

Summary

- ❖ GP consultation rates for combined 'flu/ FLI increased from 14.1 (updated) in Wk 8 to 18.5/100,000 population in Wk 9 (31% increase). Rates remain significantly lower than the same week last year and are well below the Northern Ireland threshold for seasonal influenza activity.
- ❖ The number of RSV detections increased from 4 in Wk 8 to 8 in Wk 9 (100% increase).
- ❖ OOH calls for 'flu/FLI increased from 46 in Wk 8 to 49 in Wk 9 (7% increase).
- ❖ No new pandemic (H1N1) 2009 detections in Wk 9.
- ❖ A cumulative total of 1369 pandemic (H1N1) 2009 detections in Northern Ireland as at noon 10th March 2010.
- ❖ There was one new hospitalised case reported in Wk 9.
- ❖ A cumulative total of 580 hospitalised swine flu cases as at noon 10th March 2010.
- ❖ No new swine flu related deaths have been reported in Wk 9. The total number of swine flu related deaths in Northern Ireland remains at 18 as at 10th March 2010.
- ❖ In Wk 9, there were three antiviral courses prescribed.

Sentinel GP Clinical Consultation Data

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

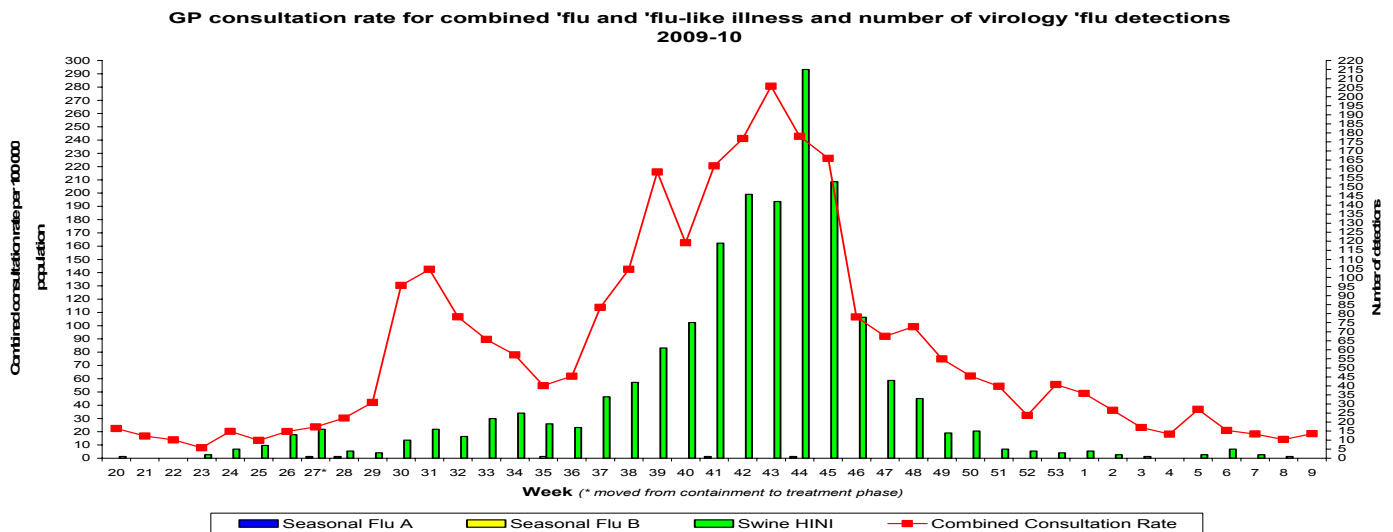
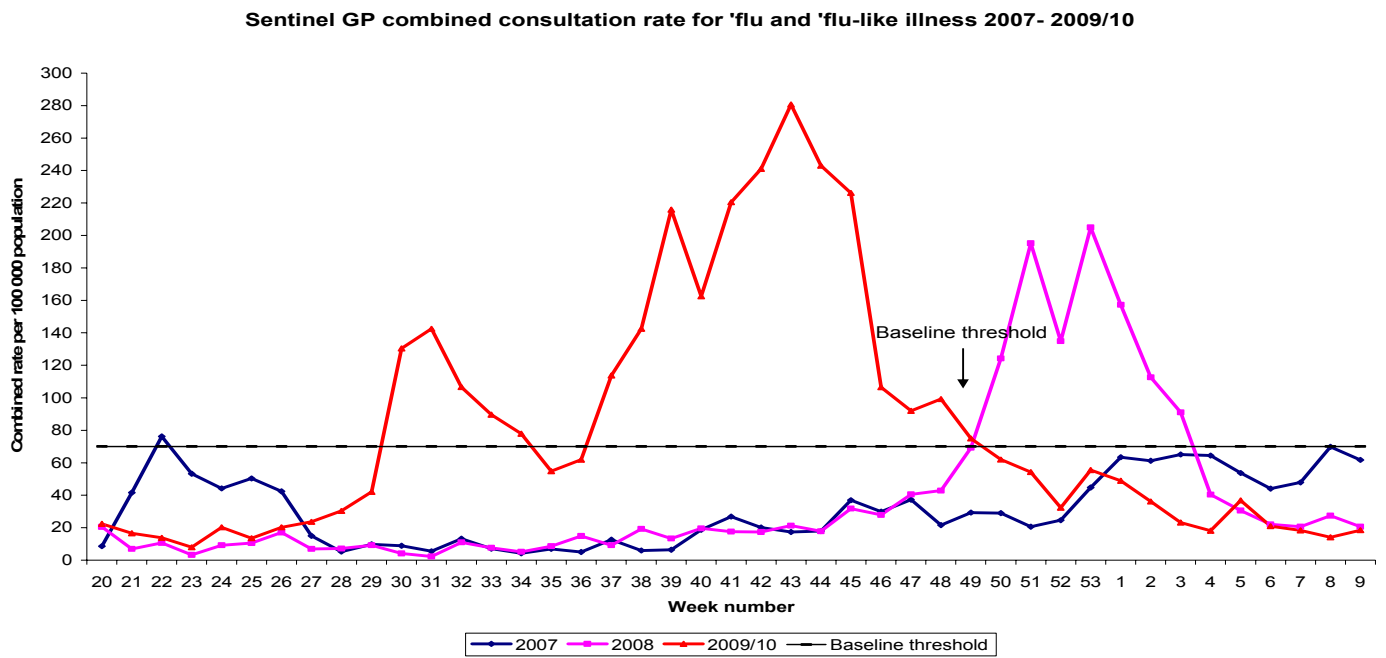
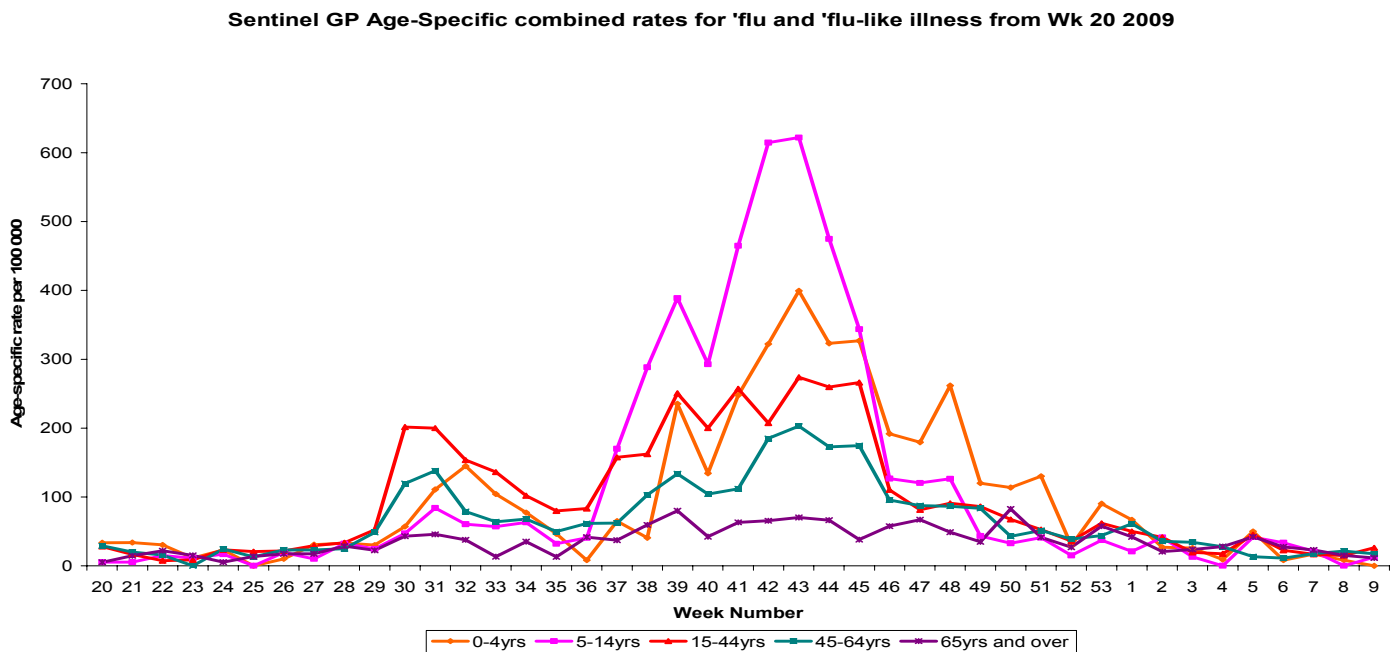


Figure 2. Consultation rates for 'flu and 'flu-like illness by year



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 increased from 14.1^{*updated} in Wk 8 to 18.5 in Wk 9 (31% increase). Rates this week are significantly lower than the same week last year and continue to remain well below the Northern Ireland threshold (Figure 2).

