Influenza Surveillance in Ireland - Weekly Update

Influenza Week 51 2009 (14th to 20th December 2009)

Summary

- Influenza activity in Ireland continued to decrease during week 51:
  - The sentinel GP influenza-like illness (ILI) consultation rate was 42.4 per 100,000 population during week 51, a decrease compared to the updated rate of 51.3 per 100,000 reported during week 50*.
  - The highest sentinel GP age-specific ILI consultation rates occurred in the 0-4 year age group.
  - The number of laboratory confirmed cases of pandemic (H1N1) 2009 continued to decrease.
  - The number of hospitalised cases of confirmed pandemic (H1N1) 2009 decreased from 13 in week 50 to 12 in week 51.
  - Two hospitalised cases of confirmed pandemic (H1N1) 2009 were admitted to ICU.
  - The proportion of sentinel specimens testing positive for pandemic (H1N1) 2009 decreased from 16.7% in week 50 to 14.3% during week 51.
  - The proportion of flu–related calls to GP Out-of-Hours services decreased slightly.
  - No pandemic (H1N1) 2009, influenza or ILI outbreaks were reported.
  - Pandemic (H1N1) 2009 is the only influenza virus circulating; 100% of specimens positive for influenza were pandemic (H1N1) 2009
  - Respiratory Syncytial Virus (RSV) activity decreased.
- Based on the surveillance of laboratory confirmed cases of pandemic (H1N1) 2009, as of 19th December:
  - 4,494 confirmed cases have been notified in Ireland.
  - Children and young adults remain the most affected groups; 80.2% of cases are less than 35 years of age.
  - Clinical illness continues to be mild in the majority of cases.
- Twenty-two deaths in confirmed cases of pandemic (H1N1) 2009 have been reported to date (23rd December).

* Since the last report, extra information on the number of ILI consultations and positive influenza specimens occurring in week 50 was provided by sentinel GPs and the NVRL and the rate for the week was adjusted accordingly

Introduction

In order to monitor influenza activity in Ireland a number of surveillance systems are in place:

1. Irish College of General Practitioners (ICGP) sentinel surveillance system
2. GP Out-of-Hours system
3. Virological data from the National Virus Reference Laboratory (NVRL), Cork University Hospital (CUH) and University College Hospital, Galway (UCHG)
4. Enhanced surveillance system for pandemic (H1N1) 2009 using the Computerised Infectious Disease Reporting system (CIDR)
5. Outbreak reporting (CIDR)
6. Pandemic (H1N1) ICU enhanced surveillance system

Details of these surveillance systems are provided in Appendix A at the back of this report.

1. GP sentinel surveillance system

Clinical Data

During week 51 2009, 51 of 61 (83.6%) ICGP sentinel general practices provided data, with 30 practices (49.2%) reporting 89 influenza-like illness (ILI) cases and 31 practices reporting no ILI cases. This corresponds to an ILI consultation rate of 42.4 per 100,000 population, which is a decrease compared to the updated rate of 51.3 per 100,000 population reported during week 50 2009[†].

Figure 1 shows the ILI consultation rates, the baseline threshold rate and the number of positive specimens detected by the National Virus Reference Laboratory (NVRL), Cork University Hospital (CUH) and University College Hospital, Galway (UCHG). CUH and UCHG have reported influenza positive non-sentinel specimens since weeks 31 and 36, 2009, respectively and these are included in figure 1. Influenza A unsubtyped isolates (probable pandemic (H1N1) 2009) are specimens that are awaiting laboratory confirmation as pandemic (H1N1) 2009.

[†] Since the last report, extra information on the number of ILI consultations and positive influenza specimens occurring in week 50 was provided by sentinel GPs and the NVRL and the rate for the week was adjusted accordingly

