

Summary

- ❖ GP consultation rates for combined 'flu/ FLI decreased from 14.5 (updated) in Wk 13 to 8.1/100,000 population in Wk 14 and increased to 12.1/100,000 population in Wk 15. Rates are lower than the same weeks last year and continue to remain well below the Northern Ireland threshold.
- ❖ The number of RSV detections remains low, only two detections in Wks 14 & 15.
- ❖ OOH calls for 'flu/FLI increased from 39 in Wk 13 to 65 in Wk 14 (67% increase), reflecting the Easter period when GP surgeries were closed. Calls for 'flu/FLI decreased to 35 in Wk 15 giving an overall decrease from Wk 13 of 10%.
- ❖ No new pandemic (H1N1) 2009 detections in Wks 14 & 15.
- ❖ A cumulative total of 1369 pandemic (H1N1) 2009 detections in Northern Ireland as at noon 21st April 2010 (unchanged since Wk 8).
- ❖ No new hospitalised cases reported in Wks 14 & 15.
- ❖ A cumulative total of 580 hospitalised swine flu cases as at noon 21st April 2010 (unchanged since Wk 9).
- ❖ No new swine flu related deaths have been reported in Wks 14 & 15. The total number of swine flu related deaths in Northern Ireland remains at 18 as at 21st April 2010.

