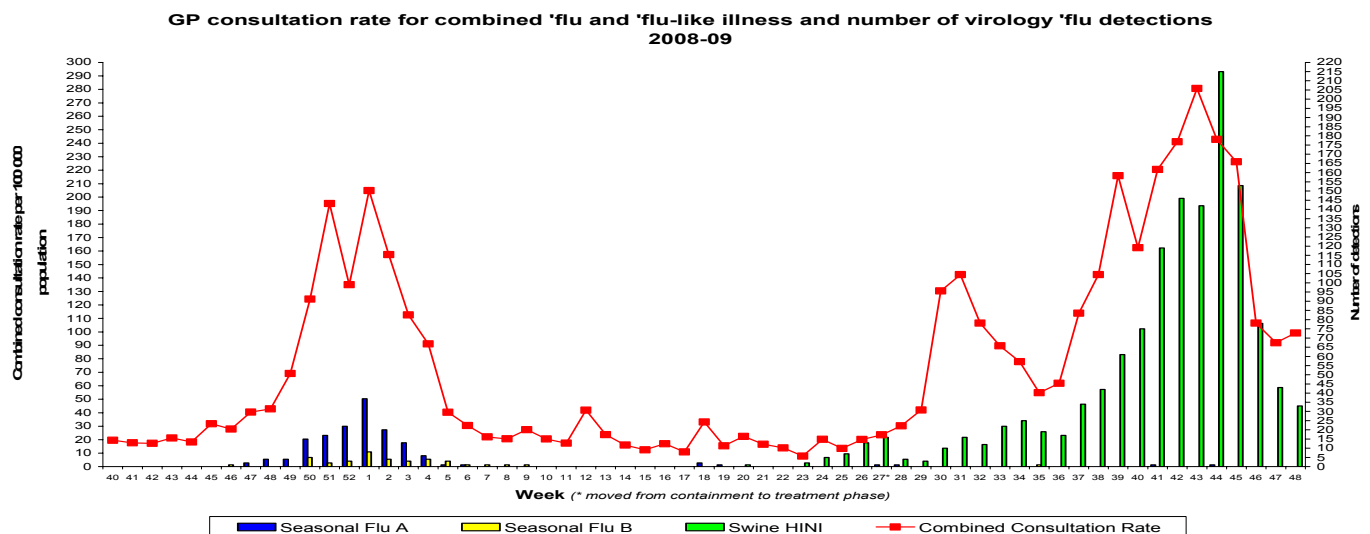
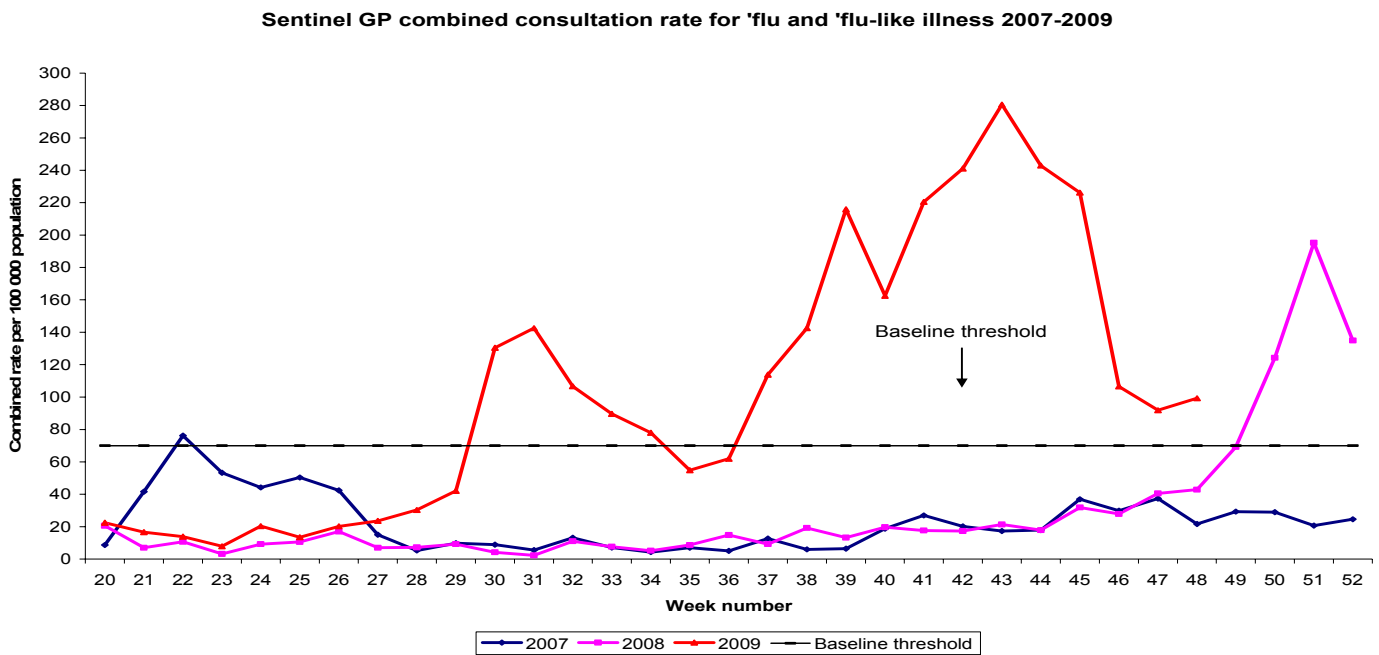