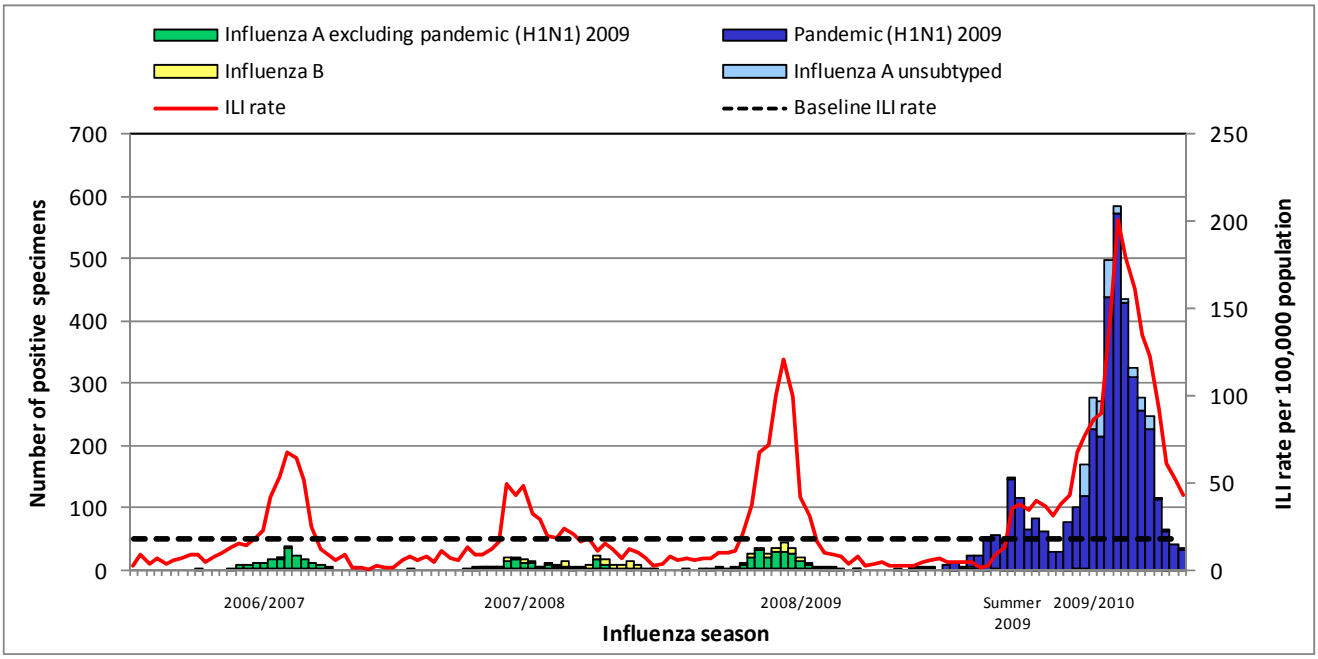

Figure 1: ILI GP consultation rates per 100,000 population, baseline ILI threshold rate, and number of positive influenza specimens, by influenza week and season[‡]

Source: NVRL, CUH and UCHG laboratory data and ICGP clinical ILI data

During week 51 2009, sentinel GPs reported 17 ILI cases in the 0-4 year age group (113.7 per 100,000 population), 10 cases in the 5-14 year age group (36.0 per 100,000 population), 60 cases in the 15-64 year age group (41.7 per 100,000 population) and two cases in those aged 65 years and older (8.6 per 100,000 population) (figure 2).