Sentinel GP Clinical Consultation Data

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

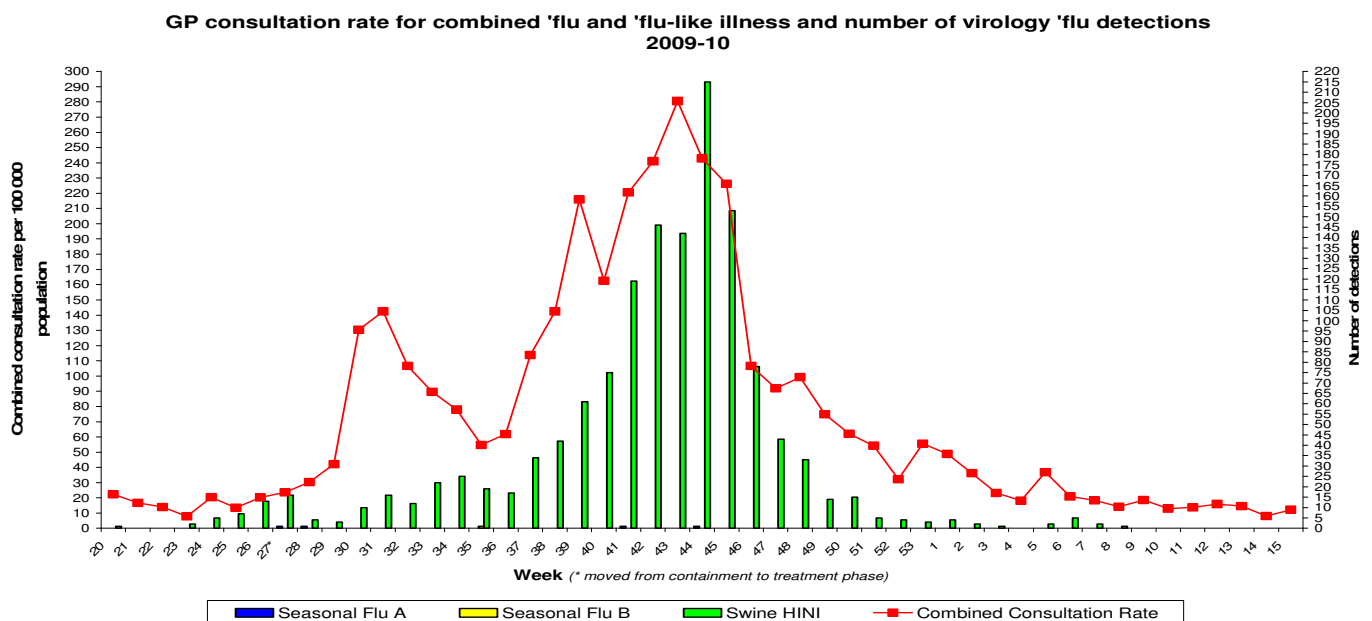
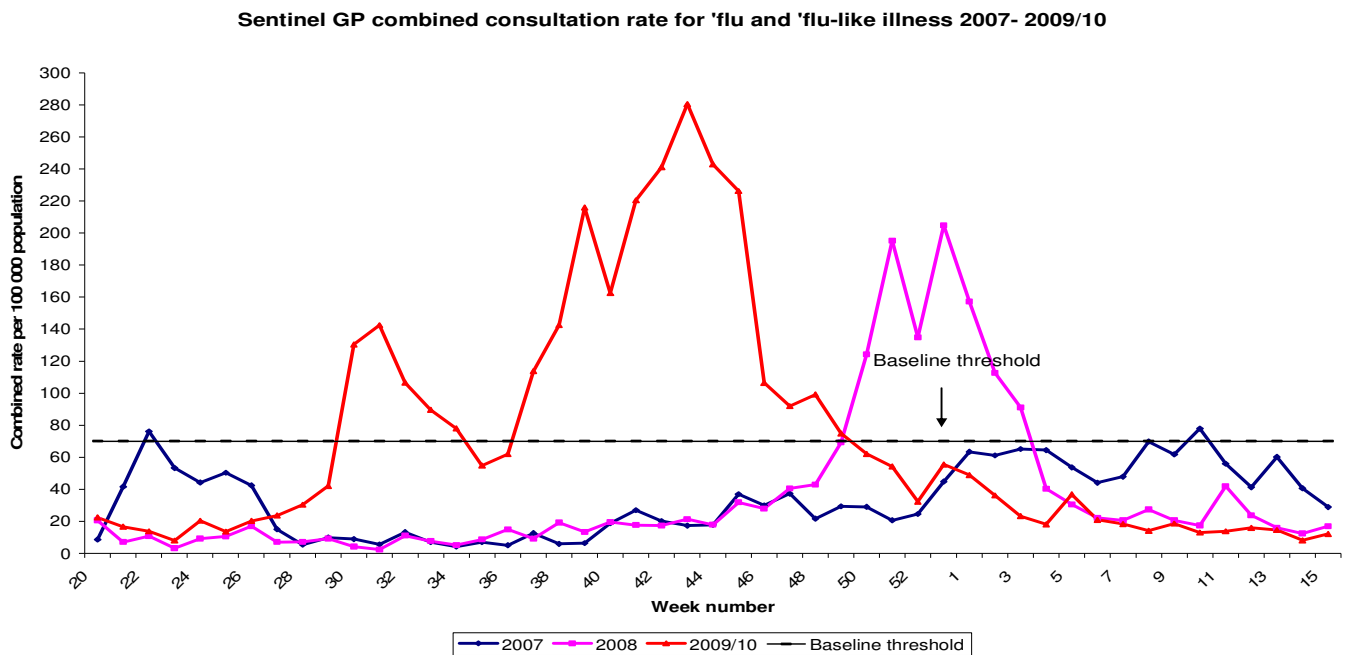
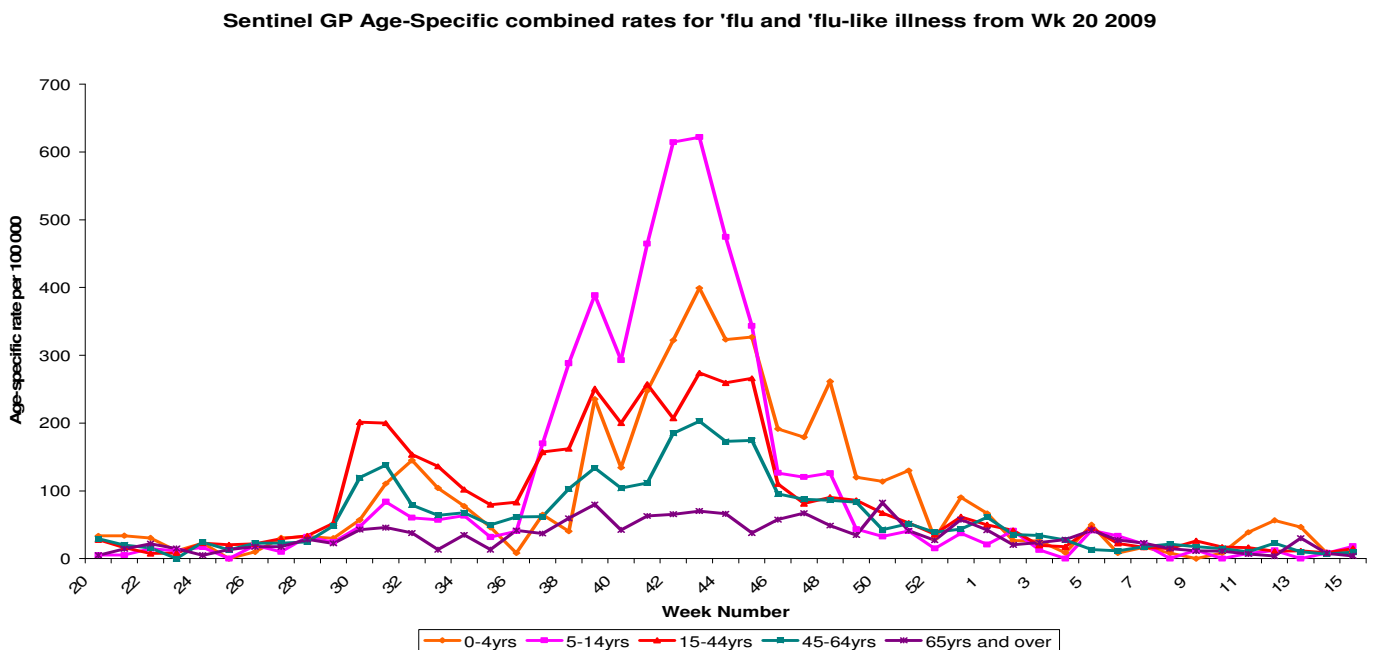


Figure 2. Consultation rates for 'flu and 'flu-like illness by year



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 has decreased from 14.5 (updated) in Wk 13 to 8.1 in Wk 14 (44% decrease). However, the rate increased in Wk 15 to 12.1/100,000. However, rates for Wks 14 & 15 are lower than the same weeks last year 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 Wk 14 and Wk 15 being in the 5-14 year age groups.

