

Summary

- ❖ GP consultation rates for combined 'flu/ FLI have risen from 162.5 (updated) in Wk 40 to 222.6/100,000 population in Wk 41 (37% increase). Rates highest in the 5-14 age group.
- ❖ OOH calls for 'flu/FLI have increased slightly to 678 (2% increase) in Wk 41 and remain highest in the 5-14 age group.
- ❖ One hundred and nineteen swine influenza detections A/H1N1v in Wk 41 (59% increase).
- ❖ A cumulative total of 565 swine influenza detections in Northern Ireland as at noon 14th October 2009.
- ❖ A cumulative total of 280 hospitalised swine flu cases as at noon on 14th October 2009.
- ❖ The number of new hospitalised cases decreased from 61 in Wk 40 to 34 in Wk 41 (44% decrease).
- ❖ Death in a twelve year old child with an underlying medical condition who tested positive for swine flu. This brings the total swine flu related deaths in Northern Ireland to four.
- ❖ Antiviral prescriptions have increased from 750 in Wk 40 to 1100 in Wk 41 (47% increase).

Sentinel GP Clinical Consultation Data

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

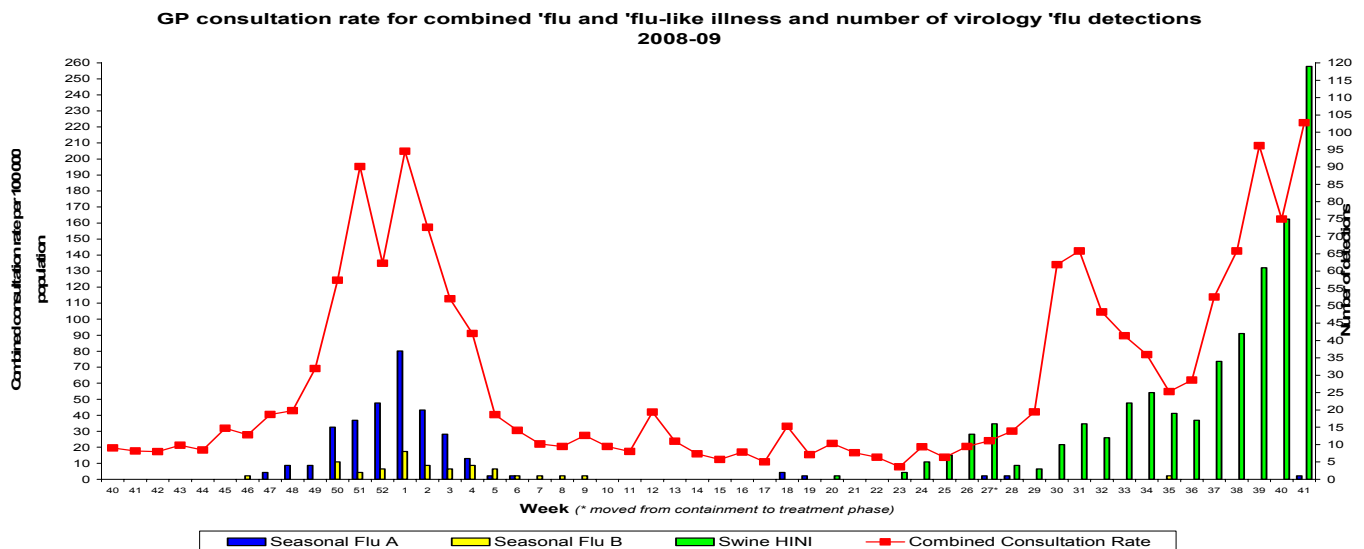
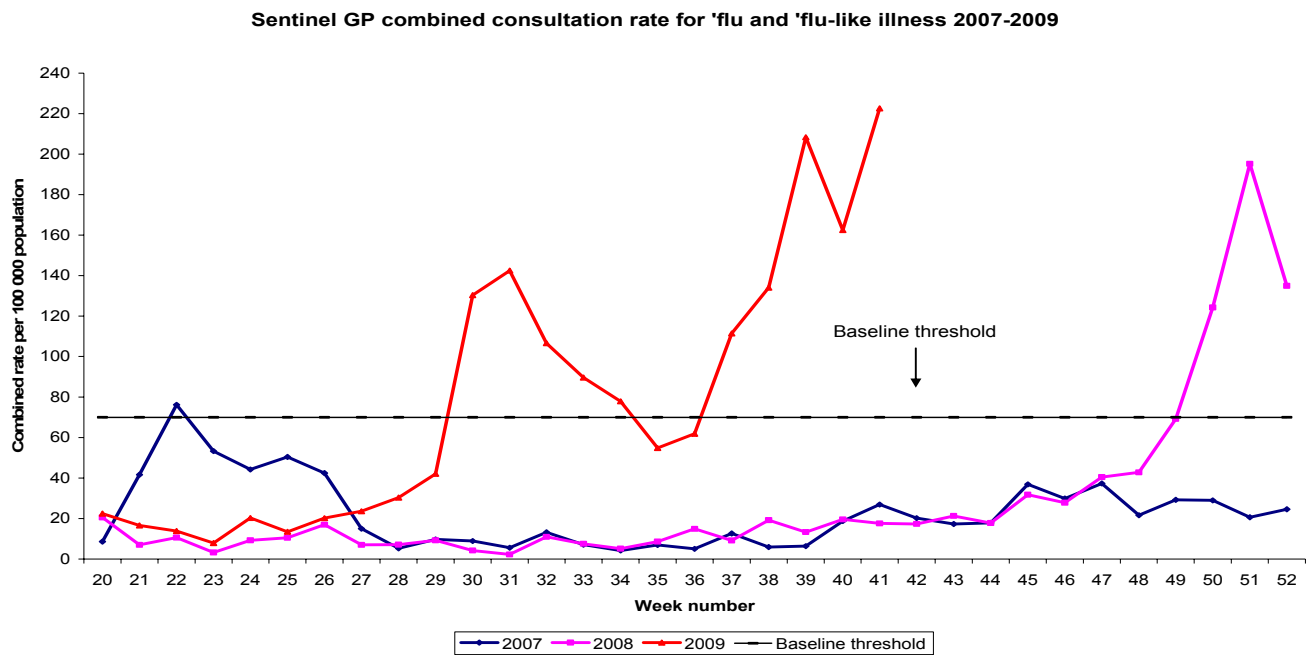
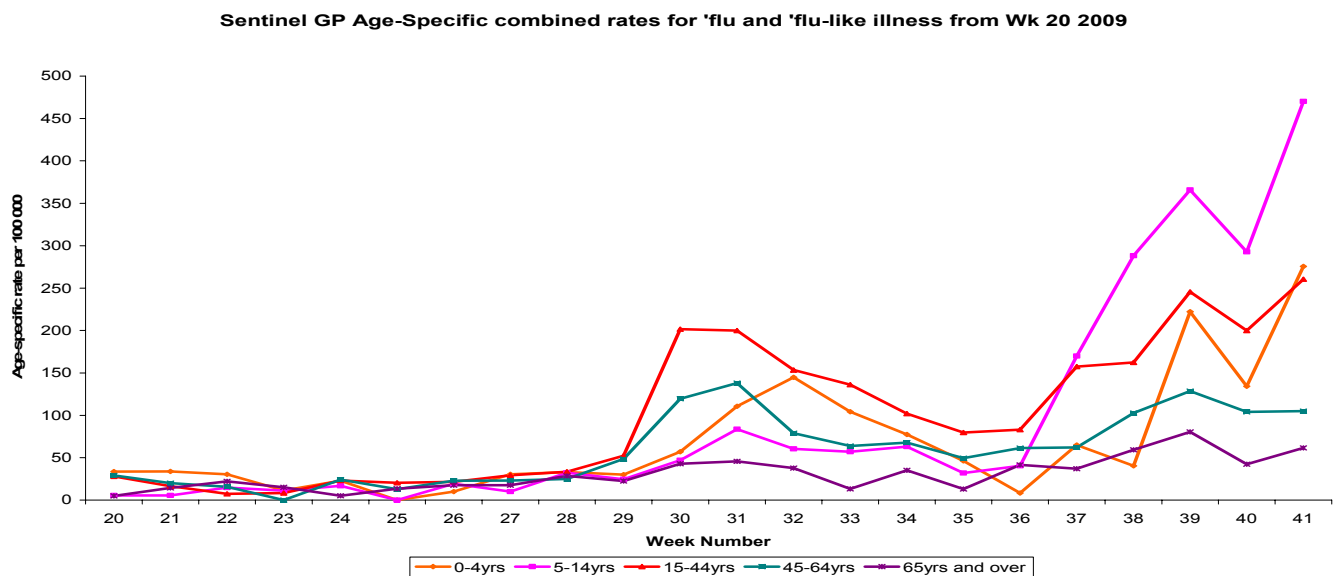


Figure 2. Consultation rates for Influenza and Influenza-Like Illness by year



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 has increased from 162.5 (updated rate due to late returns) in Wk 40 to 222.6 in Wk 41, the highest rate ever recorded in Northern Ireland . Rates are considerably higher than previous years and remain above the baseline threshold (Figure 2).

Rates in all age groups increased in Wk 41. The highest age specific combined rates in Wk 41 were recorded in the 5-14 year age group, where rates increased from 292.8 in Wk 40 to 470.1 per 100,000 population in Wk 41. Rates continue to be lowest in the 65 years and over age group.

