

Summary

- ❖ GP consultation rates for combined 'flu/ FLI decreased from 23.2 in Wk 3 to 18.1/100,000 population in Wk 4 (22% decrease). Rates remain well below the Northern Ireland threshold for seasonal influenza activity.
- ❖ The number of RSV detections decreased from 27 in Wk 3 to 23 in Wk 4 (15% decrease).
- ❖ OOH calls for 'flu/FLI decreased from 65 in Wk 3 to 54 in Wk 4 (17% decrease).
- ❖ No pandemic (H1N1) 2009 detections in Wk 4.
- ❖ A cumulative total of 1361 pandemic (H1N1) 2009 detections in Northern Ireland as at noon 3rd February 2010.
- ❖ There were no new hospitalised cases reported in Wk 4.
- ❖ A cumulative total of 574 hospitalised swine flu cases as at noon on 3rd February 2010.
- ❖ No new swine flu related deaths have been reported in Wk 4. The total number of swine flu related deaths in Northern Ireland remains at 18 as at 3rd February 2010.
- ❖ Antiviral prescriptions have decreased from 46 in Wk 3 to 25 in Wk 4 (46% decrease).

Sentinel GP Clinical Consultation Data

Figure 1. Consultation rates and virology for 'flu and 'flu-like illness

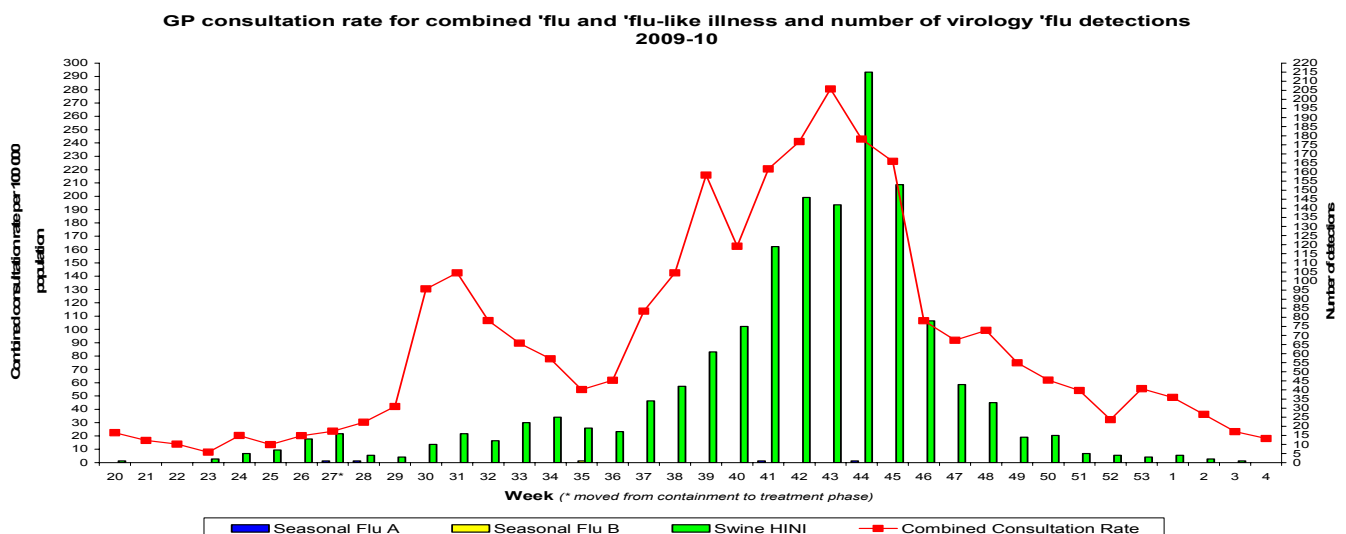
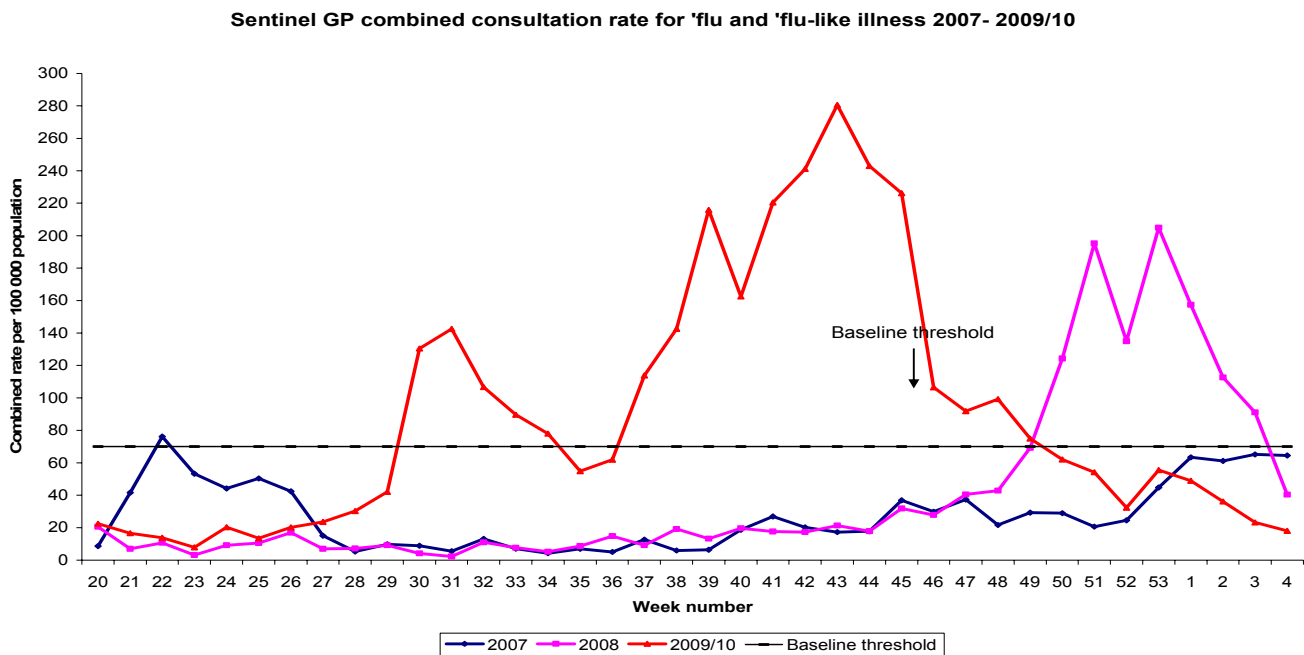
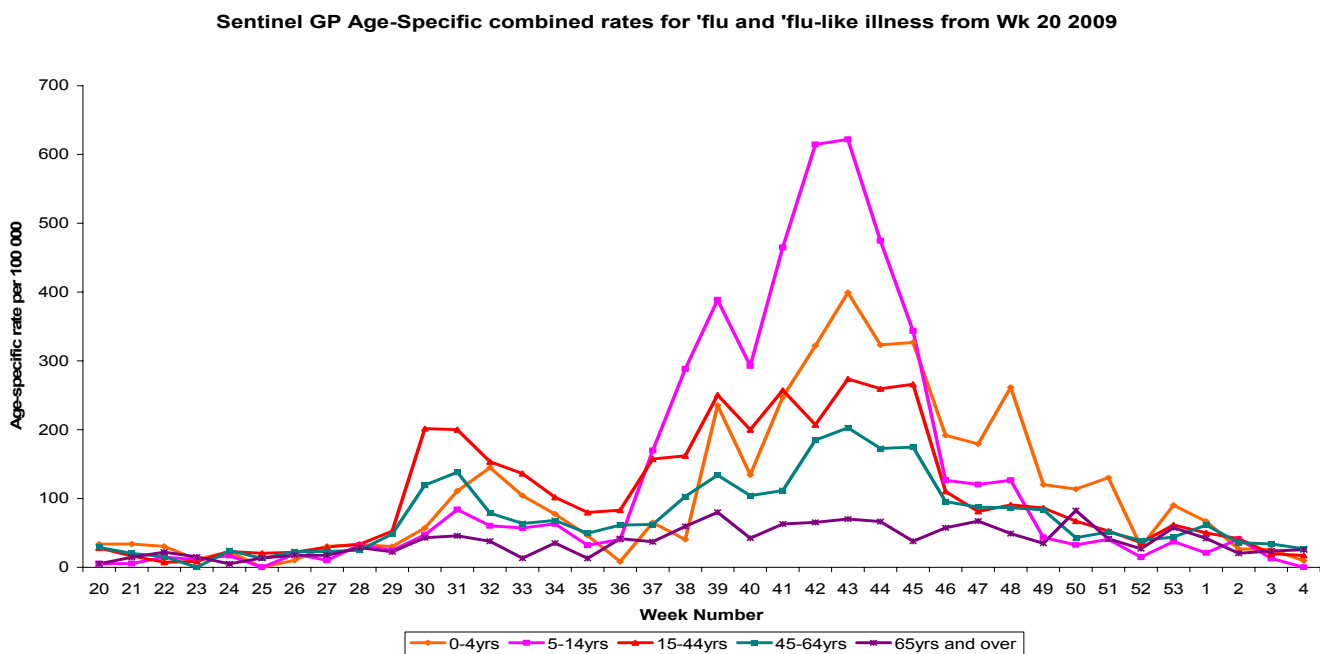


Figure 2. Consultation rates for 'flu and 'flu-like illness by year



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 'flu and 'flu-like illness in Northern Ireland by age-group



Comments: The GP combined consultation rate per 100,000 population decreased from 23.2 in Wk 3 to 18.1 in Wk 4 (22% decrease). Rates are much lower than the same week for the previous two years and remain well below the Northern Ireland threshold (Figure 2).

Rates decreased in the majority of age groups, with the exception of the over 65 year age-group which increased slightly. Similar to last week the highest age specific combined rates were in the 45-64 year age group.