Out-of-Hours (OOH) Centres Call Data

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

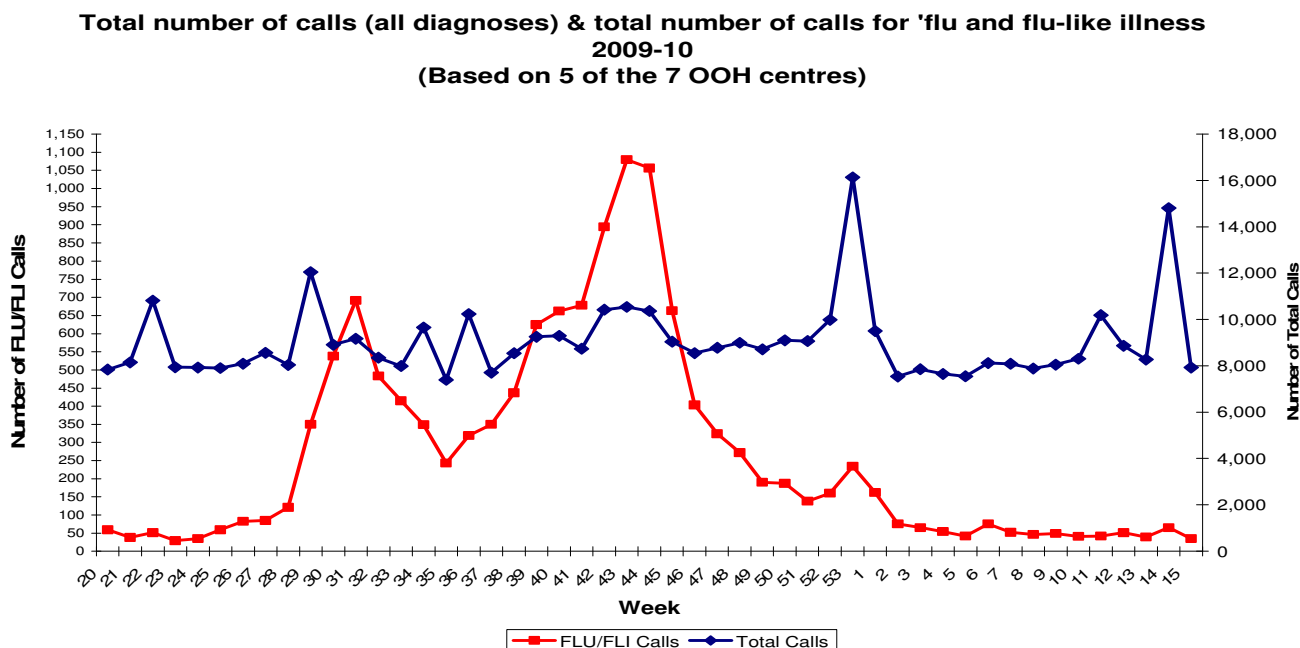
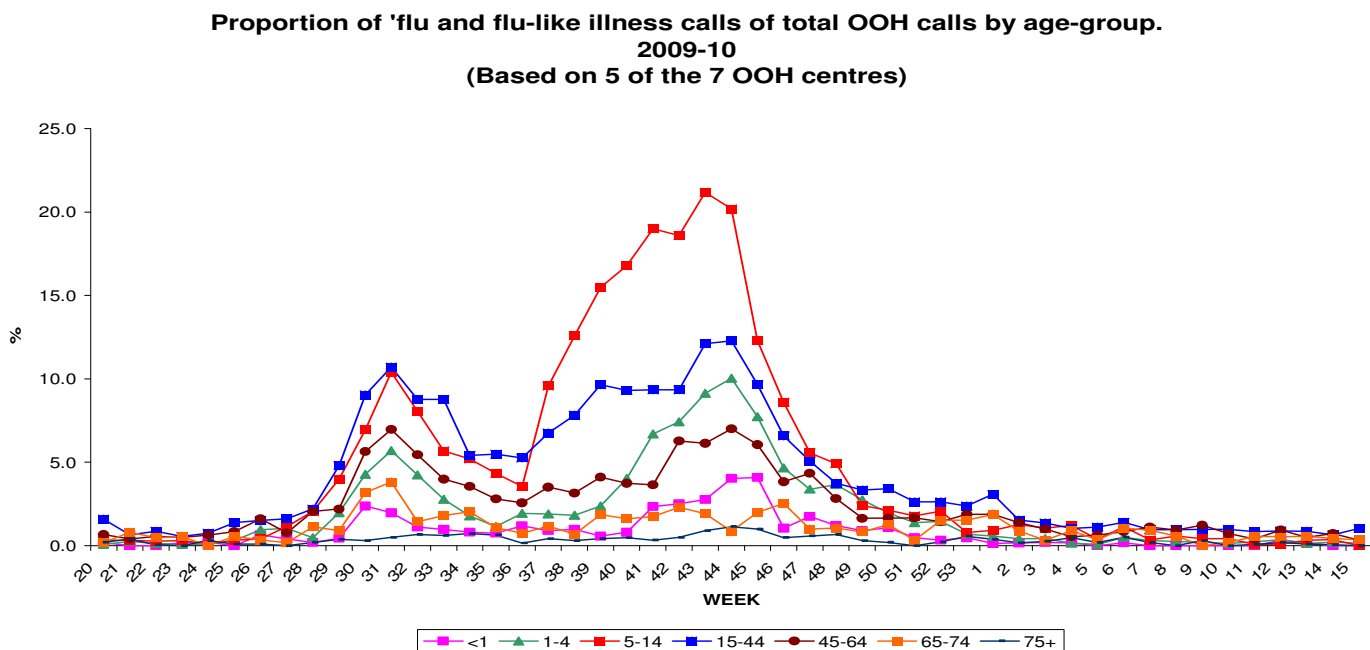