Out-of-Hours (OOH) Centres Call Data

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

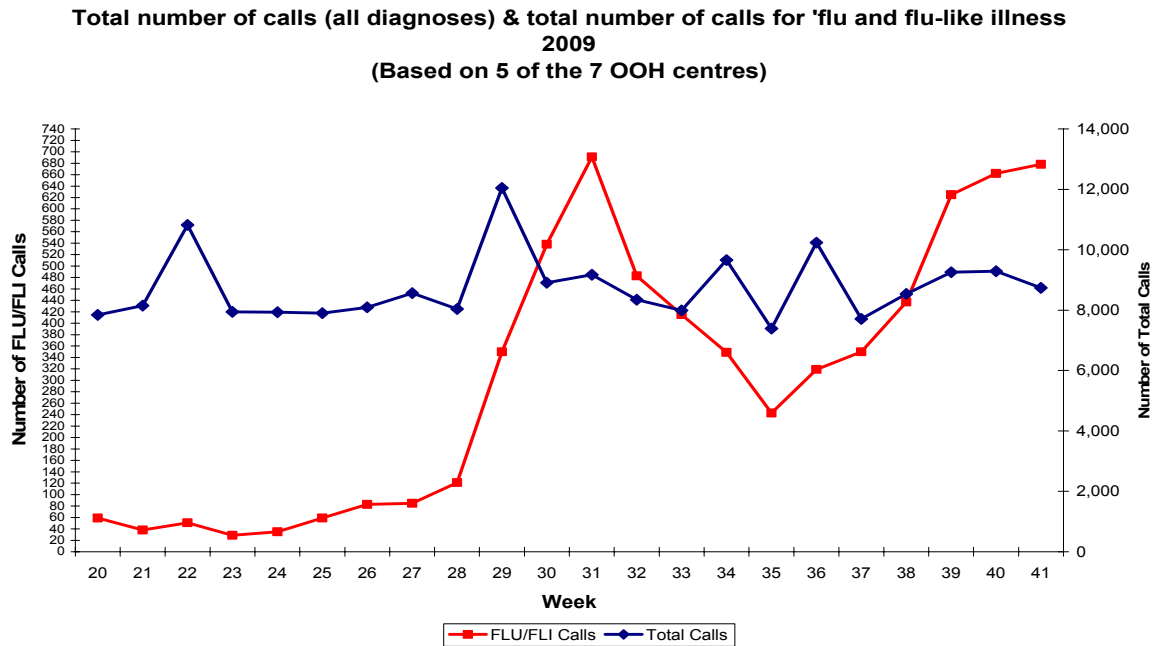
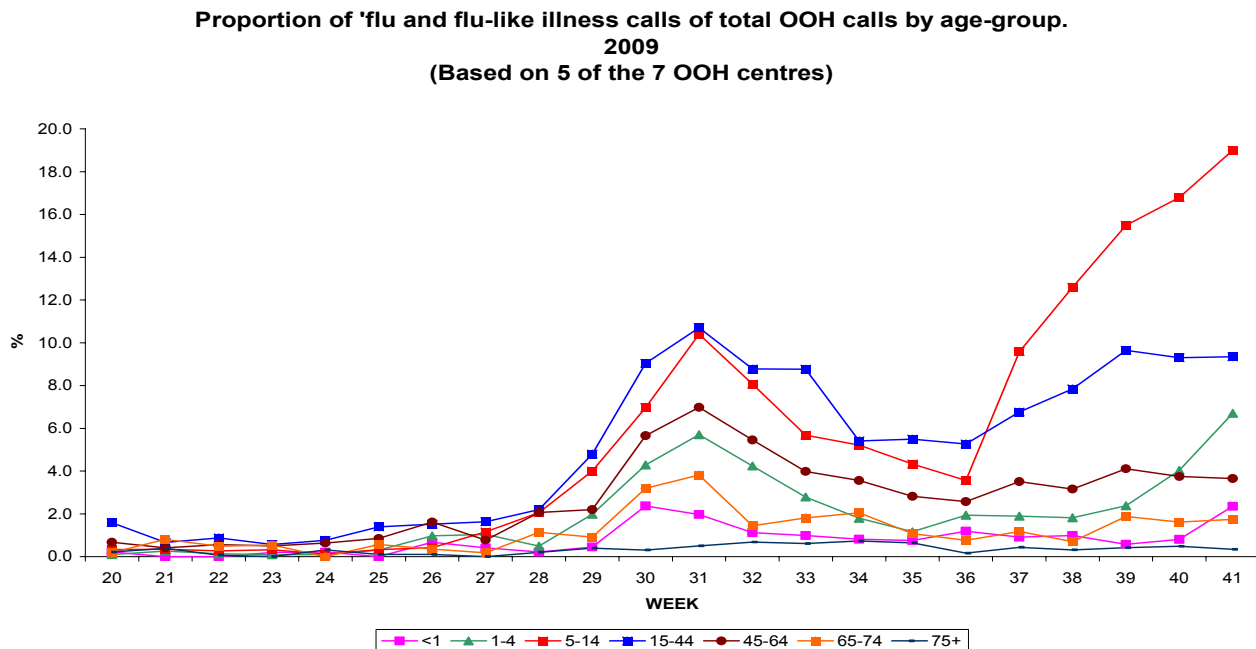


Figure 5. Proportion of 'flu and flu-like illness calls to OOHs by age-group.