Rates decreased in all age groups this week, with the exception of the 5-14 and 15-44 year age groups which increased slightly. The highest age specific combined rates were in the 15-44 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.

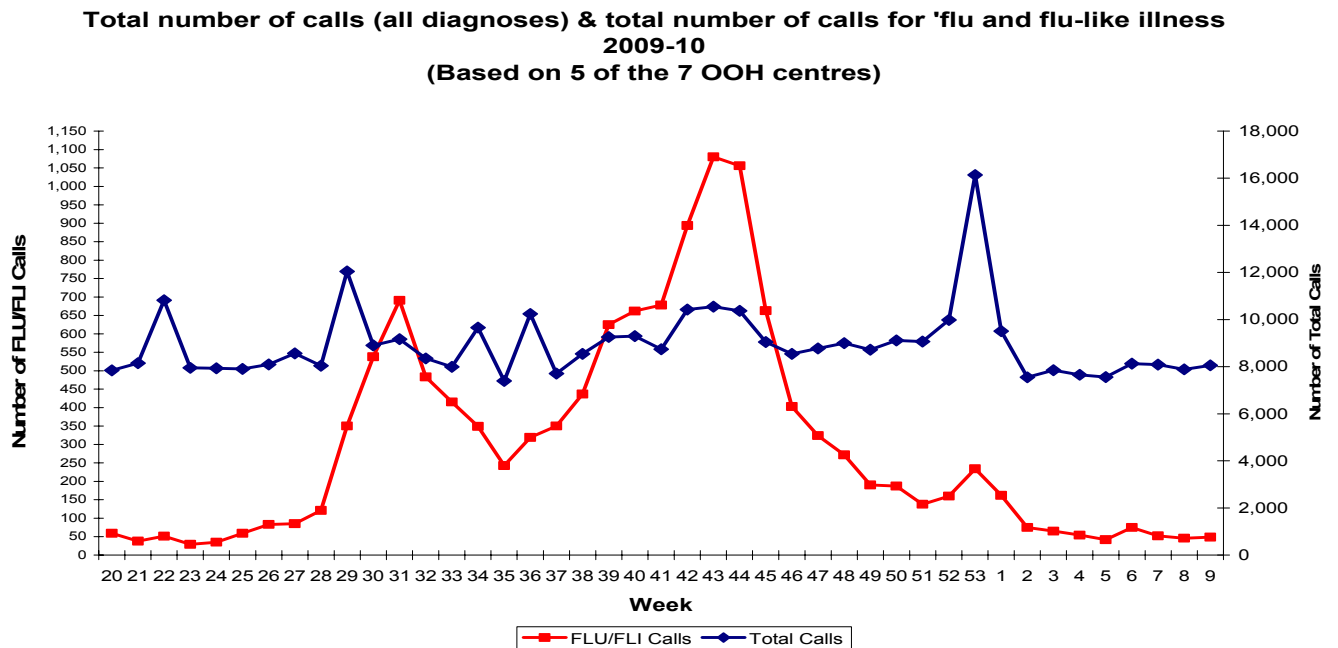
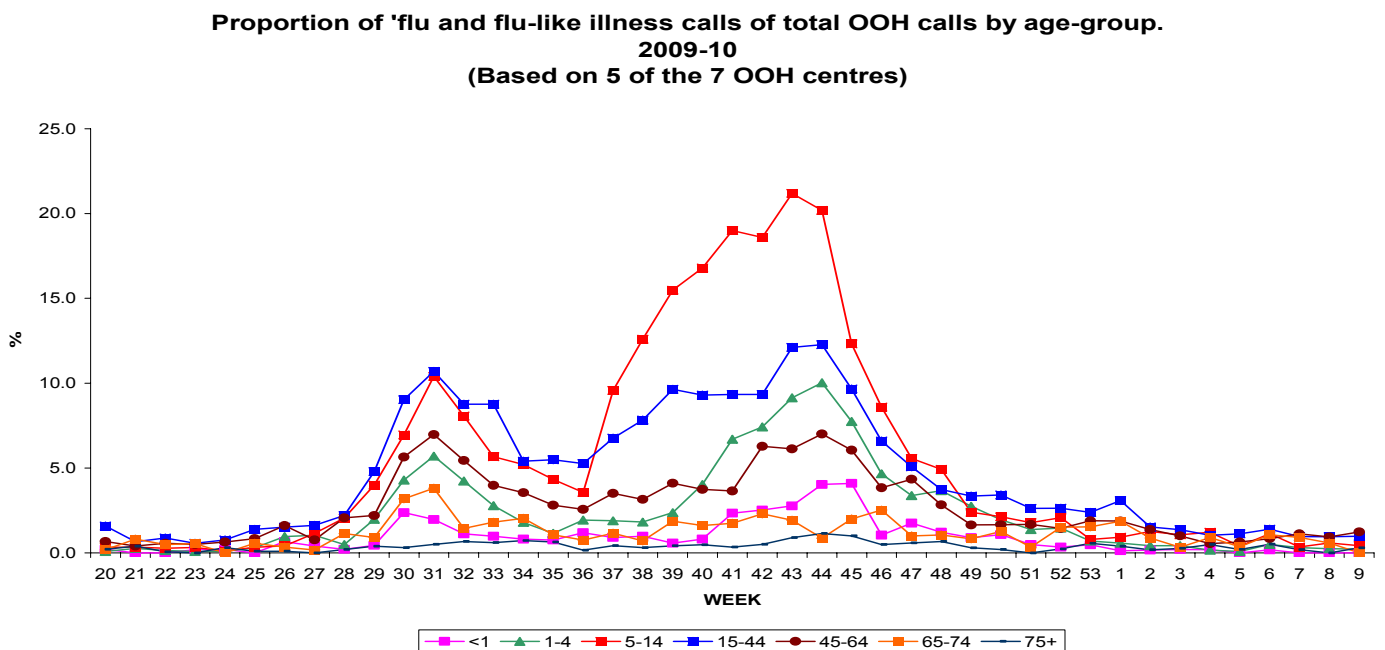