Figure 5. Proportion of 'flu and 'flu-like illness calls to OOHs by age-group



Comments: The number of calls to OOH centres (all diagnoses) increased from 8,277 calls in Wk 13 to 14,802 calls in Wk 14, reflecting the public holiday period when GP surgeries were closed. However, the number of calls decreased to 7,927 in Wk 15 giving an overall decrease of 4% from Wk 13. Similarly, the number of calls for 'flu/FLI increased from 39 in Wk 13 to 65 in Wk 14 and decreased to 35 in Wk 15 (10% decrease overall). Comparable to previous weeks, the proportion of calls for 'flu/FLI remains below 1.0%. In Wks 14 & 15 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				
14 & 15	Sentinel	0	0	0	0	0	0	0
	Non-sentinel	67	0	0	0	2	0	0
	Total	67	0	0	0	2	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 15 2010					
	FluA		FluB	RSV	Total
	Seasonal	Pandemic (H1N1) 2009			
0-4	1	231	0	597	829
5-14	0	378	0	19	397
15-64	1	714	0	39	754
65+	0	43	1	15	59
Unknown	1	3	0	0	4
All ages	3	1369	1	670	2043

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

Cumulative Total Wk 20 2009 - Wk 15 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	198	0	594	793
5-14	0	127	0	1	128	0	251	0	18	269
15-64	1	156	0	3	160	0	558	0	36	594
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	7	327	2	1051	0	663	1716

The first swine influenza detection in 2009 was reported in Wk 20 (Mid May). Laboratory confirmed detections remain at 1369 (1051 non-sentinel and 318 sentinel).

There were no new Pandemic (H1N1) 2009 detections in Wks 14 & 15. The last laboratory confirmed swine flu detection was in Wk 8, which related to a specimen dated 18th February 2010.

During Wks 14 and 15 a total of 67 specimens were tested by the Regional Virus Laboratory.

A subset of laboratory detections are periodically submitted by the Regional Virus Laboratory for antiviral susceptibility testing. As of 15 April 2010, 63 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.