Comments: The number of calls to OOH centres (all diagnoses) remained similar to last week. The proportion of calls for 'flu/FLI increased slightly from 7.1% (662 calls) in Wk 40 to 7.8% (678 calls) in Wk 41. The proportion of calls relating to 'flu/FLI continue to remain highest in the 5-14 year age group. The <1 and 1-4 years age groups have also increased in Wk 41.

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				
41	Sentinel	70	0	40	0	NT	40	57
	Non-sentinel	350	1	79	0	2	79	23
	Total	420	1	119	0	2	119	28

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 41					
AGE	FluA		FluB	RSV	Total
	Seasonal	Swine			
0-4	1	56	0	19	76
5-14	0	132	0	0	132
15-64	0	298	0	0	298
65+	0	8	1	0	9
Unknown	2	2	0	0	4
All ages	3	496	1	19	519

The first swine influenza detection in 2009 was reported in Wk 20 (Mid May). By the end of Wk 41 there had been 496 laboratory confirmed detections in Northern Ireland.

Provisional information indicates an additional 69 cases reported up to noon 14th October 2009, bringing the total number of confirmed cases in Northern Ireland to date to 565.

During Wk 41 a total of 420 specimens were tested by the Regional Virus Laboratory (350 non-sentinel and 70 sentinel). There were 119 swine influenza (40 from sentinel practices) and one seasonal 'flu A-H3 detection.

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

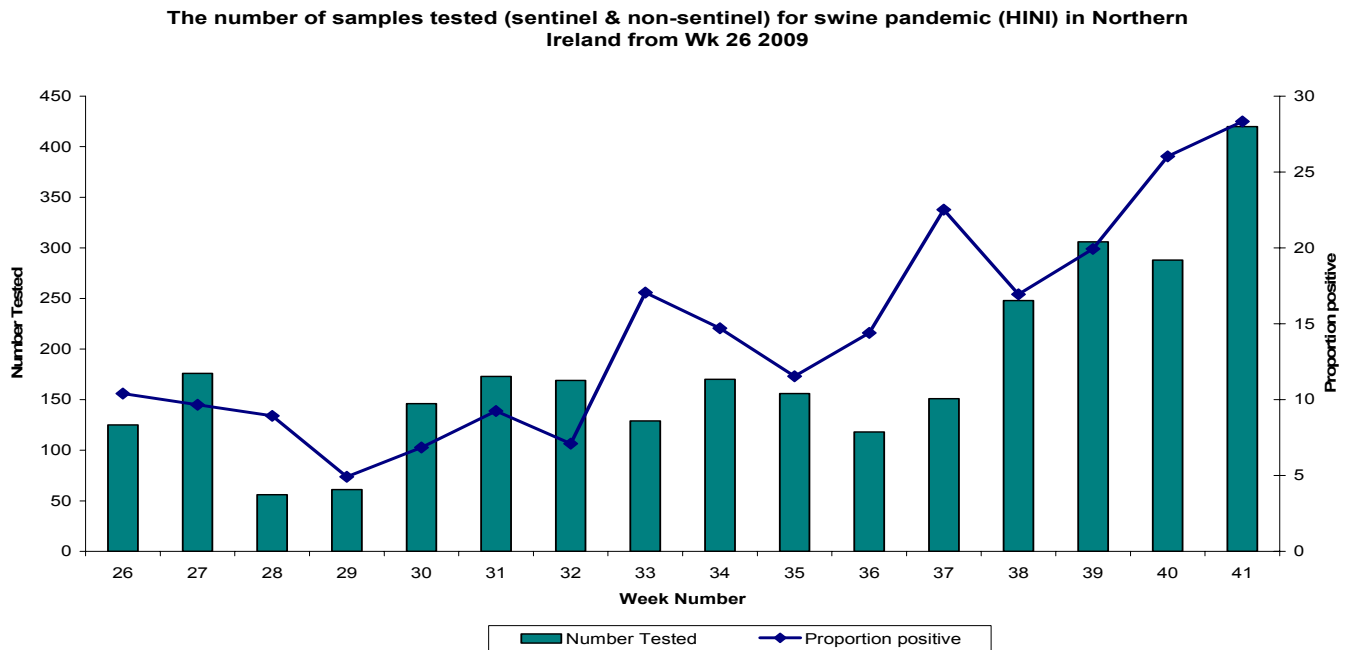
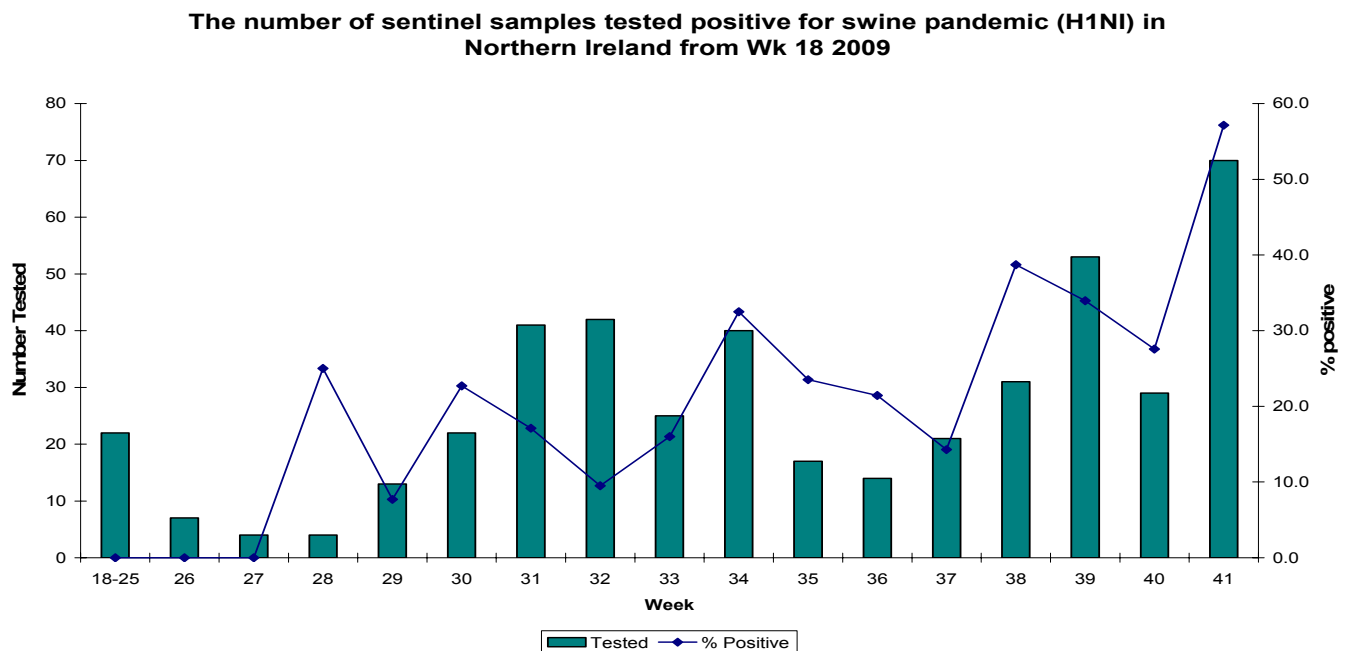