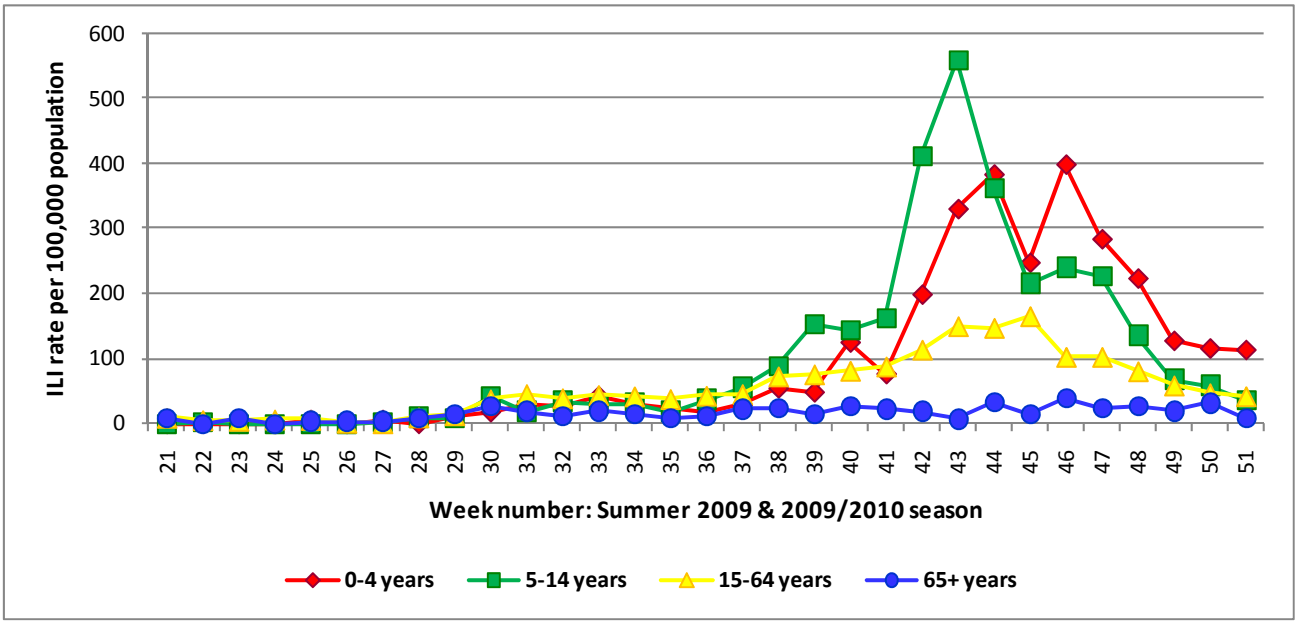

Figure 2: Age specific sentinel GP consultation rate for ILI per 100,000 population by week during the Summer 2009 and 2009/2010 influenza seasons

Source: ICGP ILI clinical data

[‡] Please note that virological data for NVRL is for all seasons, for CUH is from week 31 2009 and for UCHG is from week 36 2009.

Regional Influenza Activity by HSE-Area

Influenza activity is reported on a weekly basis from the Departments of Public Health in each HSE area. Influenza activity is based on sentinel GP ILI consultation rates, laboratory confirmed influenza cases and ILI/influenza outbreaks.

During week 51 2009, no activity was reported in HSE-W, sporadic activity (due to isolated cases of ILI and/or isolated laboratory confirmed cases of influenza) was reported by HSE-M, -MW, -NE, -NW and -S, while localised influenza activity (due to increases in ILI in local areas or two or more outbreaks within a HSE area and laboratory confirmed cases of influenza) was reported by HSE-E and –SE (figure 3).