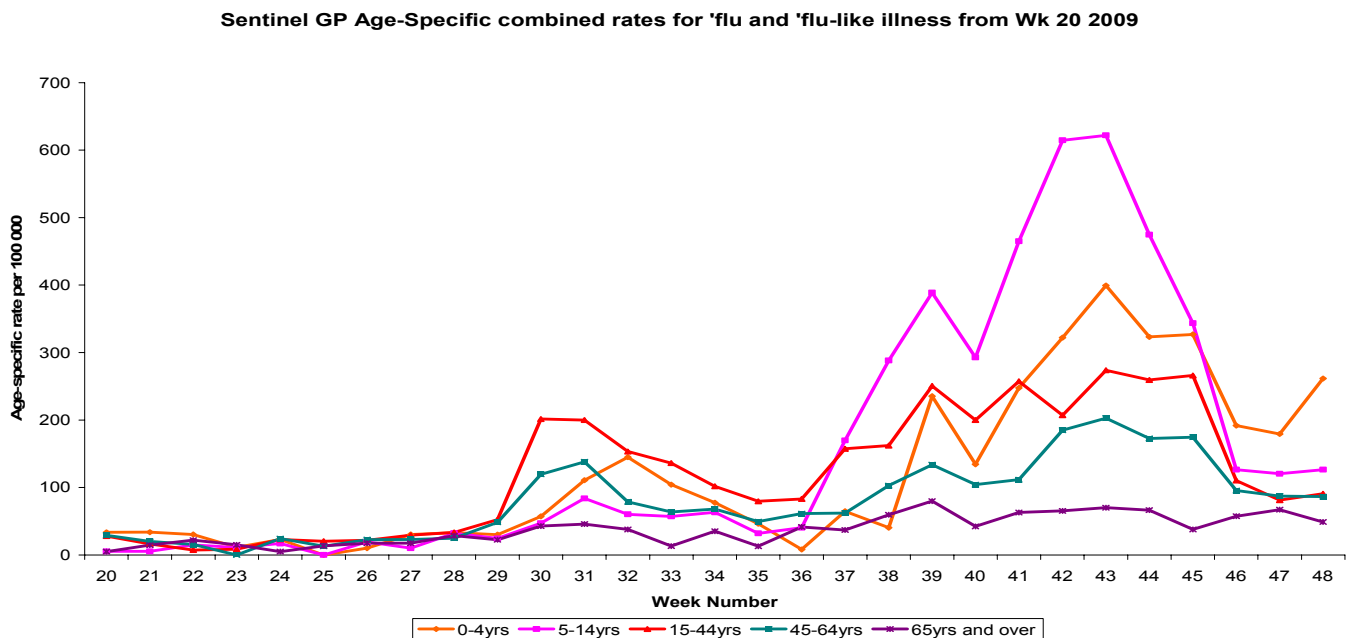