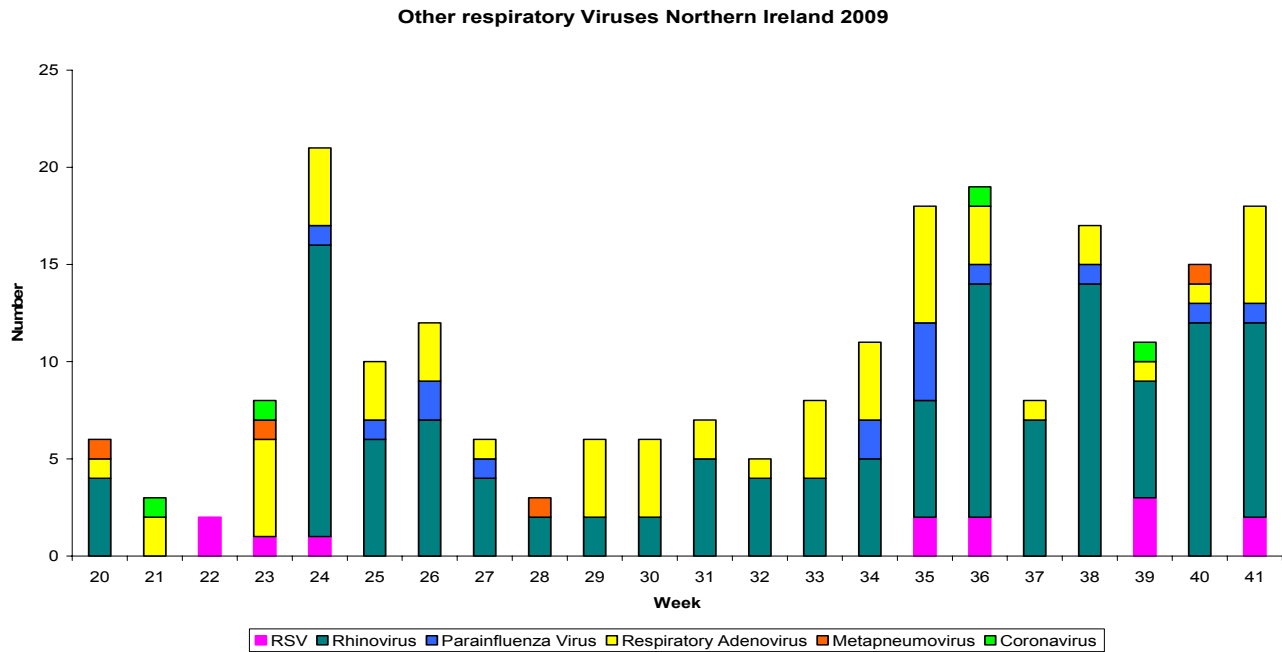
Figure 7. Number of swabs from sentinel practices and percentage positive for A/H1N1v.