Figure 5. Proportion of 'flu and 'flu-like illness calls to OOHs by age-group



Comments: The number of calls to OOH centres (all diagnoses) increased slightly from 7888 calls in Wk 8 to 8057 calls in Wk 9 (2% increase). The number of calls for 'flu/FLI also increased slightly from 46 in Wk 8 to 49 in Wk 9 (7% increase). Similar to previous weeks, the proportion of calls for 'flu/FLI remains at 1.0%. In Wk 9 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				
9	Sentinel	4	0	0	0	0	0	0
	Non-sentinel	75	0	0	0	8	0	0
	Total	79	0	0	0	8	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 9 2010					
	FluA		FluB	RSV	Total
	Seasonal	Pandemic (H1N1) 2009			
0-4	1	231	0	587	819
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	660	2033

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

Cumulative Total Wk 20 2009 - Wk 9 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	584	783
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	653	1706

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 Wk 9. The last laboratory confirmed swine flu detection was in Wk 8, which related to a specimen dated 18th February 2010.

During Wk 9 a total of 79 specimens were tested by the Regional Virus Laboratory (4 sentinel and 75 non-sentinel).

A subset of laboratory detections are periodically submitted by the Regional Virus Laboratory for antiviral susceptibility testing. As of 4th March 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.

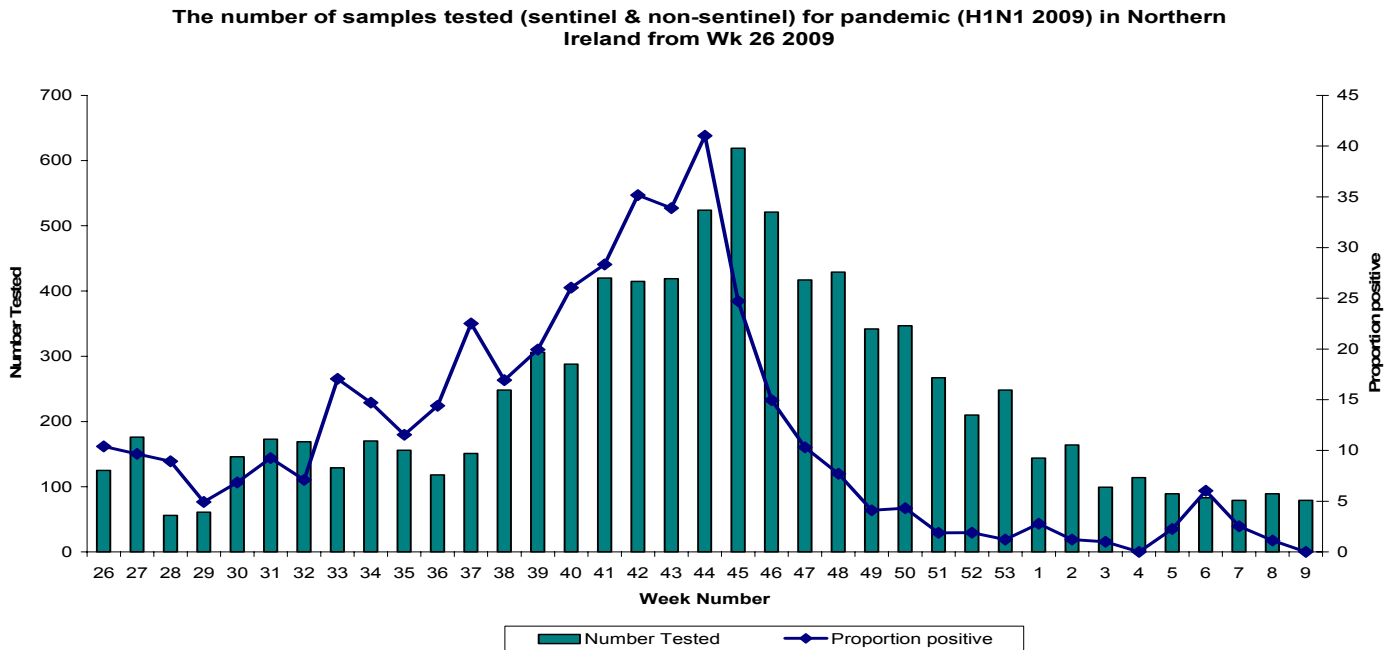
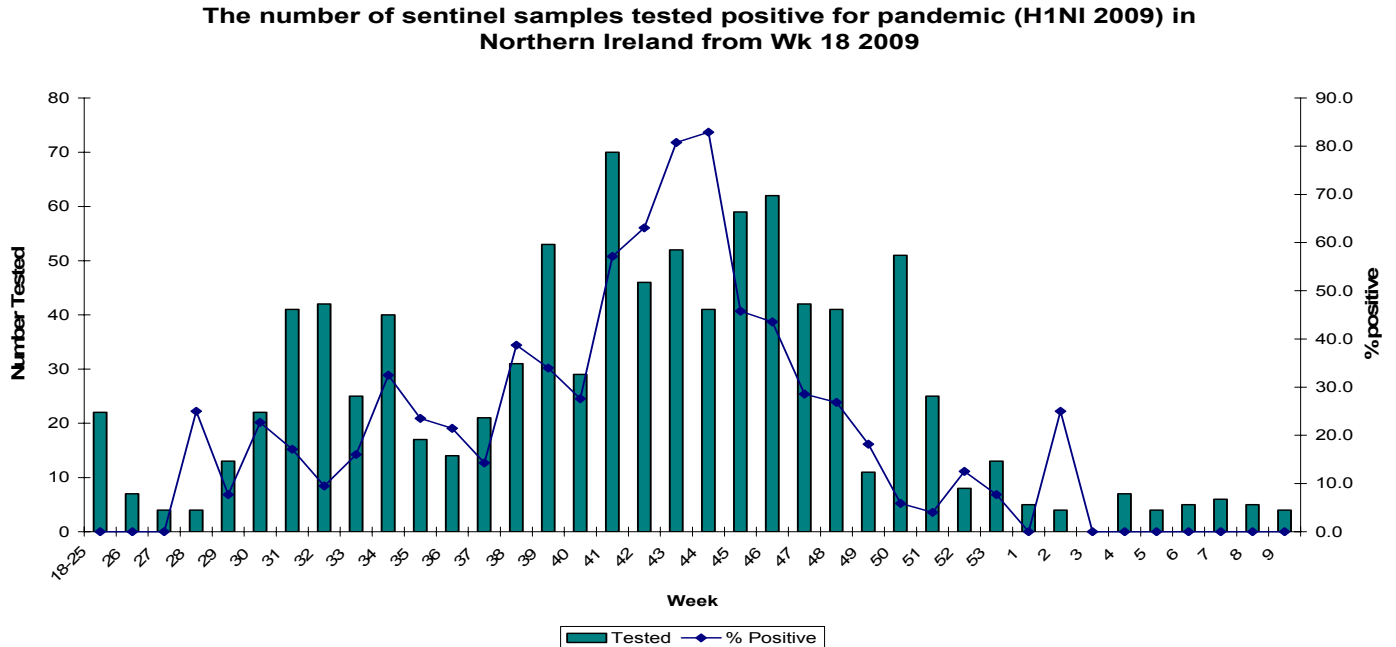