Figure 2. Consultation rates for Influenza and Influenza-Like Illness by year



Following a review of consultation data over the past 9 years, a provisional baseline threshold of 70/100,000 has been proposed to distinguish baseline from seasonal activity.

Figure 3. Weekly consultation rate for combined Influenza and Influenza-like illness in Northern Ireland by age-group



Comments: The GP combined consultation rate per 100,000 population increased this week from 91.9 in Wk 47 to 99.2 in Wk 48, (8% increase) after 4 weeks in which rates had decreased. Rates continue to be higher than previous years and remain above the baseline threshold (Figure 2).

The highest age specific combined rates were in the 0-4 year age group again this week, where rates increased by 46%, from 179.3 in Wk 47 to 261.6 in Wk 48. This may relate to increased RSV activity (see Figure 8). Rates were stable in the majority of age groups in Wk 48 with the exception of the 65 years and over age group which decreased by 27% compared to Wk 47.

Out-of-Hours (OOH) Centres Call Data

Figure 4. Weekly OOH total calls and estimated call numbers for Influenza and Influenza-like illness.

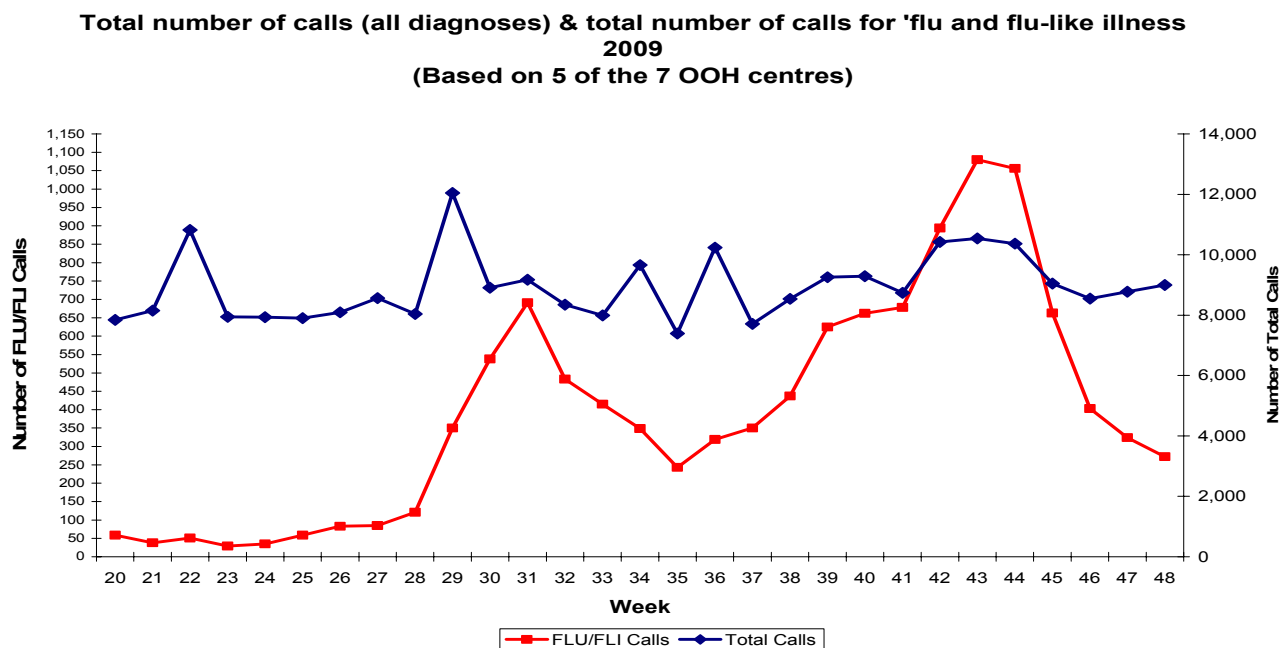
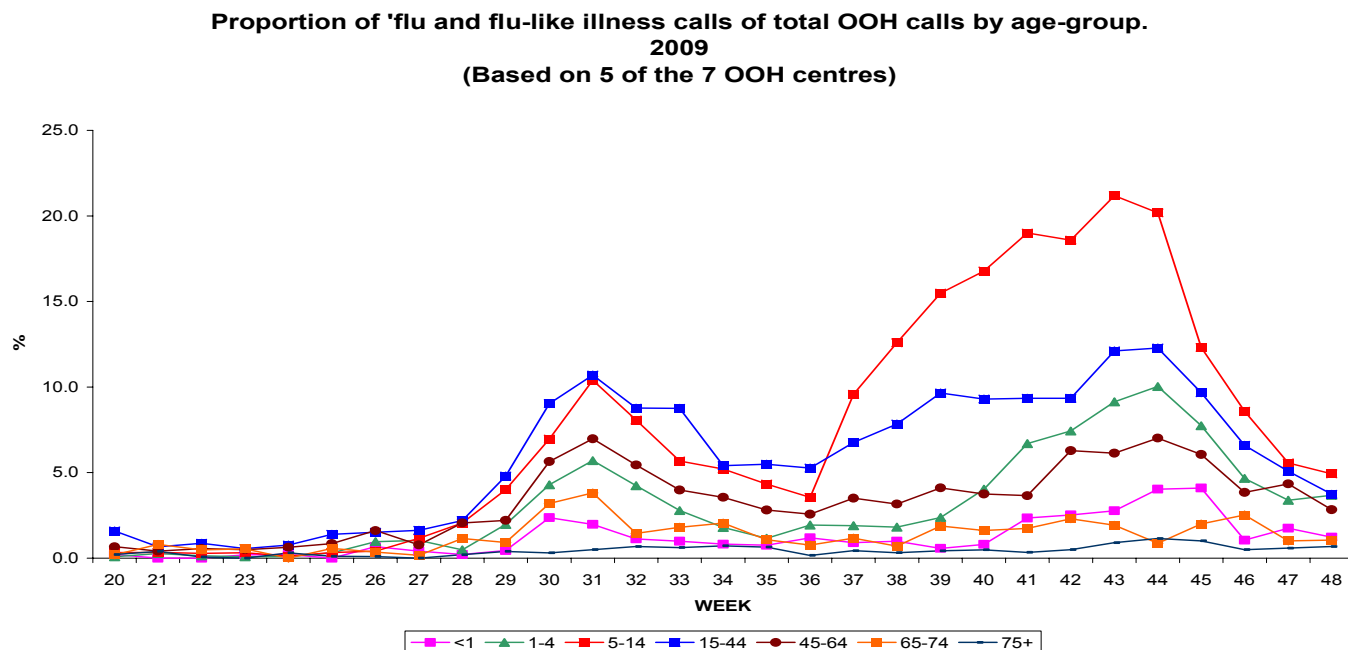


Figure 5. Proportion of Influenza and Influenza-like illness calls to OOHs by age-group.



Comments: The number of calls to OOH centres (all diagnoses) increased slightly again this week from 8776 calls in Wk 47 to 8994 calls in Wk 48 (2% increase). However, the number of calls for 'flu/FLI decreased. The proportion of calls for 'flu/FLI decreased from 3.7% in Wk 47 to 3.0% in Wk 48. In Wk 48 the proportion of calls relating to 'flu/FLI decreased or remained similar to Wk 47 in the majority of age groups, with the exception of the 1-4 year age group which increased slightly. The 5-14 year age group continues to remain highest overall.