Comments:

The proportion of samples (sentinel and non-sentinel) that tested positive for A/H1N1v increased from 26% in Wk 40 to 28% in Wk 41, with the general upward trend since Wk32 continuing (Figure 6). The proportion of sentinel swabs positive increased from 28% in Wk 40 to 57% in Wk 41, this would be consistent with greater community transmission (Figure 7).

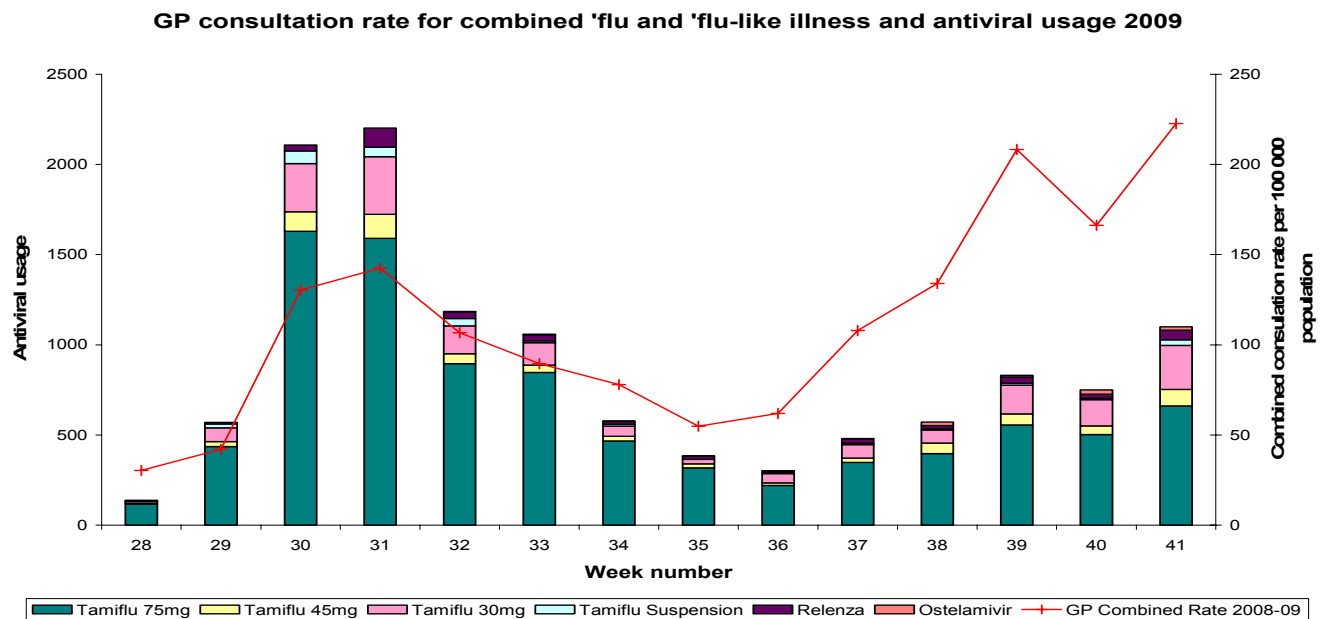
Figure 8. Weekly cases of other respiratory viruses



Comments: The number of other respiratory viruses recorded increased from 15 in Wk 40 to 18 in Wk 41. Rhinovirus accounted for 56% (n=10) of all other respiratory viruses recorded and is principally in hospitalised infants (0-4 years). There were also five respiratory adenovirus, one parainfluenza and two RSV detections in Wk41.

Antiviral usage

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



Comments: In Wk 41, 1100 antiviral courses were prescribed compared with 750 courses in Wk 40.