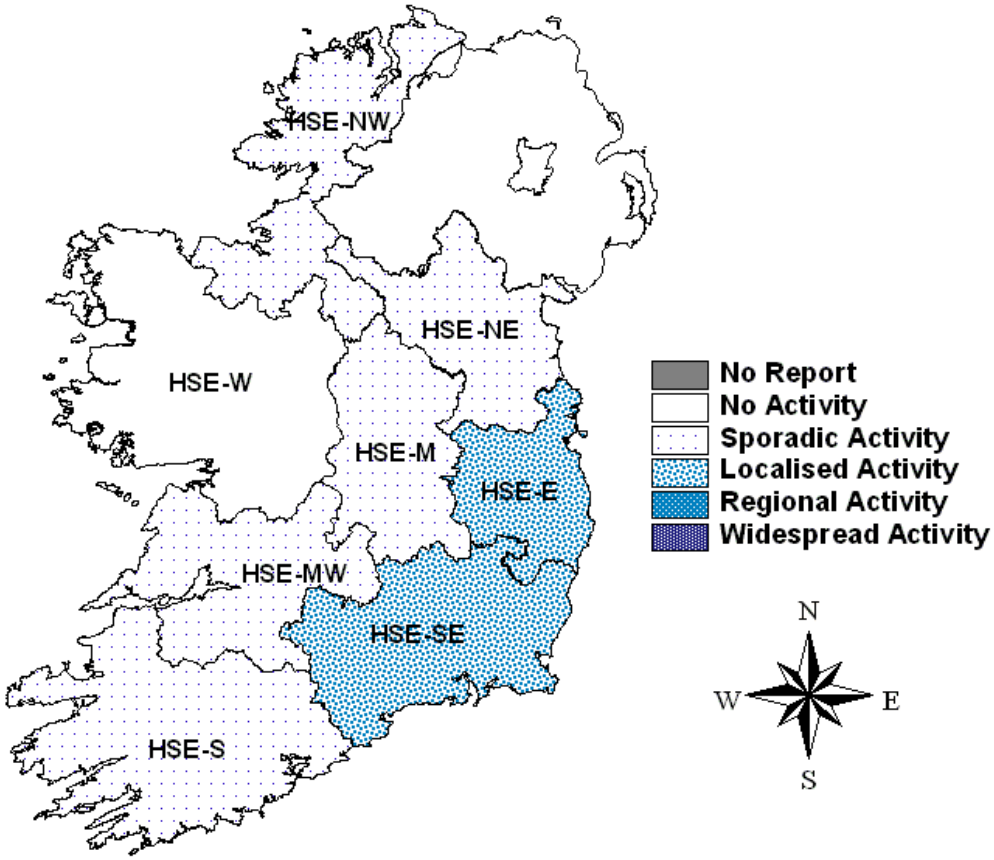

Figure 3: Map of provisional influenza activity by HSE area during influenza week 51 2009

Sentinel hospitals and schools

The Departments of Public Health have established at least one sentinel hospital in each HSE area, to report data on total hospital admissions, total emergency admissions and total respiratory admissions by age group on a weekly basis. Sentinel primary and secondary schools were also established in each area, in close proximity to the sentinel GPs, to report absenteeism data on a weekly basis. During influenza week 51 2009, hospital and school sentinel data were received from four of the eight HSE areas. One sentinel hospital in HSE-E reported an increase in the proportion of respiratory admissions and three sentinel primary schools (one in HSE-E and two in HSE-SE) reported an increase in absenteeism during week 51 compared with week 50.

2. GP Out-Of-Hours services surveillance

The Department of Public Health in the HSE-NE is collating national data on calls to nine of thirteen GP Out-of-Hours services in Ireland. Clinical details from all calls are recorded. Records with clinical symptoms reported as flu or influenza are extracted for analysis. This information may act as an early indicator of increased ILI activity. However, data are self-reported by callers and are not based on coded influenza diagnoses. The percentage of flu-related calls was 5.7% during week 51, a slight decrease compared to the proportion (6.0%) reported during week 50 (figure 4).