Out-of-Hours (OOH) Centres Call Data

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

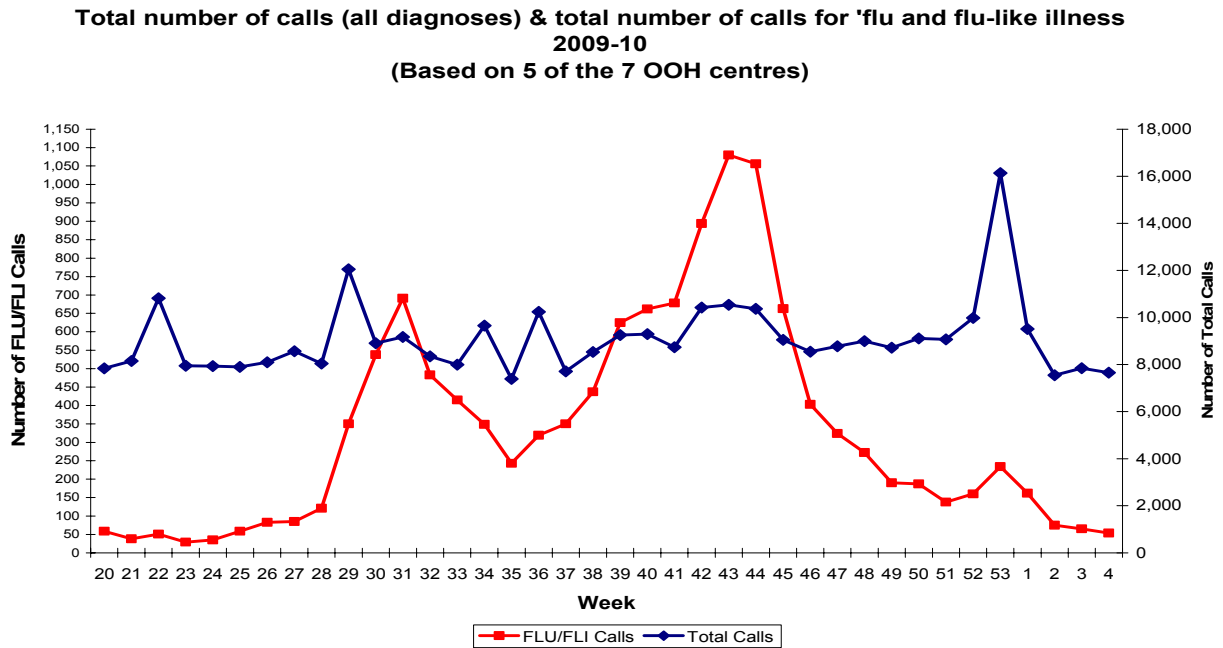
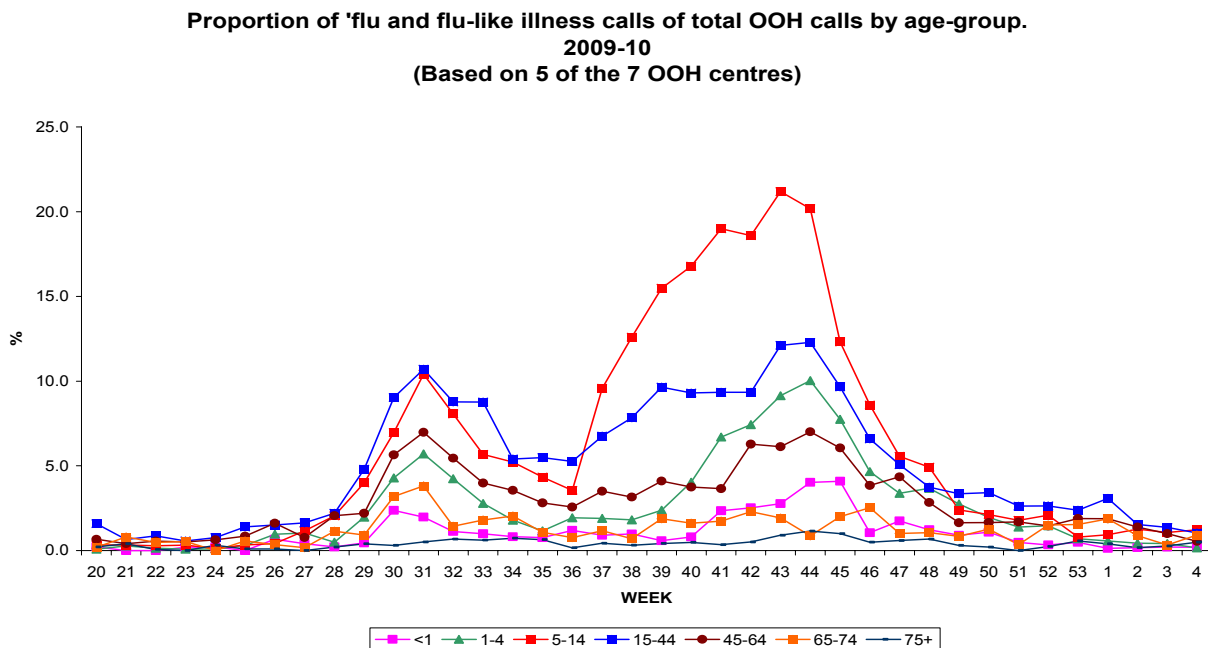


Figure 5. Proportion of 'flu and 'flu-like illness calls to OOHs by age-group



Comments: The number of calls to OOH centres (all diagnoses) decreased from 7850 calls in Wk 3 to 7651 calls in Wk 4 (3% decrease). The number of calls for 'flu/FLI also decreased. For the third consecutive week, the proportion of calls for 'flu/FLI remained at 1.0%. In Wk 4 the proportion of calls relating to 'flu/FLI remained stable in all age groups.