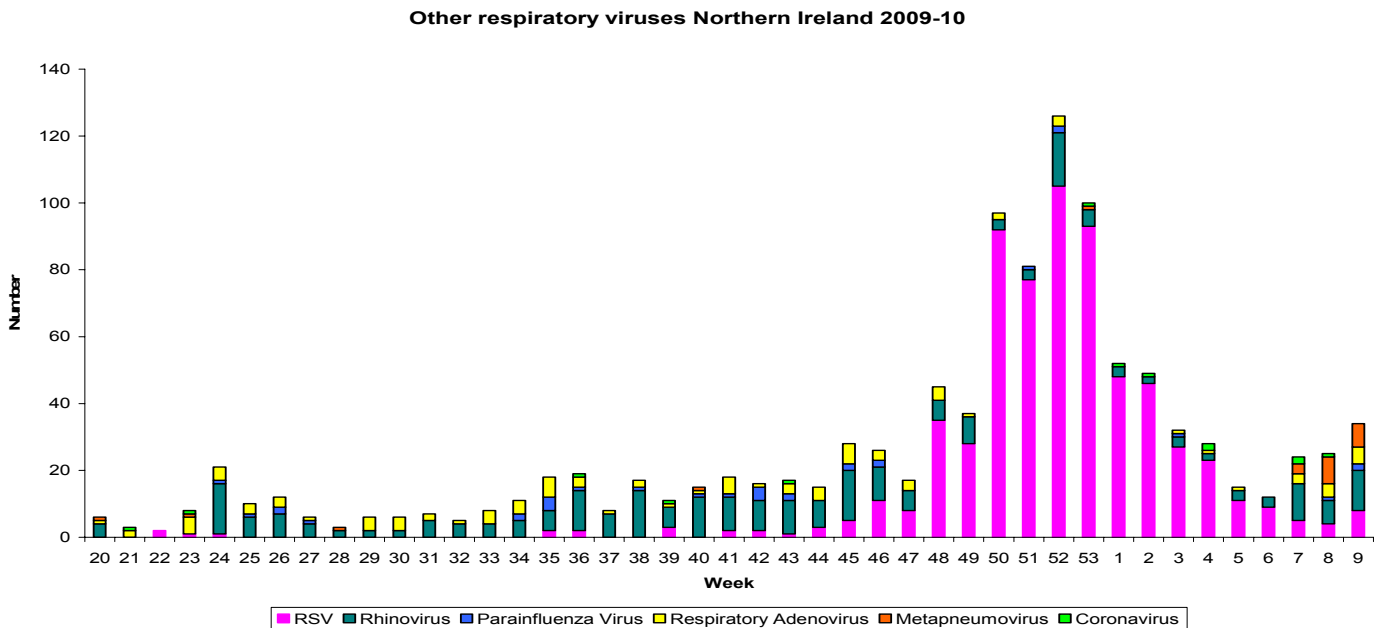
Figure 7. Number of swabs from sentinel practices and percentage positive for A/H1N1 2009.



Comments: The number of specimens submitted for testing remains low. There were no samples that tested positive for pandemic (H1N1) 2009 in Wk 9 (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

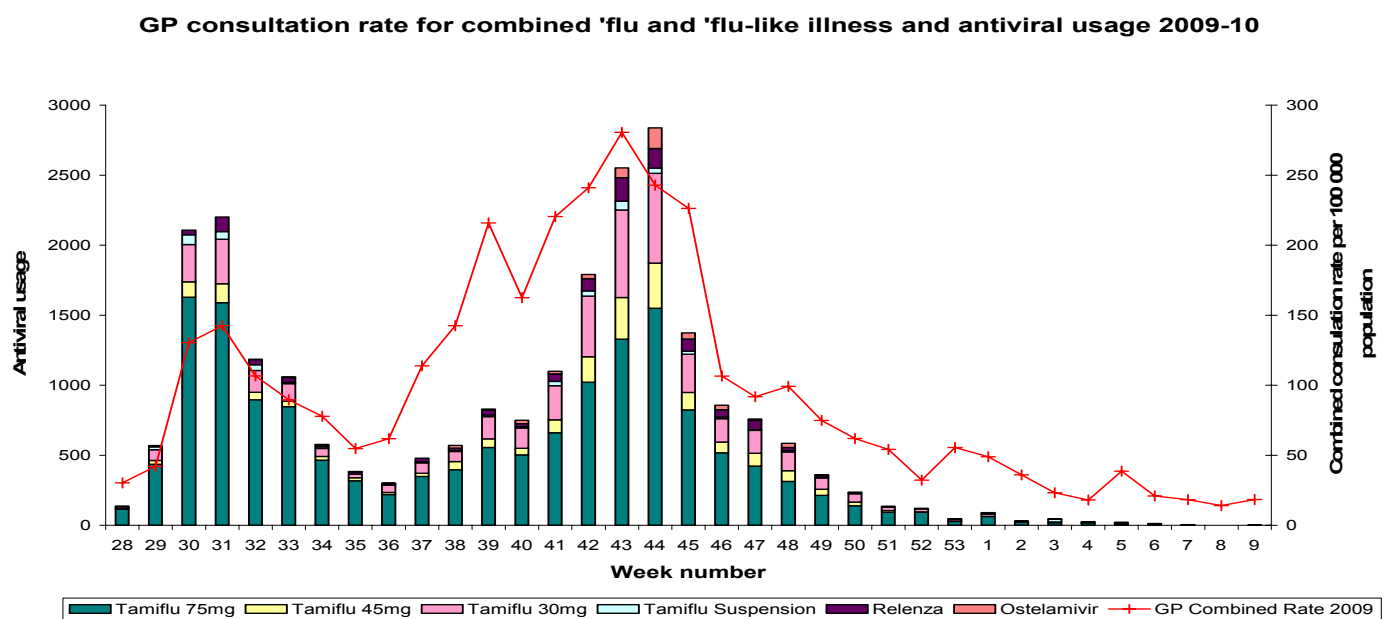
Figure 8. Weekly cases of other respiratory viruses



Comments: The number of other respiratory viruses recorded has increased from 25 in Wk 8 to 35 in Wk 9 (40% increase). RSV detections increased slightly in Wk 9 and accounted for 23% (n=8) of all other respiratory viruses recorded. In Wk 9, Rhinovirus predominated and accounted for 34% (n=12). There were also seven metapneumovirus, five respiratory adenovirus, two parainfluenza virus and one coronavirus detections in Wk 9.