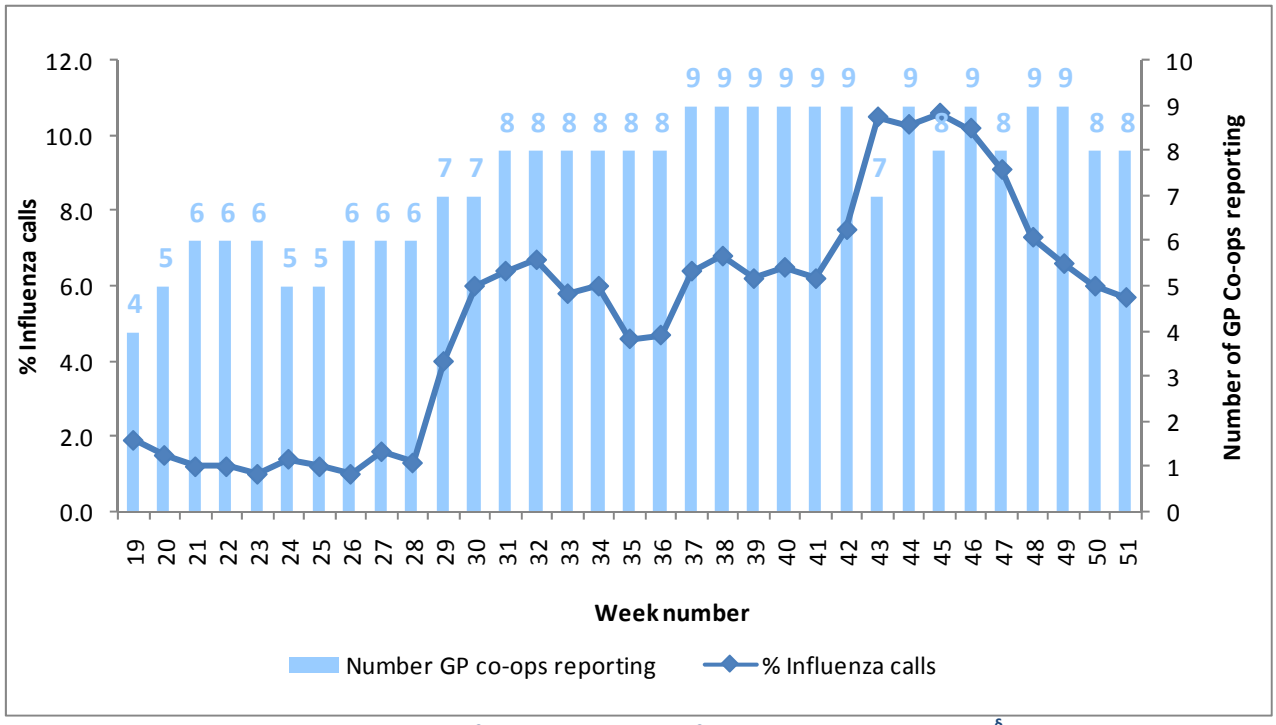

Figure 4: Flu-related calls as a proportion of total calls to Out-of-Hours GP Co-ops by week[§]
Source: HSE-NE.

[§] Week 51: data received from CARE-Doc, D-Doc, K-Doc, NE-Doc, NoW-Doc, Shan-Doc, South-Doc, West-Doc. Not all services provided data for all weeks.

3. Virological Data from the National Virus Reference Laboratory (NVRL), Cork University Hospital (CUH) and University College Hospital, Galway (UCHG)

Forty-two specimens from sentinel GPs were tested by the NVRL during week 51 2009, 6 (14.3%) of which were positive for pandemic (H1N1) 2009.

The NVRL also tested 303 non-sentinel specimens taken during the same week.[**] Of these, 21 (6.9%) were positive for pandemic (H1N1) 2009 and 35 specimens (11.6%) tested positive for RSV (table 1 and table 3). One specimen was positive for parainfluenza virus type 1. No specimens were positive for other influenza A subtypes, influenza B, adenovirus or parainfluenza virus types 2 and 3. Figure 5 shows the number and percentage of non-sentinel RSV positive specimens detected by the NVRL during the 2009/2010 influenza season compared to the 2008/2009 influenza season.

UCHG tested 16 non-sentinel specimens taken during week 51 2009, one (6.2%) of which was positive for pandemic (H1N1) 2009 (table 2).

CUH tested 60 non-sentinel specimens taken during week 51 2009, 9 (15.0%) of which were positive for pandemic (H1N1) 2009 (table 2).

Pandemic (H1N1) 2009 is the only influenza virus circulating. During week 51, 100% of specimens positive for influenza were pandemic (H1N1) 2009. For summer 2009 and 2009/2010 influenza seasons to date, confirmed pandemic (H1N1) 2009 has accounted for 99.4% of influenza positive specimens (table 1).

During week 51, the percentage of sentinel and non-sentinel specimens testing positive for pandemic (H1N1) 2009 was 8.8%, an increase compared to 7.1% positive during week 50. Figure 6 shows the number of sentinel specimens tested by the NVRL for influenza and non-sentinel specimens tested by the NVRL, CUH and UCHG for influenza and the percentage of specimens testing positive for influenza by week number for the Summer 2009 and 2009/2010 influenza seasons.

To date, the NVRL has performed neuraminidase sequencing on 23 non-sentinel pandemic (H1N1) 2009 isolates. Oseltamivir susceptibility results are available for 23 isolates, of which all were susceptible to oseltamivir. Zanamivir susceptibility results are available for 17 isolates, of which all were susceptible to zanamivir.

[**] Please note that non-sentinel specimens relate to specimens referred to the NVRL (other than sentinel specimens) and may include more than one specimen from each case