Virological Data

Table 1. Virus activity in Northern Ireland

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.

Week Number	Source	Specimens Tested	Influenza A		Influenza B	RSV	Total influenza Positive	% Influenza Positive
			Seasonal	Pandemic (H1N1) 2009				
4	Sentinel	7	0	0	0	1	0	0
	Non-sentinel	107	0	0	0	22	0	0
	Total	114	0	0	0	23	0	0

Note: From Wk 53 sentinel swabs are also being routinely tested for RSV

Table 2. Cumulative virus activity by age-group for NI 2009-10

Cumulative Total Wk 20 2009 - Wk 4 2010					
	FluA		FluB	RSV	Total
	Seasonal	Pandemic (H1N1) 2009			
0-4	1	230	0	554	785
5-14	0	375	0	19	394
15-64	1	708	0	35	744
65+	0	43	1	15	59
Unknown	1	3	0	0	4
All ages	3	1359	1	623	1986

Table 3. Cumulative virus activity by age-group and source (sentinel and non-sentinel) for NI 2009-10

Cumulative Total Wk 20 2009 - Wk 4 2010										
AGE	Sentinel					Non Sentinel				
	FluA		FluB	RSV	Total	FluA		FluB	RSV	Total
	Seasonal	Pandemic (H1N1) 2009				Seasonal	Pandemic (H1N1) 2009			
0-4	0	33	0	3	36	1	197	0	551	749
5-14	0	127	0	1	128	0	248	0	18	266
15-64	1	156	0	2	159	0	552	0	33	585
65+	0	2	1	0	3	0	41	0	15	56
Unknown	0	0	0	0	0	1	3	0	0	4
All ages	1	318	1	6	326	2	1041	0	617	1660

The first swine influenza detection in 2009 was reported in Wk 20 (Mid May). There were no positive detections for swine influenza in Wk 4, with the total detections by the end of Wk 4 remaining at 1359 laboratory confirmed detections (1041 non-sentinel and 318 sentinel).

Provisional information indicates an additional 2 cases reported up to noon 3rd February 2010, bringing the total number of confirmed cases in Northern Ireland to date to 1361.

During Wk 4 a total of 114 specimens were tested by the Regional Virus Laboratory (7 sentinel and 107 non-sentinel).

A subset of laboratory detections are periodically submitted by the Regional Virus Laboratory for antiviral susceptibility testing. As of 28th January 2010, 61 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.