Virological Data

Table 1. Virus activity in Northern Ireland

Week Number	Source	Specimens Tested	Influenza A		Influenza B	RSV	Total influenza Positive	% Influenza Positive
			Seasonal	Swine				
48	Sentinel	41	0	11	0	NT	11	27
	Non-sentinel	388	0	22	0	35	22	6
	Total	429	0	33	0	35	33	8

NB: All virology data is provisional. Specimens tested refer to the date of laboratory reports and not the date the specimen was received by the laboratory.* NT = not tested

Table 2. Cumulative virus activity by age-group for NI 2009

Cumulative Total Wk 20 - Wk 48					
AGE	FluA		FluB	RSV	Total
	Seasonal	Swine			
0-4	1	214	0	84	299
5-14	0	370	0	0	370
15-64	1	683	0	0	684
65+	0	38	1	0	39
Unknown	2	6	0	0	8
All ages	4	1311	1	84	1400

The first swine influenza detection in 2009 was reported in Wk 20 (Mid May). By the end of Wk 48 there had been 1311 laboratory confirmed detections in Northern Ireland.

Provisional information indicates an additional 10 cases reported up to noon 02nd December 2009, bringing the total number of confirmed cases in Northern Ireland to date to 1321.

During Wk 48 a total of 429 specimens were tested by the Regional Virus Laboratory (388 non-sentinel and 41 sentinel). There were 33 swine influenza detections (11 from sentinel practices).

As of 12th November 2009, 28 pandemic influenza samples from Northern Ireland have been tested for antiviral susceptibility at the Health Protection Agency Respiratory Virus Unit, London. Samples were screened for the marker commonly associated with resistance to oseltamivir in seasonal influenza (H275Y). None of the Northern Ireland samples showed resistance to oseltamivir. Further samples have been submitted for susceptibility testing and results are awaited.

Figure 6. Total number of samples tested and percentage positive.

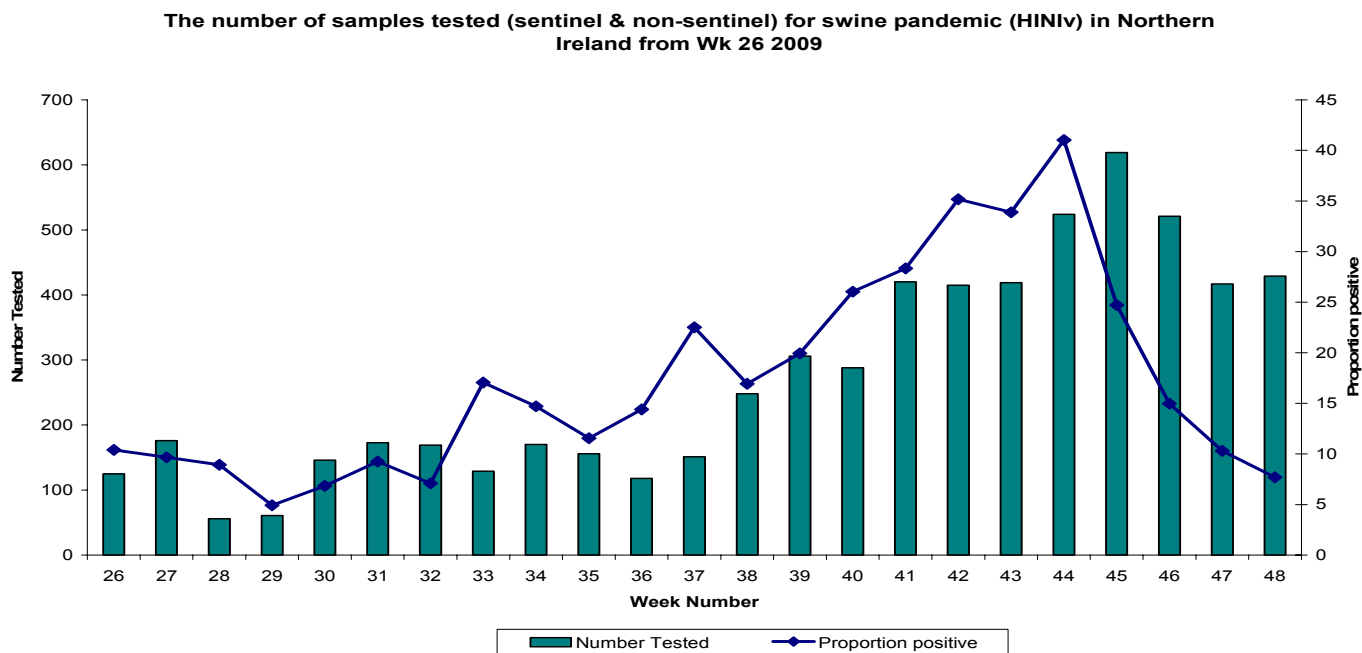
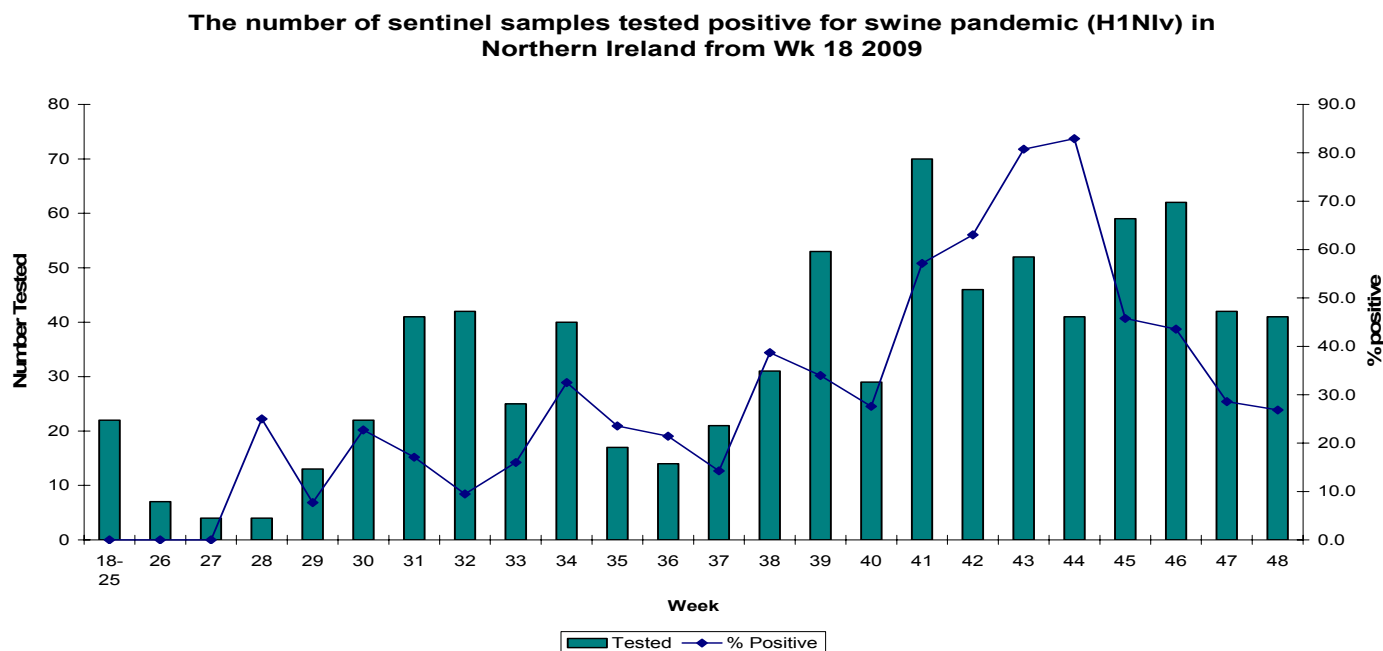