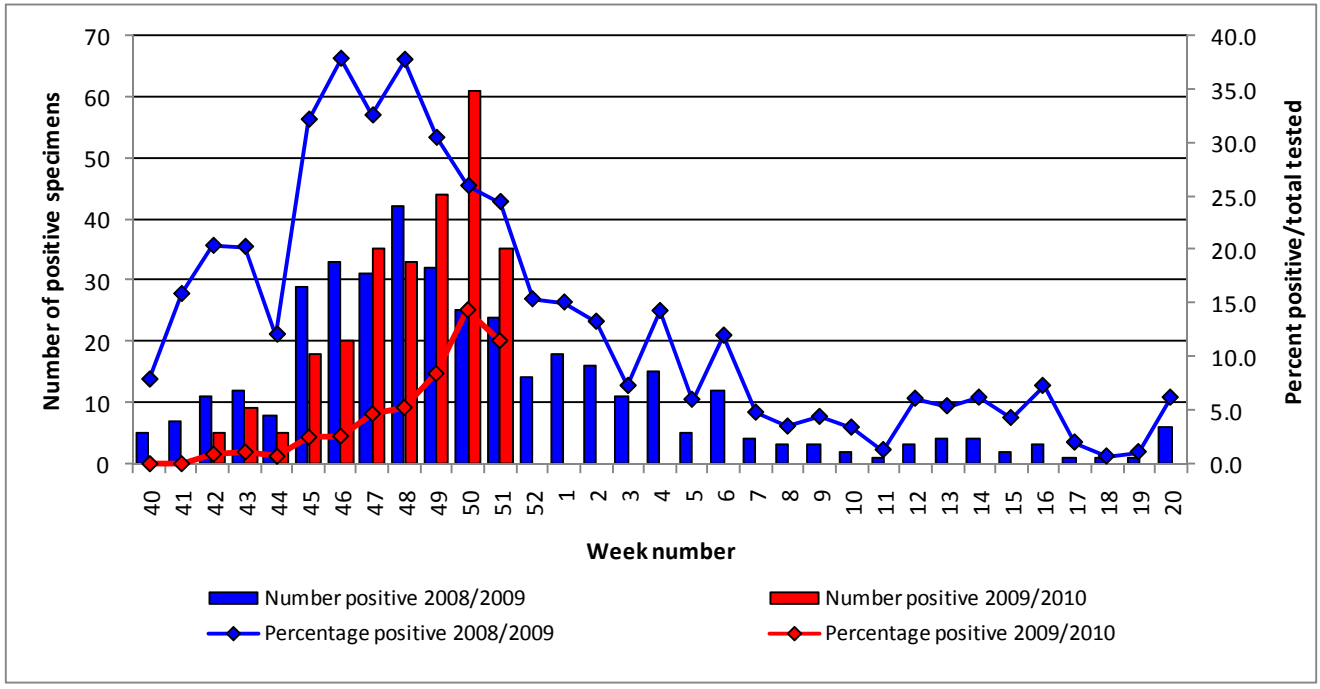

Figure 5: NVRL non-sentinel RSV activity for influenza season 2008/2009 compared to influenza season 2009/2010