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

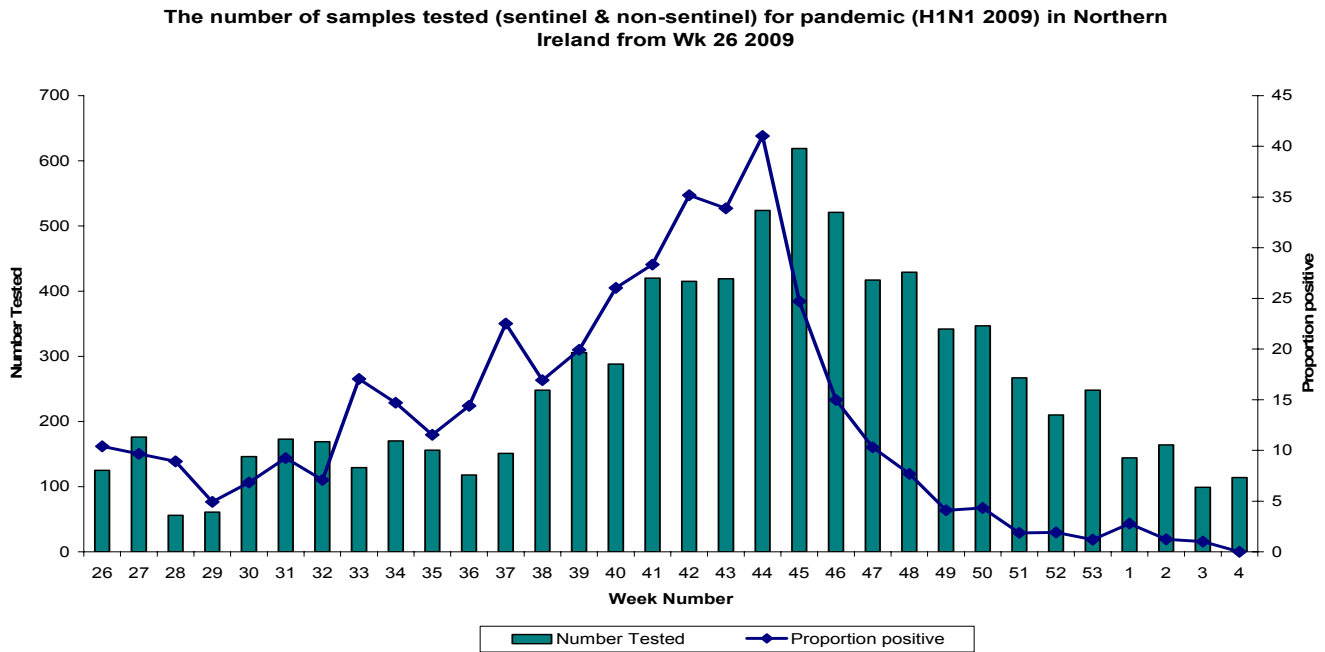
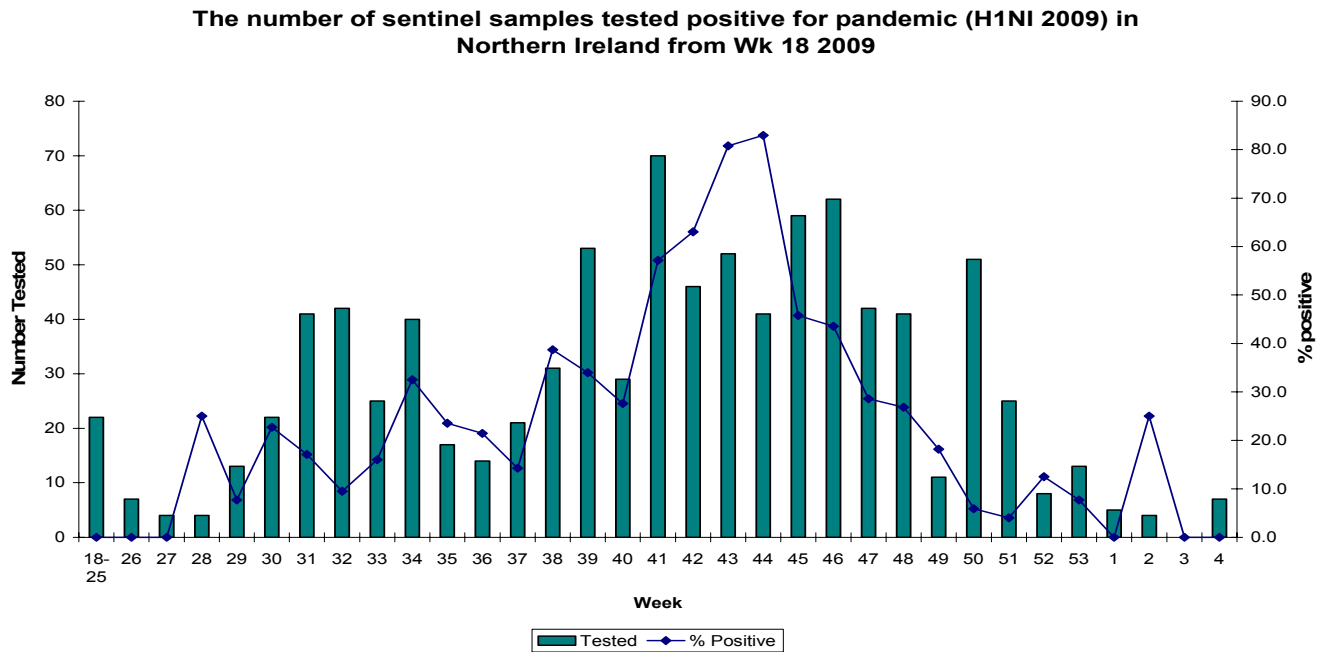