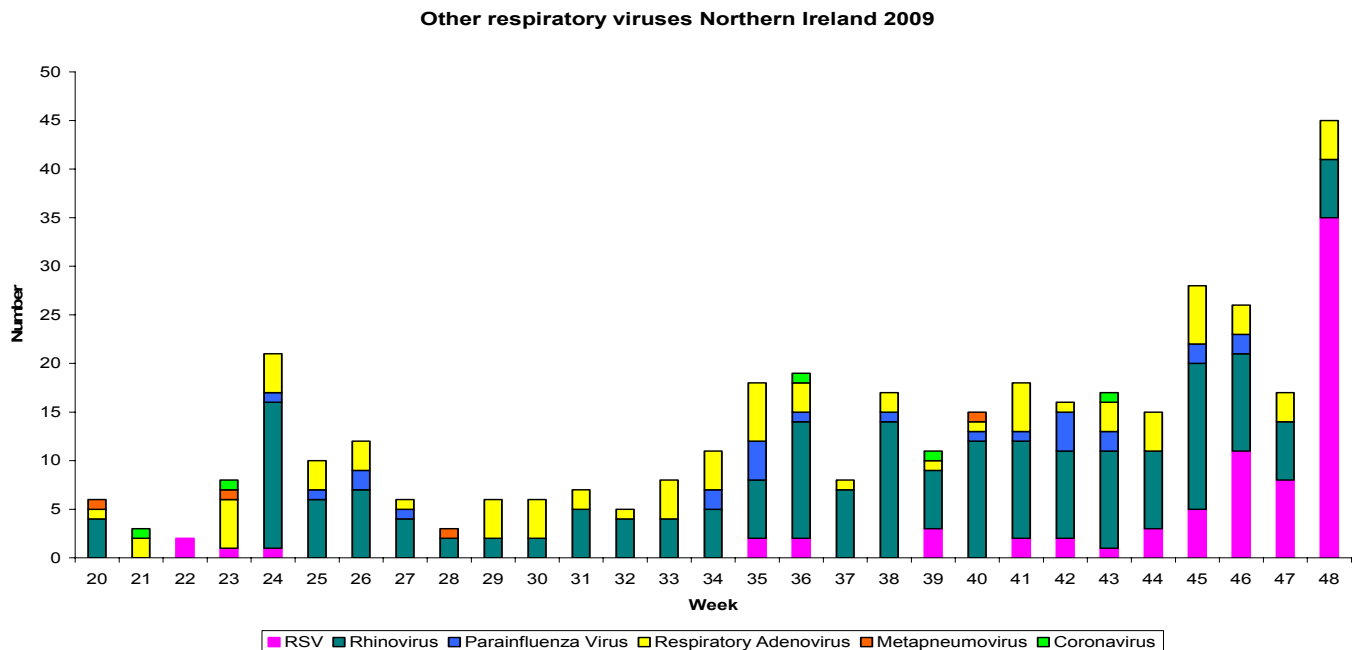
Figure 7. Number of swabs from sentinel practices and percentage positive for A/H1N1v.



Comments: The proportion of samples (sentinel and non-sentinel) that tested positive for A/H1N1v decreased again this week from 10% in Wk 47 to 8% in Wk 48 (Figure 6). The proportion of sentinel swabs positive also decreased from 29% in Wk 47 to 27% in Wk 48 (Figure 7).