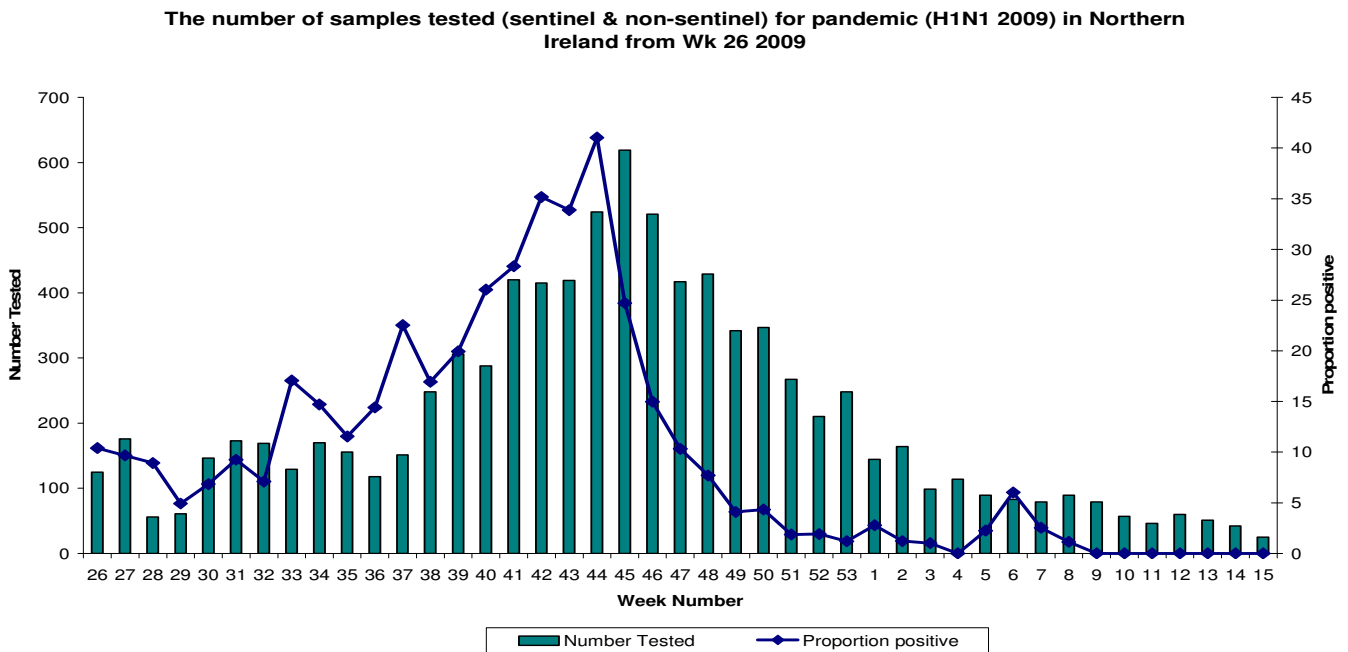
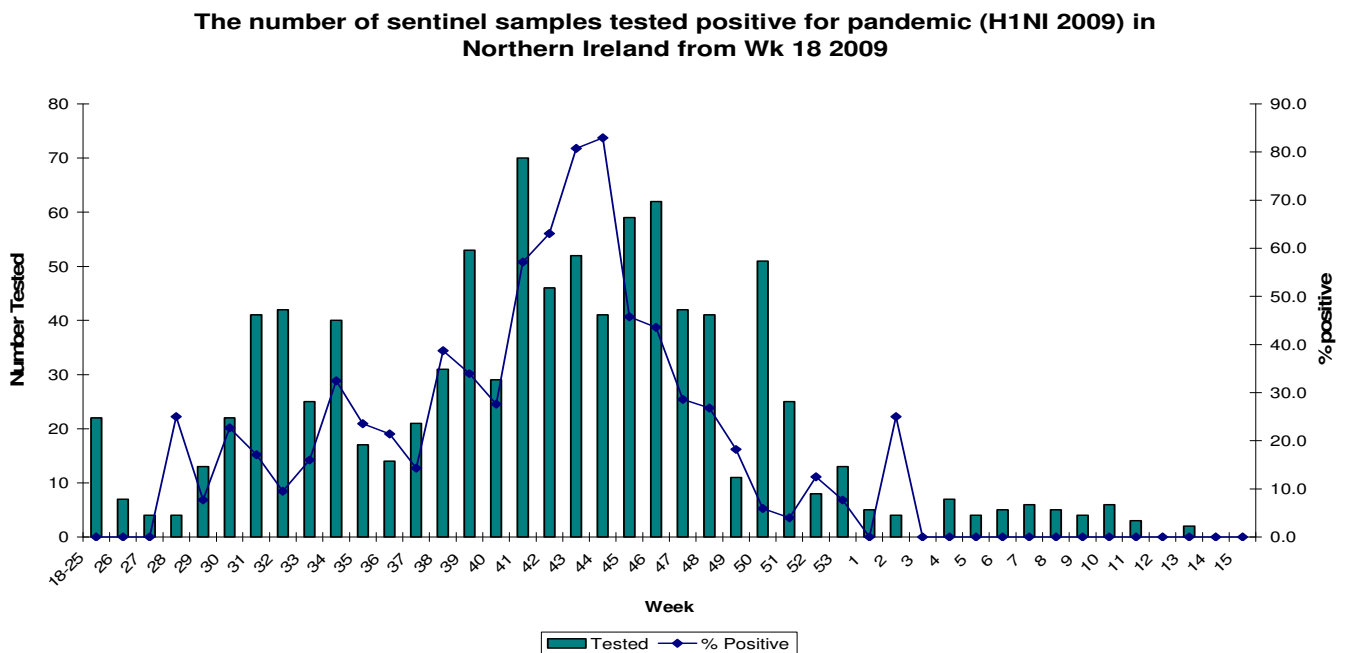