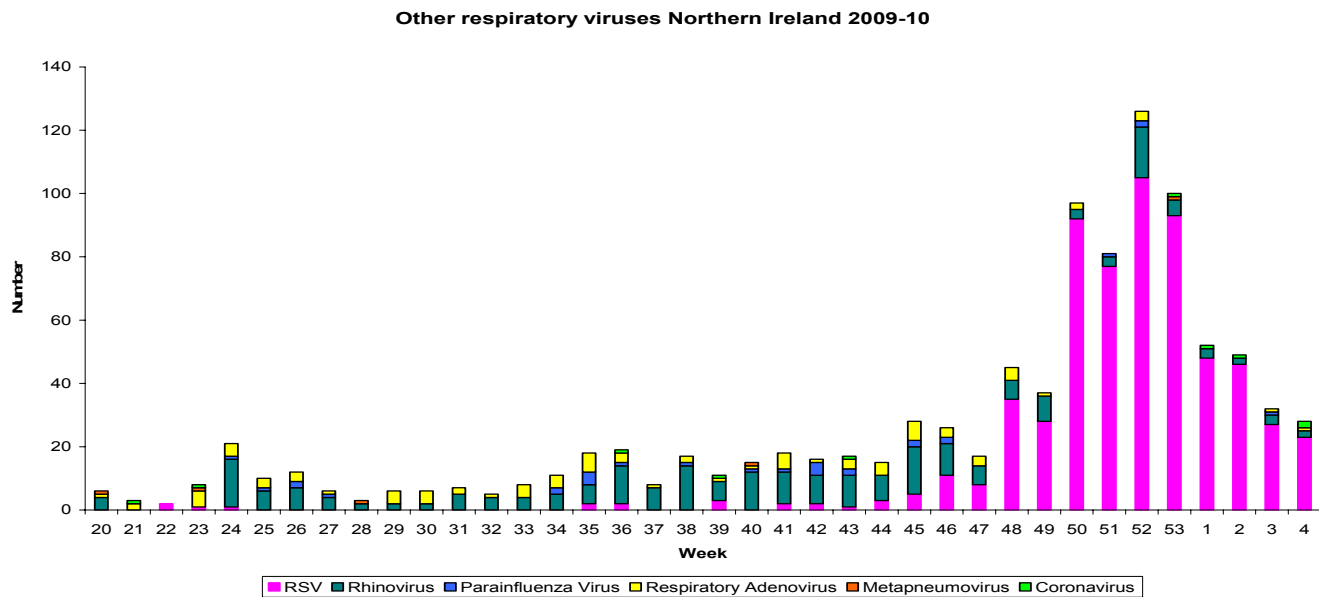
Figure 7. Number of swabs from sentinel practices and percentage positive for A/H1N1 2009.



Comments: There were no samples that tested positive for pandemic (H1N1) 2009 in Wk 4.

Other respiratory viruses

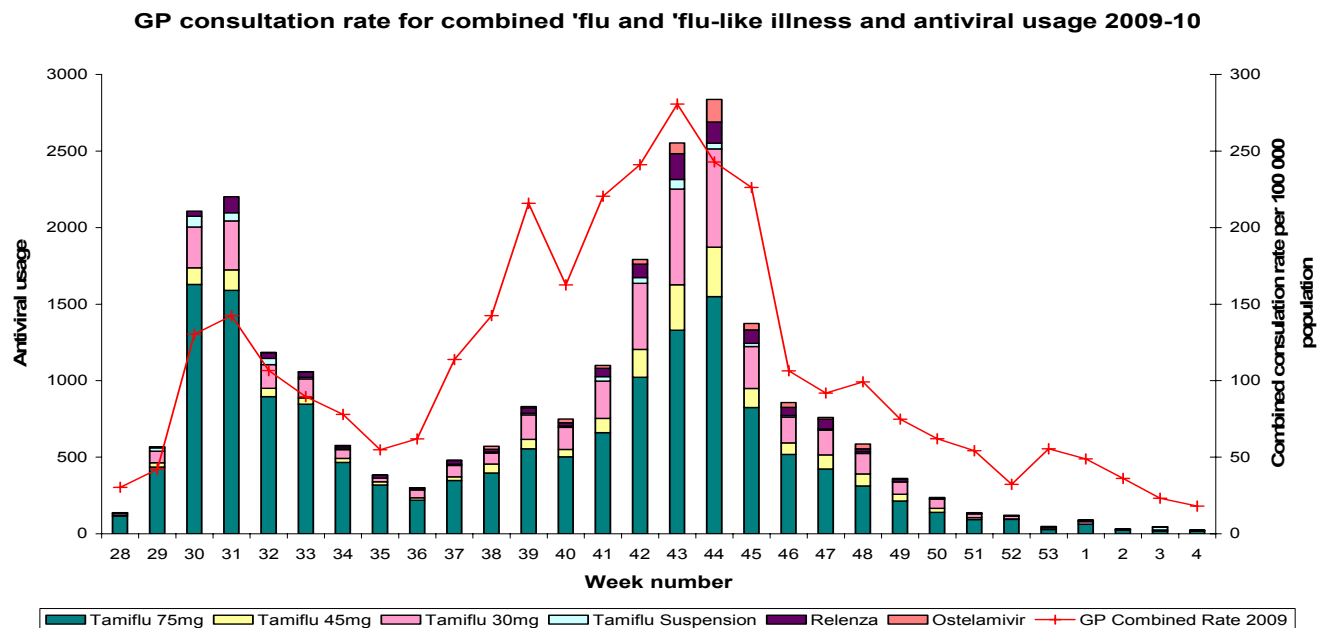
Figure 8. Weekly cases of other respiratory viruses



Comments: The number of other respiratory viruses recorded has decreased from 32 in Wk 3 to 28 in Wk 4 (13% decrease). While the number of RSV detections predominate and accounted for 82% (n=23) of all other respiratory viruses recorded, the number of detections continue to decrease. There were also two rhinovirus, two coronavirus and one adenovirus detections in Wk 4.