Other respiratory viruses

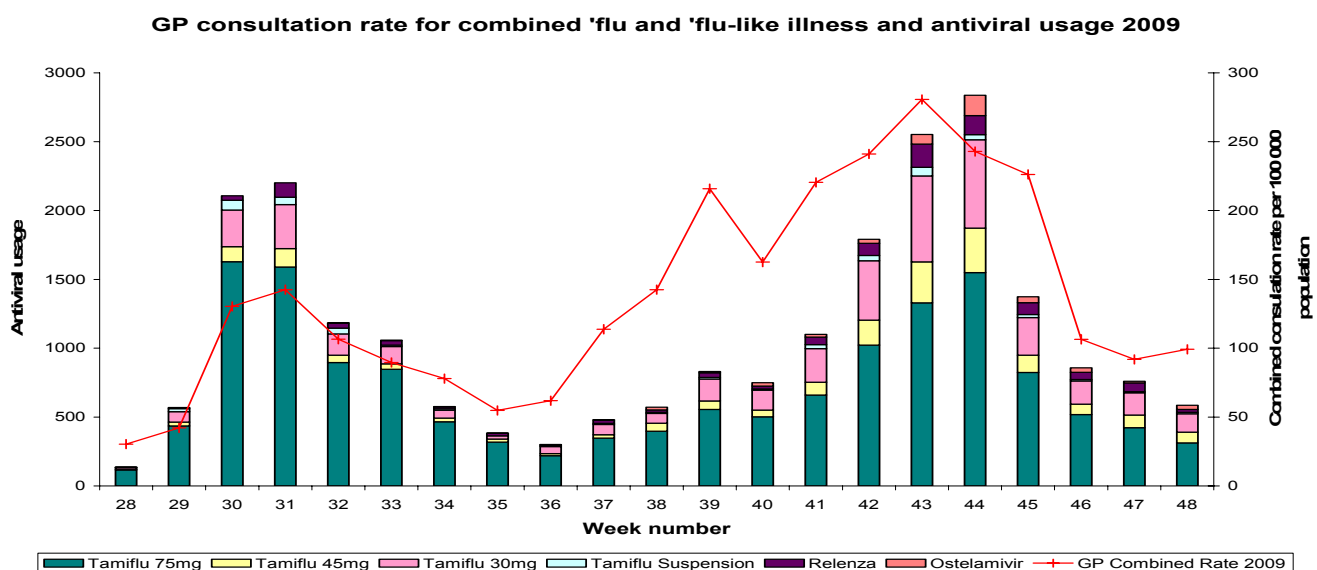
Figure 8. Weekly cases of other respiratory viruses



Comments: The number of other respiratory viruses recorded has increased from 17 in Wk 47 to 45 in Wk 48. The number of RSV detections increased significantly this week, with 35 detections compared with 8 last week. RSV accounted for 78% of all other respiratory viruses recorded and all were in hospitalized infants (0-4 years). There were also six rhinovirus (13%) and four respiratory adenovirus (9%) detections in Wk 48.

Antiviral usage

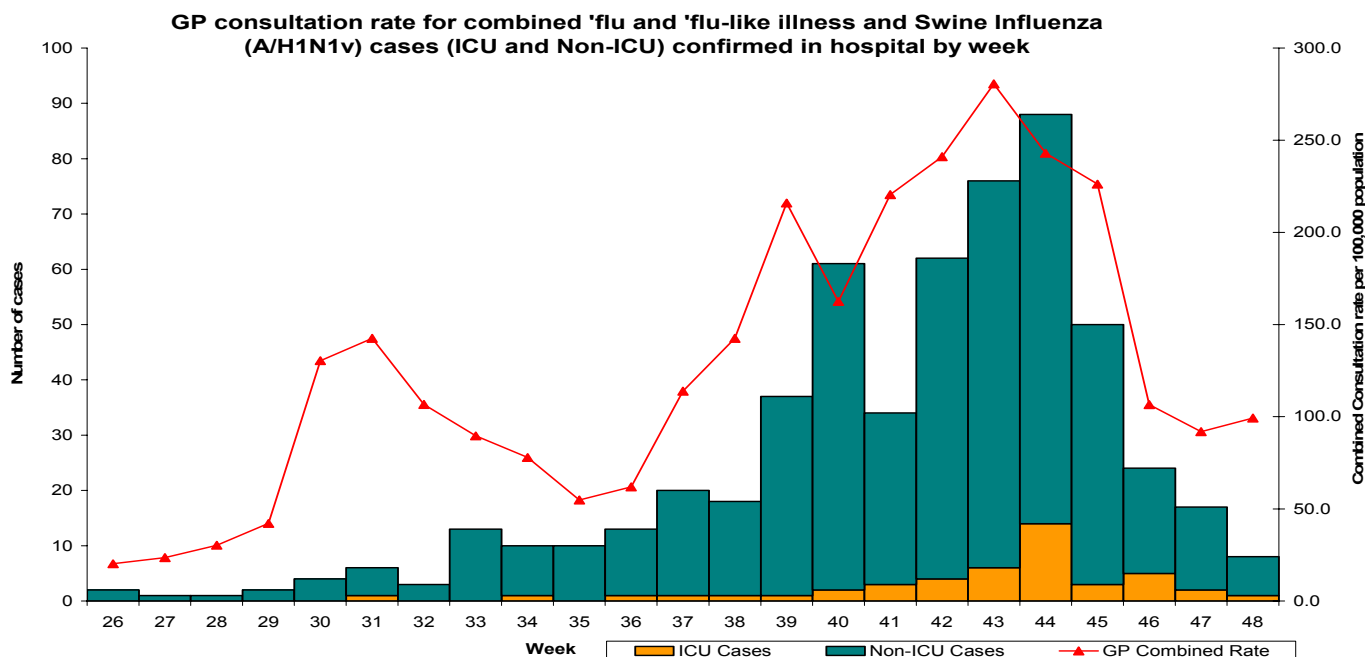
Figure 9. GP consultation rate for 'flu/flu-like illness and number of antiviral prescriptions