Antiviral usage

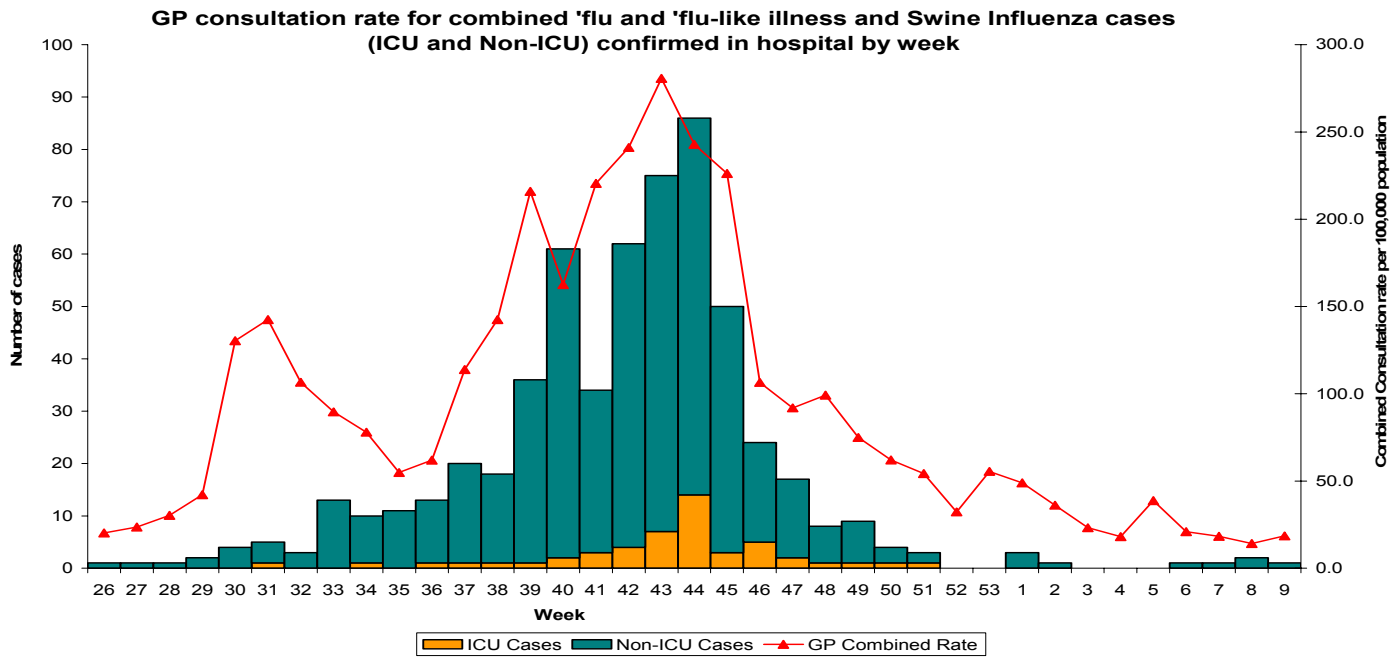
Figure 9. GP consultation rate for 'flu and 'flu-like illness and number of antiviral prescriptions



Comments: In Wk 9, there were three antiviral courses prescribed.

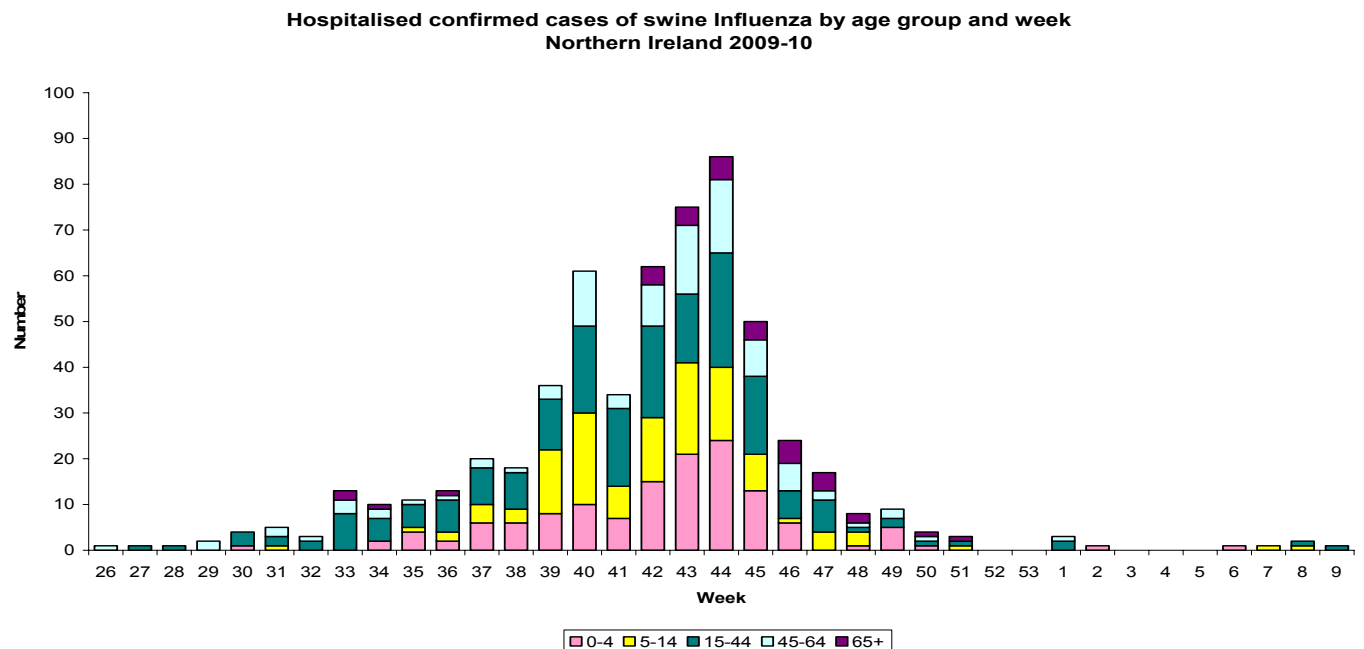
Swine influenza cases confirmed in Hospitals