Swine influenza cases confirmed in Hospitals

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

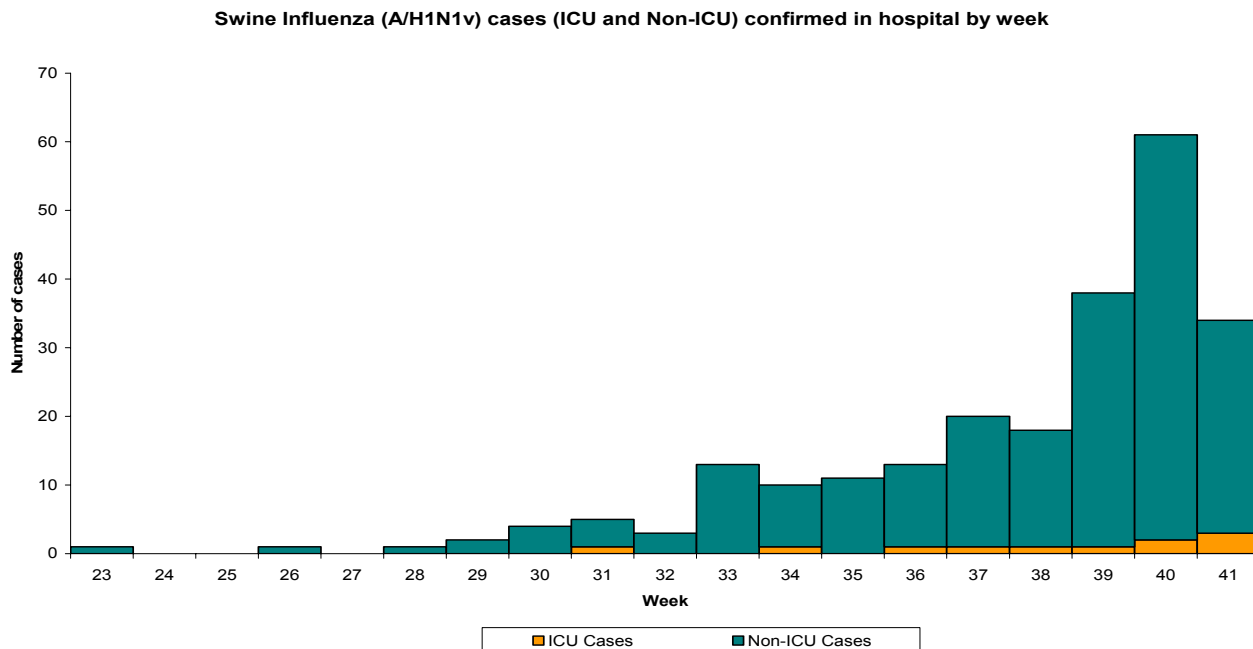
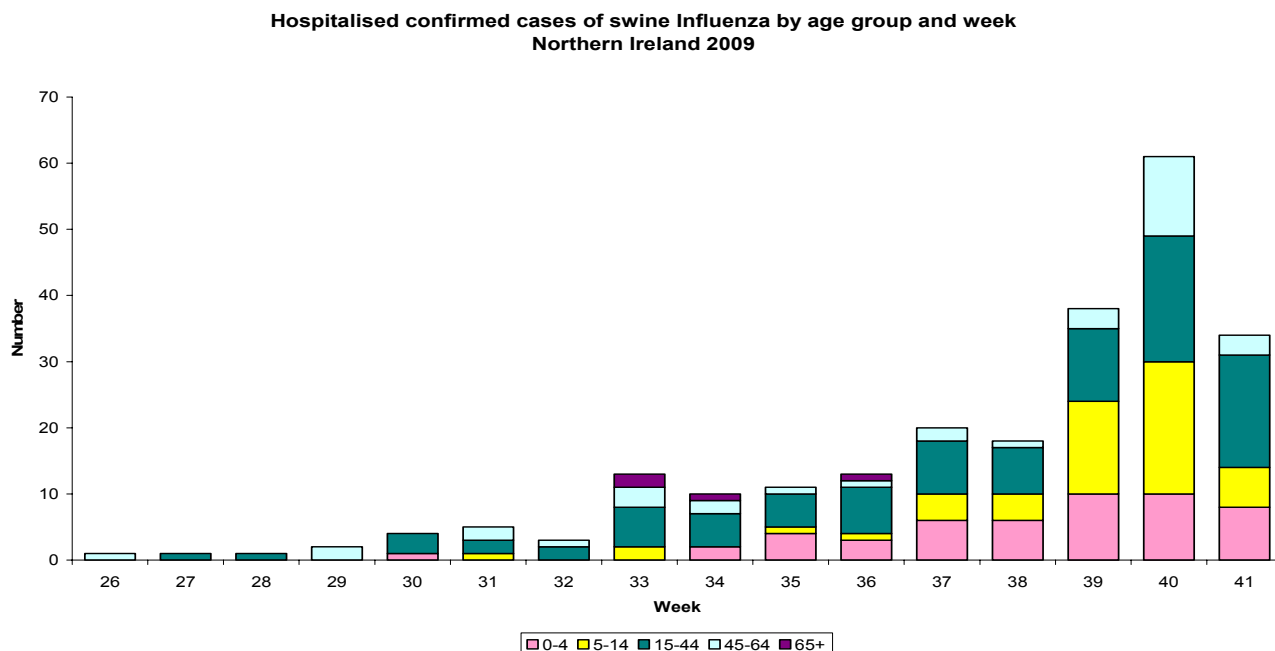


Figure 11. Swine influenza cases confirmed in hospital by age group.