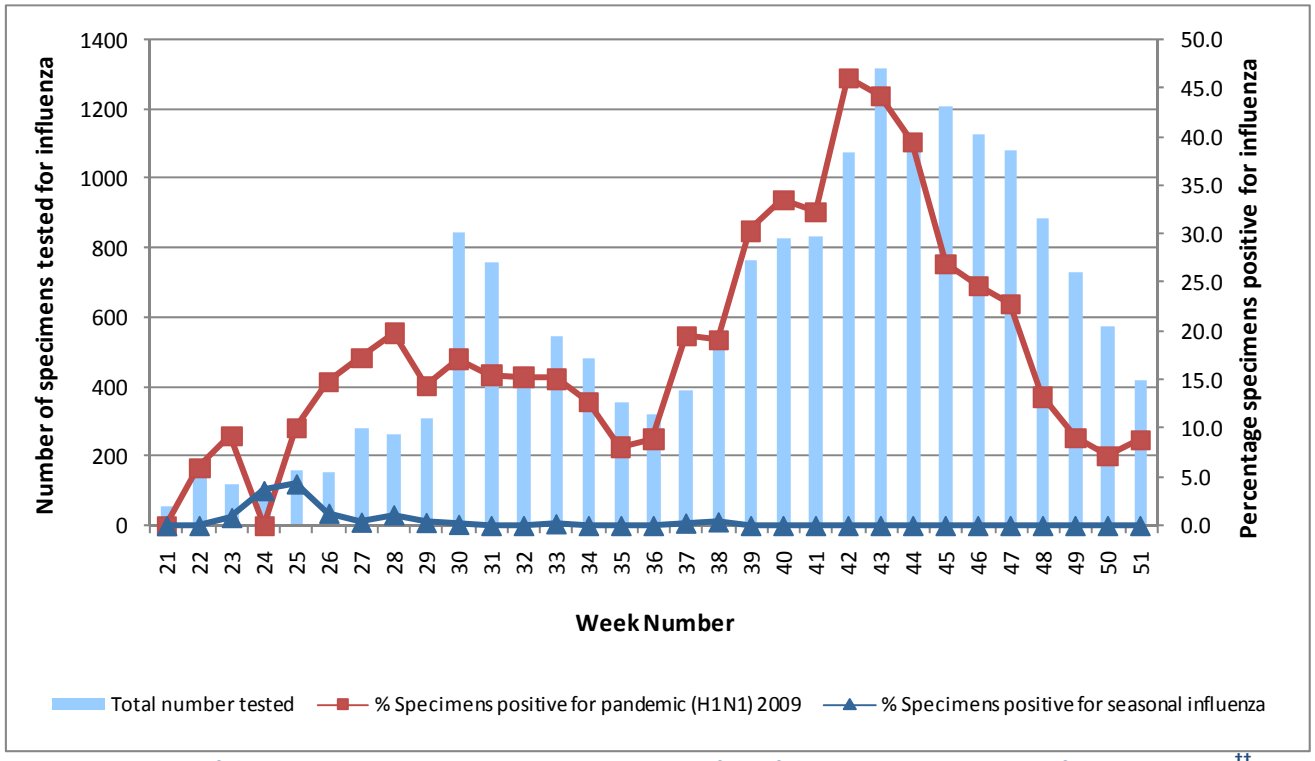

Figure 6: Number of sentinel and non-sentinel specimens tested for influenza and percentage influenza positive[††]

Source: NVRL, CUH & UCHG

[††] Please note that virological data for NVRL is from week 21 2009, for CUH is from week 31 2009 and for UCHG is from week 36 2009.

Table 1: Number of sentinel and non-sentinel respiratory specimens tested and positive results, influenza week 51 2009 and Summer 2009 & 2009/2010 seasons to date‡‡

Source: NVRL, CUH and UCHG

Week number	Specimen type	Total Specimens tested	Number Influenza Positive	% Influenza Positive	Confirmed Pandemic (H1N1) 2009	Probable Pandemic (H1N1) 2009	Influenza A(H3)	Influenza A(H1)	Influenza A (unsubtyped)	Influenza B	% Pandemic (H1N1) 2009
51	Sentinel	42	6	14.3	6	0	0	0	0	0	100.0
	Non-sentinel	379	31	8.2	28	3	0	0	0	0	100.0
	Total	**421**	**37**	**8.8**	**34**	**3**	**0**	**0**	**0**	**0**	100.0
21-51	Sentinel	2074	751	36.2	748	0	3	0	0	0	99.6
	Non-sentinel	17103	3834	22.4	3513	296	0	0	22	3	99.3
	Total	**19177**	**4585**	**23.9**	**4261**	**296**	**3**	**0**	**22**	**3**	99.4

Table 2: Number of non-sentinel respiratory specimens tested and positive results by laboratory, influenza week 50 2009 and Summer 2009 & 2009/2010 seasons to date‡‡

Source: NVRL, CUH and UCHG

Week number	Laboratory	Total specimens tested	Number influenza positive	% Influenza positive	Confirmed Pandemic (H1N1) 2009	Probable Pandemic (H1N1) 2009	% Pandemic (H1N1) 2009	Influenza A (unsubtyped)	Influenza B
51	NVRL	303	21	6.9	21	0	100.0	0	0
	CUH	60	9	15.0	6	3	100.0	0	0
	UCHG	16	1	6.2	1	0	100.0	0	0
	Total	**379**	**31**	**8.2**	**28**	**3**	**100.0**	**0**	**0**
21-51	NVRL	13183	2545	19.3	2516	5	99.1	21	3
	CUH	2743	809	29.5	518	291	100.0	0	0
	UCHG	1177	480	40.8	479	0	99.8	1	0
	Total	**17103**	**3834**	**22.4**	**3513**	**296**	99.3	**22**	**3**

Table 3: Number of non-sentinel specimens tested by the NVRL for other respiratory pathogens and positive results, influenza week 51 2009 and Summer 2009 & 2009/2010 seasons to date

Source: NVRL

Week number	Total specimens	RSV	% RSV Positive	Adenovirus	% Adenovirus positive	Parainfluenza virus type 1	% Parainfluenza virus type 1	Parainfluenza virus type 2	% Parainfluenza virus type 2	Parainfluenza virus type 3	% Parainfluenza virus type 3
51	303	35	11.6	0	0.0	1	0.3	0	0.0	0	0.0
21-39	6093	21	0.3	4	0.1	4	0.1	0	0.0	6	0.1
40-51	7090	265	3.7	2	0.0	5	0.1	1	0.0	1	0.0

‡‡ Please note that virological data for NVRL is from week 21 2009, for CUH is from week 31 2009 and for UCHG is from week 36 2009.