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 was one new hospitalised case confirmed with pandemic (H1N1) 2009 in Wk 9. The total number of hospitalised cases up until 10th March 2010 remains at 580. Fifty cases with confirmed swine influenza were admitted to Intensive Care Units up until 10th March in Northern Ireland (Figure 10).

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.

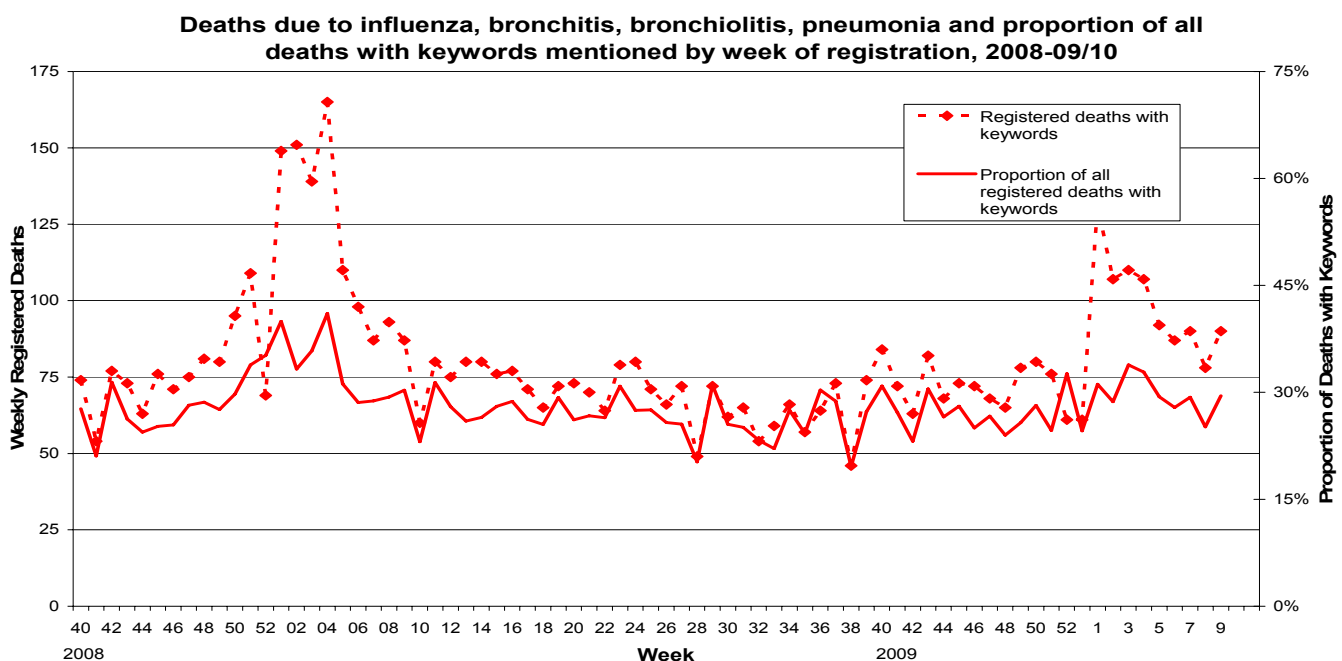
Note: *The definition of a school outbreak:*

- *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 increased slightly from 25% in Wk 8 to 30% in Wk 9. In Wk 9, there were 305 registered deaths of which 90 related to these specific respiratory infections.

No new swine flu related deaths have been reported in Wk 9. The total number of swine flu related deaths reported up until 10th March 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 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
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 ^{*updated}
Wk 9	29	6	17%	18.5