Comments: CDSC (NI) have been recording the number of swine influenza cases confirmed in hospitals in Northern Ireland on a daily basis. As at 14th October 2009 there have been two hundred and eighty cases in hospitals in Northern Ireland. The number of hospitalised cases confirmed with A/H1N1v decreased from 61 in Wk 40 to 34 in Wk 41 (figures provisional) (Figure 10). The highest proportion of cases over all continues to be in the 15-44 age-group (40%).

Twelve cases with confirmed swine influenza were admitted to Intensive Care Units up until 14th October in Northern Ireland.

Outbreaks

For the period 05th October to 12th October there were three school outbreaks reported in Northern Ireland. The cumulative number of reported school outbreaks to date is eight.

There have been no school closures as a result of the outbreaks and appropriate public health advice has been given. Given that the highest rates are in the 5-14 year age group, it is to be expected that many schools will be experiencing increased levels of sickness absence from influenza and influenza-like illness.

The following caveats applies:

- 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.

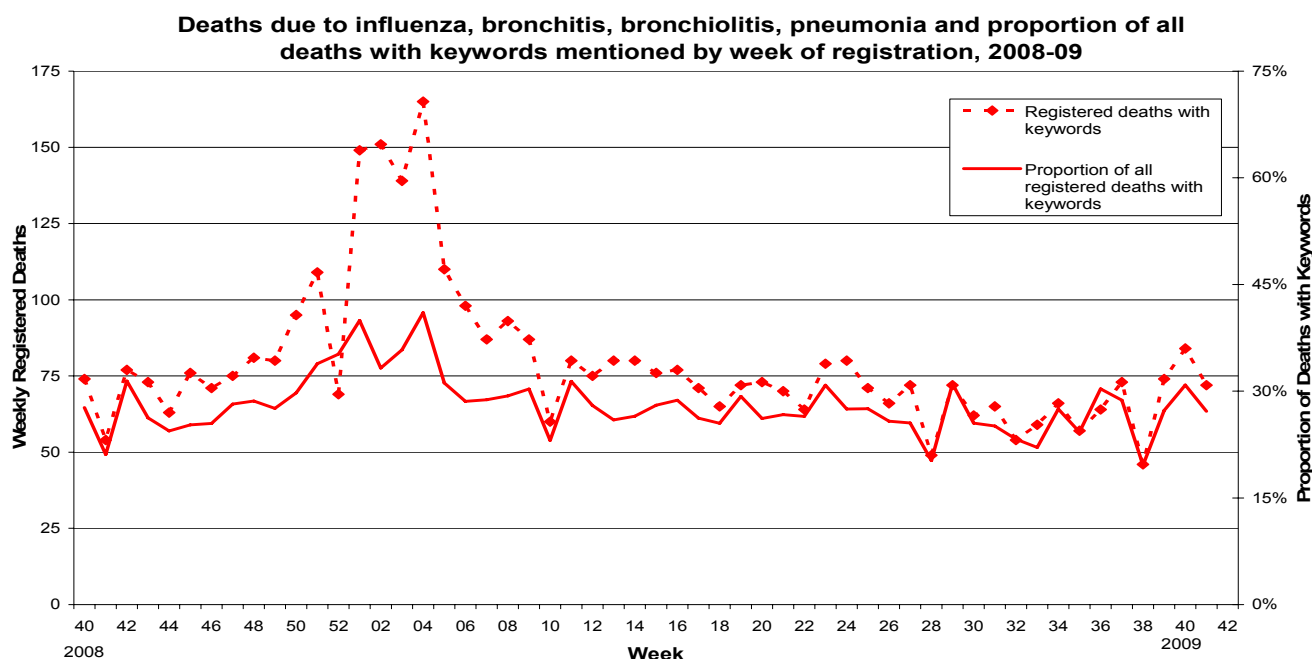
Note: *The definition of a school outbreak:*

- *Schools with confirmed case or cases*
- *50% or more of class off with any illness*
- *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 31% in Wk 40 to 27% in Wk 41. In Wk 41, there were 265 registered deaths of which 72 related to these specific respiratory infections.

Two deaths occurred, one in an infant and one in a 12 year old child, both confirmed with swine flu. The latter had an underlying health condition. This brings the total number of swine flu related deaths to four in Northern Ireland.

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:

Eileen Morelli
Information Officer
CDSC(NI)
02890263386
eileen.morelli@hpa.org.uk

Cathriona Kearns
Epidemiological Scientist
CDSC(NI)
02890263386
cathriona.kearns@hpa.org.uk

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, Eileen Morelli, and Dr. Brian Smyth, with data input assistance from Gillian Smyth and Joy Miskimmons.

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	76	15	16%	54.8
Wk 36	85	18	17%	61.9
Wk 37	177	45	20%	113.8
Wk 38	226	52	19%	142.5
Wk 39	285	85	23%	208.3
Wk 40	250*	54*	18%*	162.5 ^{*updated}
Wk 41	266	118	31%	222.6