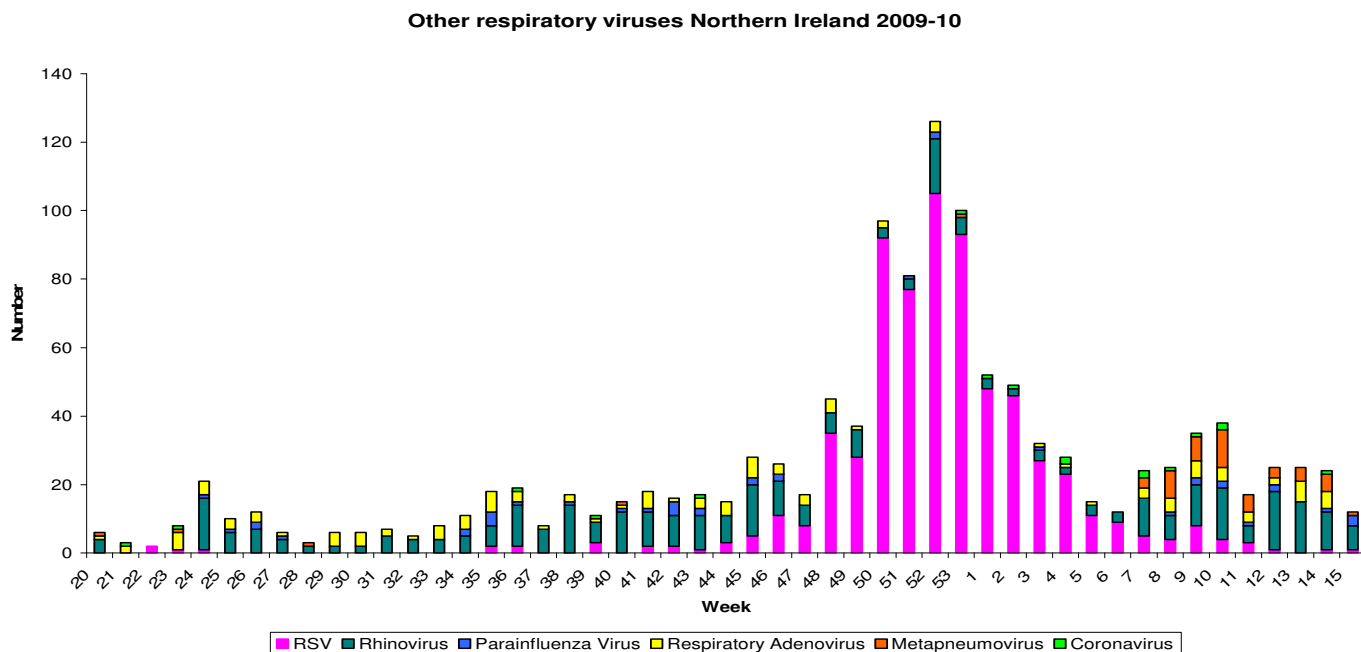
Figure 7. Number of swabs from sentinel practices and percentage positive for A/H1N1 2009.



Comments: The number of specimens submitted for testing remains low. There were no samples that tested positive for pandemic (H1N1) 2009 in Wks 14 & 15 (Figure 6). With relatively small numbers of specimens submitted for testing fluctuations in the positivity rate are to be expected and should be interpreted with caution.

Other respiratory viruses

Figure 8. Weekly cases of other respiratory viruses



Comments: There were 36 other respiratory viruses recorded in Wks 14 & 15. RSV detections continued to decrease and accounted overall for 6% (n=2) of all other respiratory viruses recorded during this two week period. In Wks 14 & 15, rhinovirus predominated and accounted for 50% (n=18) of all detections. There were also six metapneumovirus, five respiratory adenovirus, four parainfluenza virus and one coronavirus detections in Wks 14 & 15.

Antiviral usage

From 1 April the treatment of individuals demonstrating flu symptoms reverted to normal arrangements in line with NICE guidelines. This means that the use of antiviral drugs for the prevention or treatment of influenza is no longer indicated because surveillance data shows that the overall rate of influenza in Northern Ireland has now fallen below the threshold at which the use of antiviral drugs is triggered.