Antiviral usage

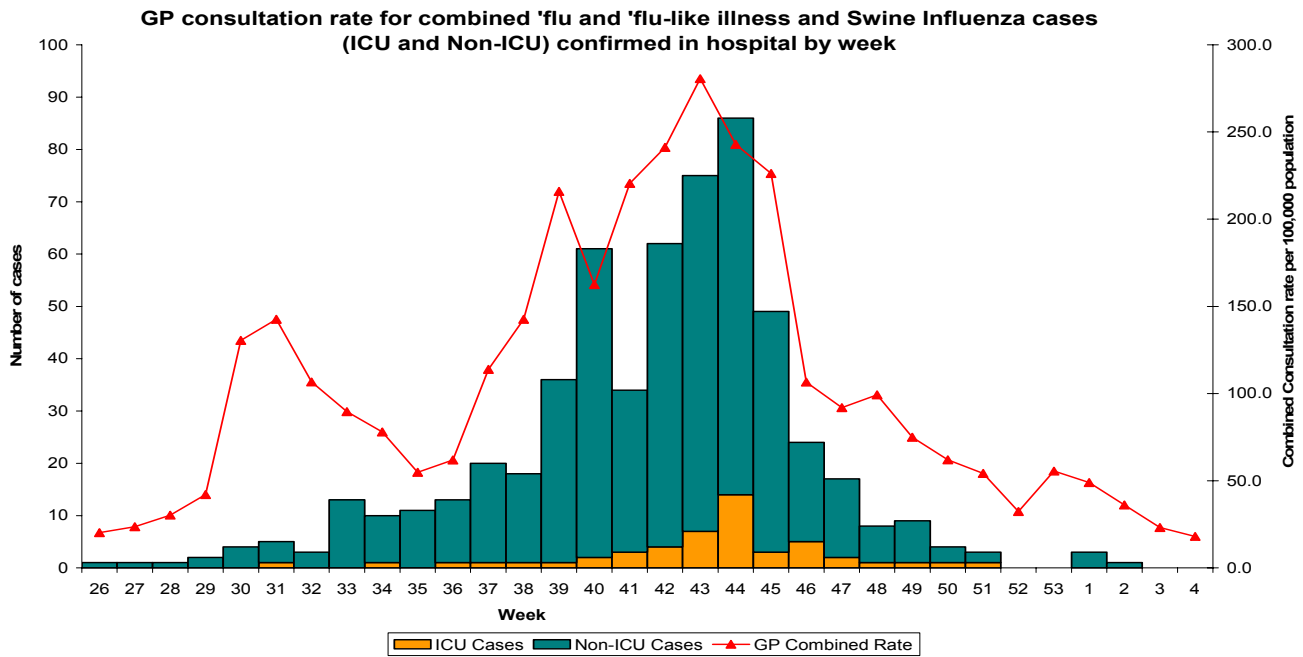
Figure 9. GP consultation rate for 'flu and 'flu-like illness and number of antiviral prescriptions



Comments: In Wk 4, 25 antiviral courses were prescribed compared with 46 courses in Wk 3 (46% decrease).

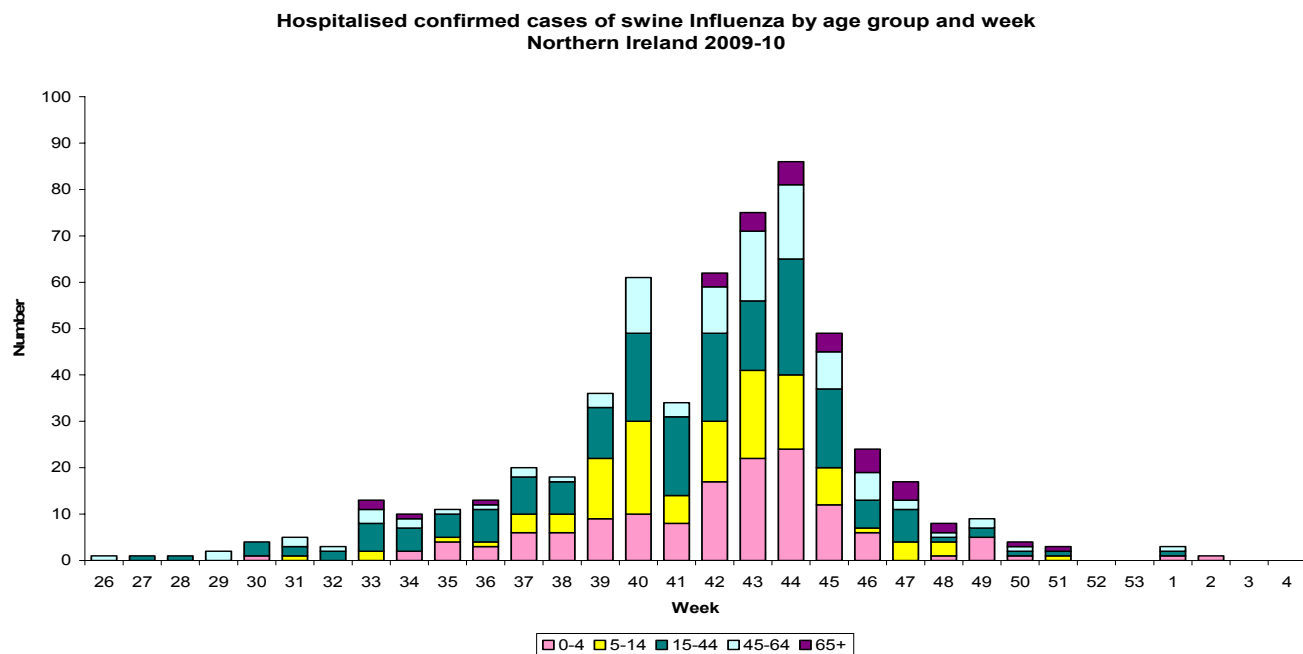
Swine influenza cases confirmed in Hospitals