Comments: In Wk 48, 586 antiviral courses were prescribed compared with 760 courses in Wk 47 (23% decrease).

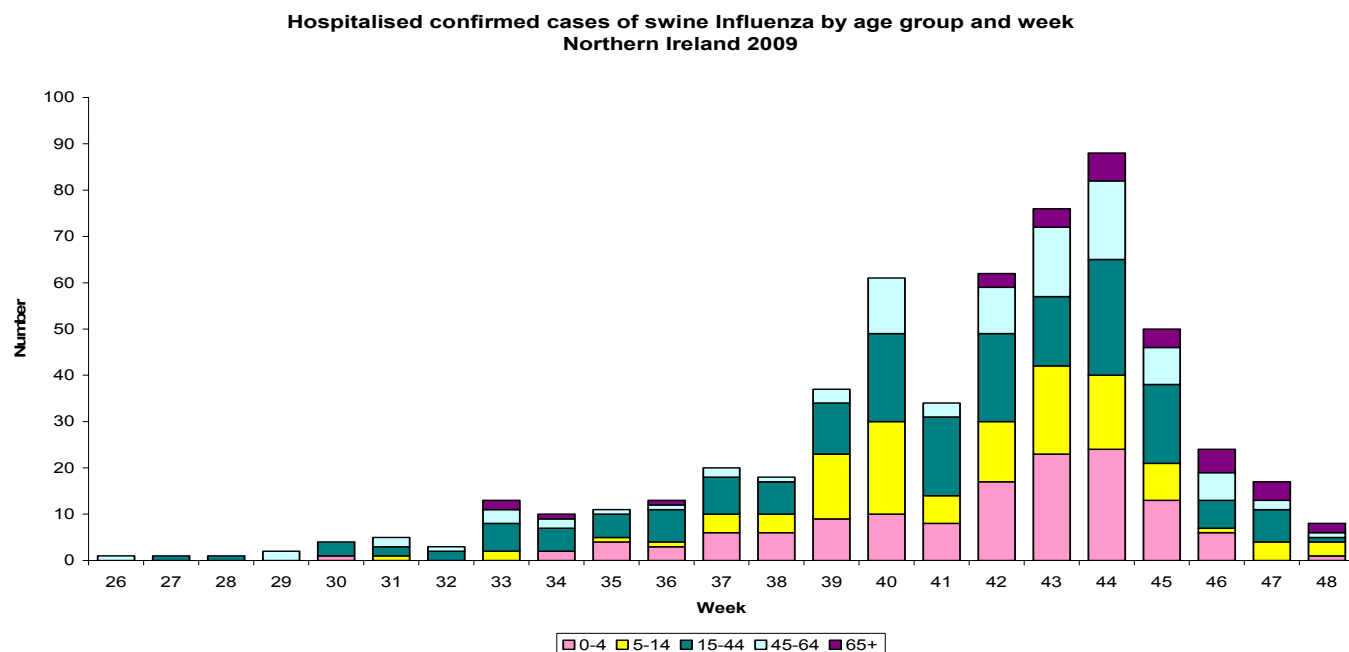
Swine influenza cases confirmed in Hospitals

Figure 10. Swine influenza cases confirmed in hospital by week.



Note: Graph has been updated due to late returns, numbers may vary slightly from previous week

Figure 11. Swine influenza cases confirmed in hospital by age group.



Comments: As at 2nd December 2009 there have been five hundred and sixty-three cases in hospitals in Northern Ireland. The number of hospitalised cases confirmed with A/H1N1v decreased again this week from 17 in Wk 47 to 8 in Wk 48 (figures provisional) (Figure 10). In Wk 48 there was a decrease in hospitalised cases in all age groups. Forty-eight cases with

confirmed swine influenza were admitted to Intensive Care Units up until 02nd December in Northern Ireland.

Outbreaks

For the period 23rd November to 29th November there were no new school outbreaks reported in Northern Ireland. The cumulative number of reported school outbreaks since the beginning of September remains at twenty-five. The last reported school outbreaks were in Wk 43 (17-23 October).

All special schools have been asked to notify the PHA if they have 1 or more children with swine flu. If a case occurs in a special school, those with swine flu are advised to stay at home until they are better, and if necessary, antiviral prophylaxis is given to other children. The highest risk children (those in special schools for severe learning disability) have been offered the swine flu vaccine, with over 2,100 having been vaccinated to date, giving an uptake rate of 76% (revised).

There have been no school closures as a result of the outbreaks and appropriate public health advice has been given.

The following caveats apply:

- The Public Health Agency is not routinely informed of influenza-like illness resulting in school absenteeism.
- These figures include outbreaks confirmed and under investigation.
- As this is a non-statutory reporting system it will incompletely capture the true numbers of outbreaks.