Swine influenza cases confirmed in Hospitals

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

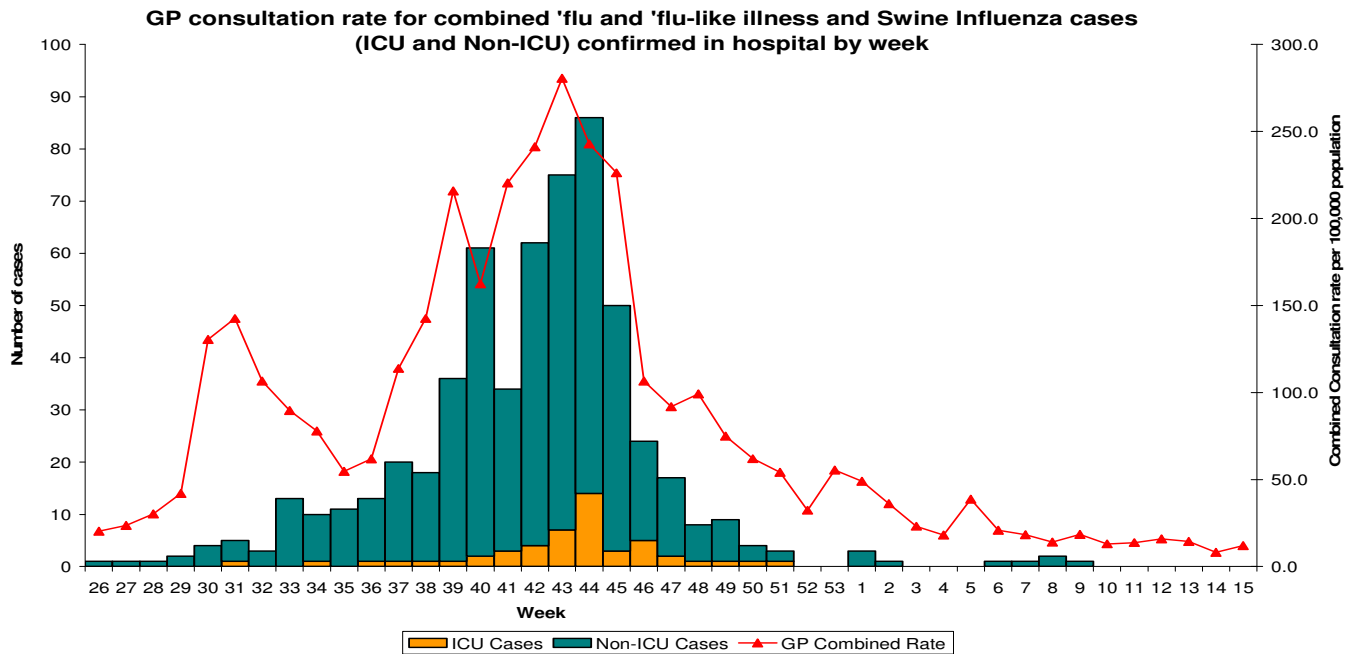
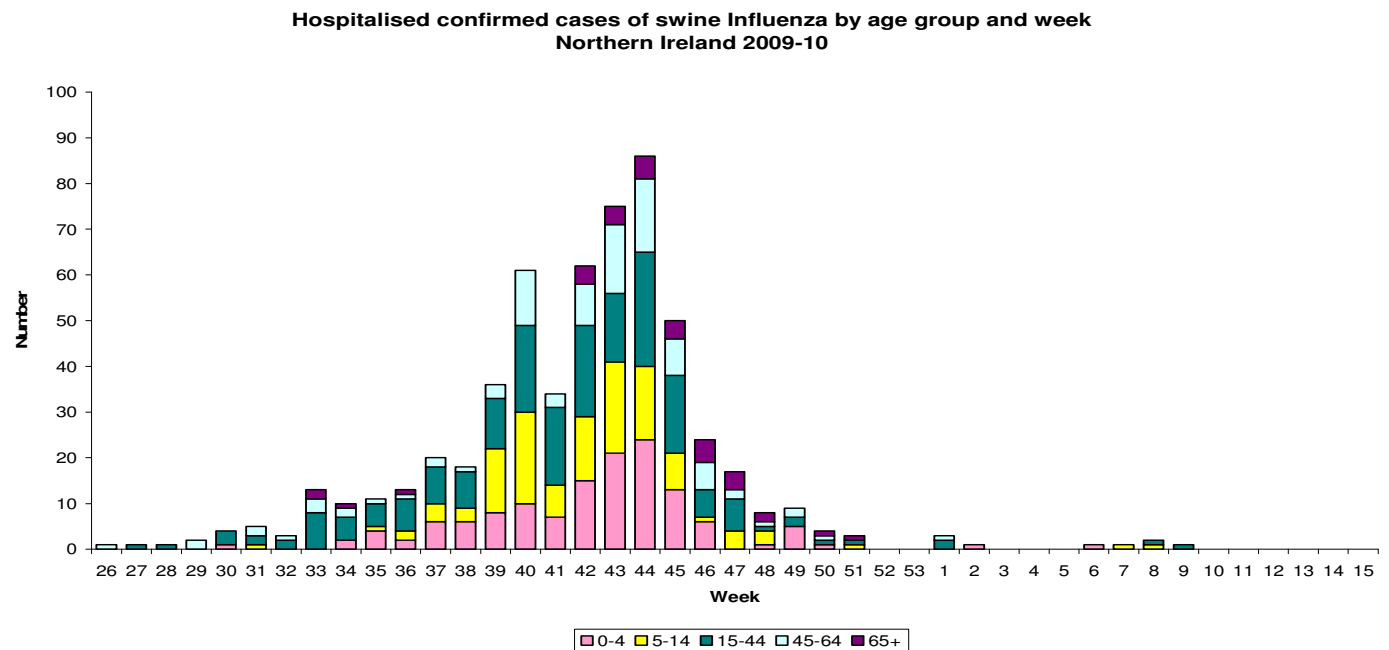


Figure 11. Swine influenza cases confirmed in hospital by age group.