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



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

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



Comments: There were no new hospitalised cases confirmed with pandemic (H1N1) 2009 in Wk 4, bringing the total number of cases in hospitals to 574 (figures provisional) (Figure 10). Fifty cases with confirmed swine influenza were admitted to Intensive Care Units up until 3rd February in Northern Ireland.

Outbreaks

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).

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.

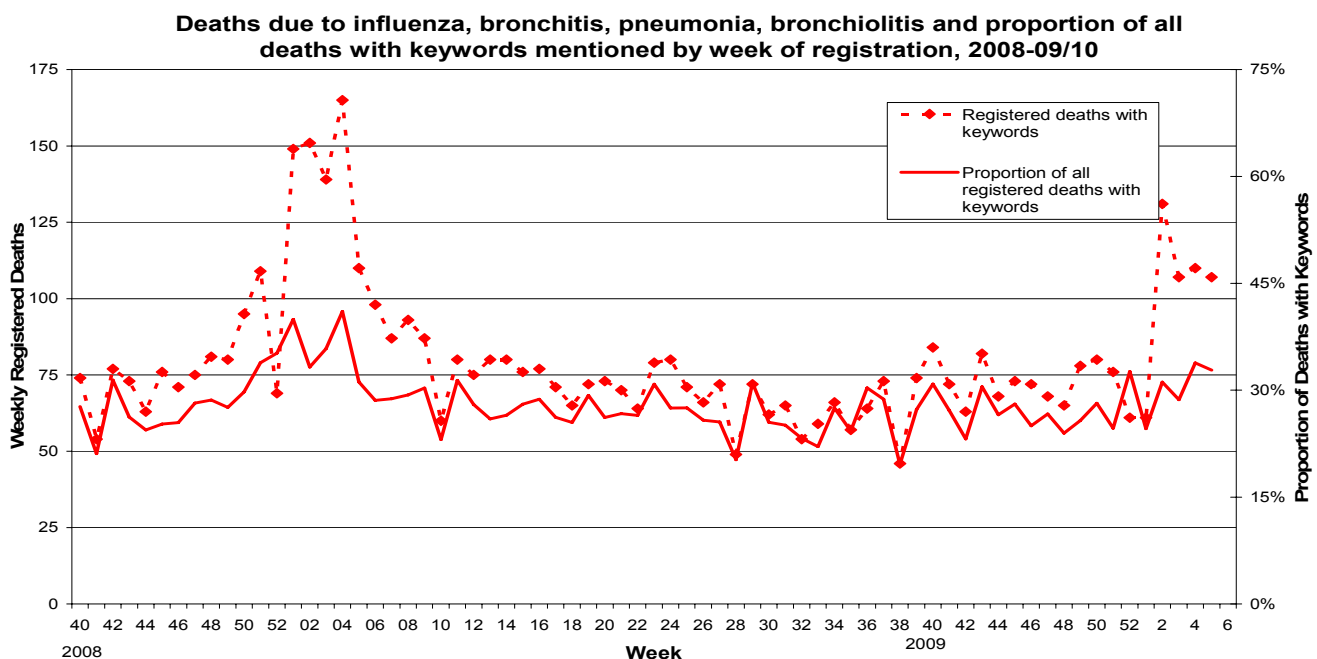
Note: *The definition of a school outbreak:*

- *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

Figure12. Weekly registered deaths



Comments: The proportion of deaths related to respiratory keywords decreased slightly from 34% in Wk 3 to 33% in Wk 4. In Wk 4, there were 326 registered deaths of which 107 related to these specific respiratory infections.

No new swine flu related deaths have been reported in Wk 4. The total number of swine flu related deaths reported up until 3rd February remains at eighteen.

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, Oonagh McArdle and Dr. Brian Smyth.

Appendix (1)

2009/10	Total cases	Total cases	Proportion due to	Combined Rate for 'Flu
Week No	FLI	'Flu	clinical '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
Wk 49	98	39	28%	74.9
Wk 50	95	24	20%	62.0
Wk 51	72	32	31%	54.2
Wk 52	37	14	27%	32.3
Wk 53	76	29	28%	55.5
Wk 1	72	20	22%	48.9
Wk 2	47	16	25%	36.1
Wk 3	32	10	24%	23.2
Wk 4	17	13	43%	18.1