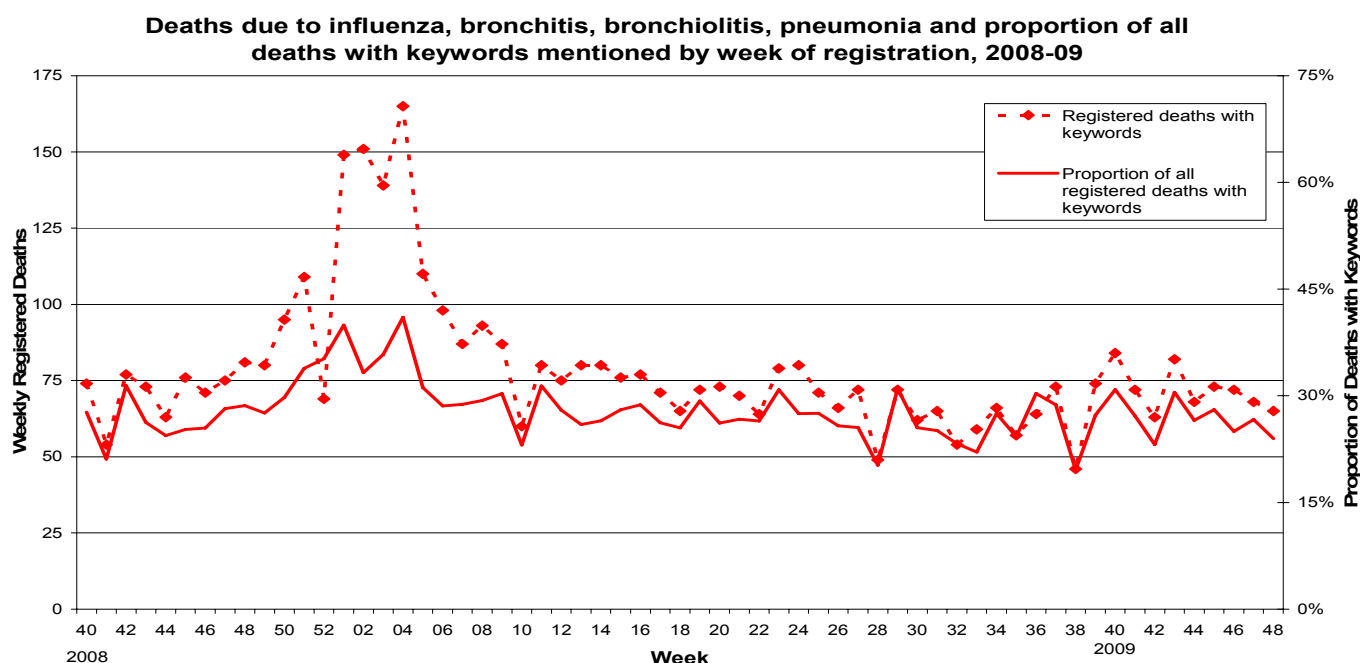
Note: *The definition of a school outbreak:*

- *Schools with confirmed case or cases or*
- *50% or more of class off with any illness or*
- *10% or more of the school pupils absent/ill*

Mortality Data

Daily 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

Figure 12. Weekly registered deaths



Comments: The proportion of deaths related to respiratory keywords has decreased from 27% in Wk 47 to 24% in Wk 48. In Wk 48, there were 271 registered deaths of which 65 related to these specific respiratory infections.

No new swine flu related deaths have been reported in Wk 48. The total number of swine flu related deaths reported up until 2nd December remains at thirteen. The last reported swine flu related death was in Wk 46 (7-13 November).

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".*

Further information

Further information on pandemic (H1N1) 2009 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/infections/topics_az/influenza/seasonal/activity0809/flureport.htm

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, Joy Miskimmons and Dr. Brian Smyth, with data input assistance from Paul Cabrey.

Appendix (1)

2008 -2009 Season Week No	Total cases FLI	Total cases 'Flu	Proportion due to clinical 'flu	Combined Rate for 'Flu and FLI (per 100 000 population)
Wk 20	25	7	22%	22.4
Wk 21	22	2	8%	16.6
Wk 22	21	1	5%	13.8
Wk 23	10	1	9%	7.9
Wk 24	25	6	19%	20.3
Wk 25	20	2	9%	13.5
Wk 26	30	3	9%	20.2
Wk27	32	6	16%	23.6
Wk28	36	9	20%	30.3
Wk29	54	14	21%	42.1
Wk30	179	37	17%	130.4
Wk31	175	47	21%	142.5
Wk32	130	32	20%	106.6
Wk 33	131	16	11%	89.6
Wk 34	118	25	17%	77.9
Wk 35	77	15	16%	54.8
Wk 36	89	29	25%	61.9
Wk 37	177	45	20%	113.8
Wk 38	226	52	19%	142.5
Wk 39	287	103	26%	215.9
Wk 40	250	54	18%	162.5
Wk 41	285	137	32%	220.5
Wk 42	305	168	36%	241.1
Wk 43	411	132	24%	280.6
Wk 44	383	114	23%	242.9
Wk 45	261	171	40%	226.2
Wk 46	178	33	16%	106.5
Wk 47	149	37	20%	91.9
Wk 48	165	38	19%	99.2