Comments: There were no new hospitalised cases confirmed with pandemic (H1N1) 2009 in Wks 14 & 15. The total number of hospitalised cases up until 21st April 2010 remains at 580. Fifty cases with confirmed swine influenza were admitted to Intensive Care Units up until 21st April in Northern Ireland (Figure 10). The last confirmed hospitalised case with pandemic (H1N1) 2009, was in Wk 9 (27th February – 5th March 2010).

Outbreaks

There were no new school outbreaks reported this week. The cumulative number of reported school outbreaks in Northern Ireland since the beginning of September remains at twenty-six. The last reported school outbreak was in Wk 5 (30th January – 5th February 2010).

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.

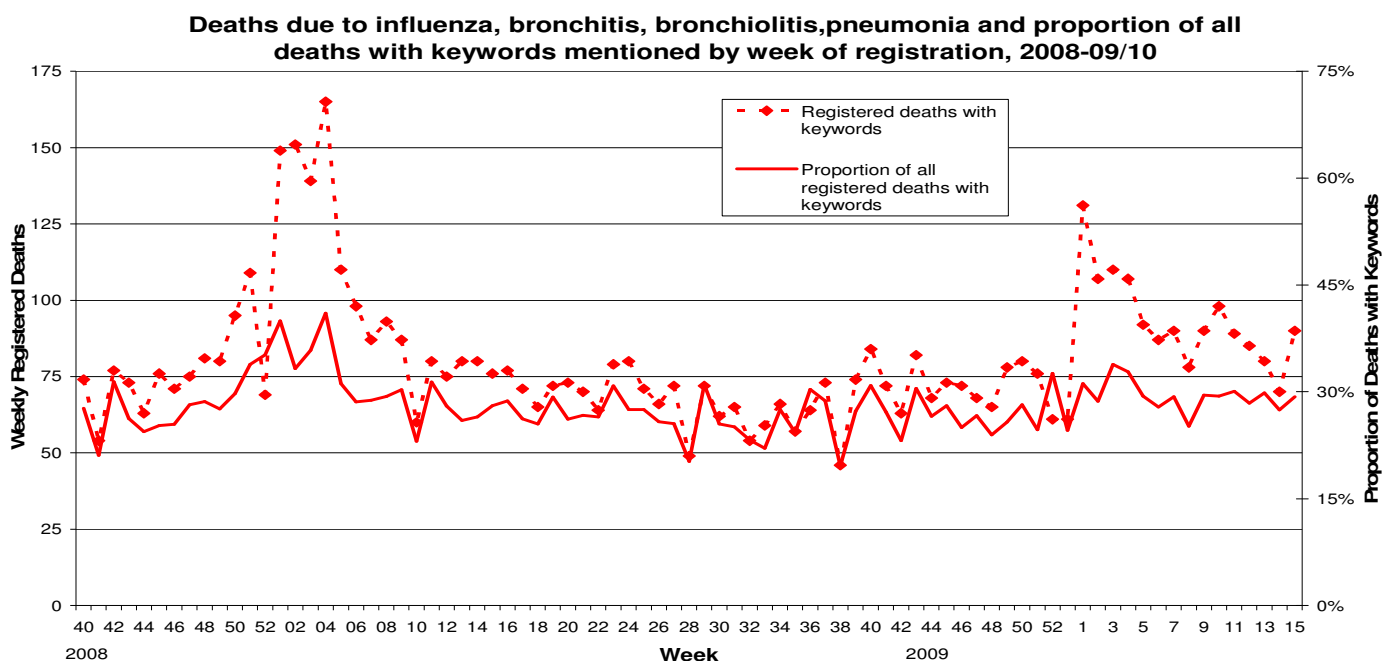
Note: *The definition of a school outbreak:*

- *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 over this two week period averaged at 28%, compared with 30% in Wk 13. In Wks 14 & 15, there were 562 registered deaths of which 160 related to these specific respiratory infections.

No new swine flu related deaths have been reported in Wks 14 & 15. The total number of swine flu related deaths reported up until 21st April 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:

Paul Cabrey
Information Officer
CDSC (NI)
02890263386
paul.cabrey@hscni.net

Cathriona Kearns
Epidemiological Scientist
CDSC (NI)
02890263386
cathriona.kearns@hscni.net

Acknowledgements:

CDSC (NI) wish to thank NISRA, the sentinel GPs, Out-of-Hours Centres, Regional Virus Laboratory, Trusts, HSCB and community pharmacies 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, 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	20	13	39%	17.8
Wk 5	50	19	28%	36.8
Wk 6	22	17	44%	20.9
Wk 7	29	5	15%	18.3
Wk 8	20	7	26%	14.1
Wk 9	29	6	17%	18.5
Wk 10	16	9	36%	13.0
Wk 11	25	3	11%	13.8
Wk 12	25	6	19%	15.9
Wk 13	20	4	17%	14.5* updated
Wk 14	12	3	20%	8.1
Wk 15	17	4	19%	12.1