4. Laboratory confirmed cases of pandemic (H1N1) 2009 (CIDR)

During the current pandemic phase of mitigation, testing for influenza is focused on hospitalised cases, cases with severe clinical illness and in other situations such as clusters of ILI in institutions or unusual clusters of serious illness.

As of 19th December 2009, a total of 4,494 confirmed cases of pandemic (H1N1) 2009 infection were reported.[§§] Figure 7 shows the number of confirmed pandemic (H1N1) 2009 cases by week of notification and hospitalisation status.

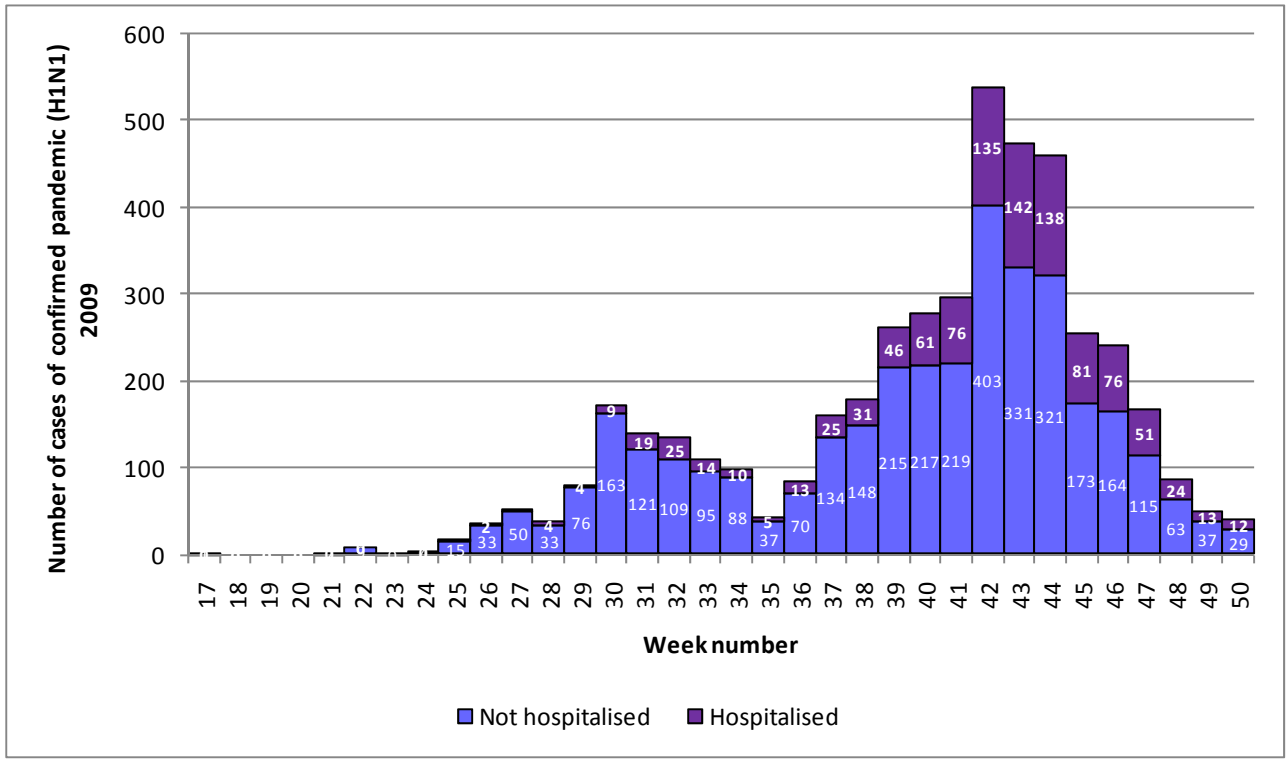

Figure 7: Number of confirmed cases of pandemic (H1N1) 2009 by week of notification and hospitalisation status[***]

Source: CIDR

Age and Sex

Of the 4,494 confirmed cases reported to 19th December, 2,398 were female (53.4%), 2,068 were male (46.0%) and sex was not reported for 28 cases (0.6%). The median age of cases was 17 years (range: 0-84 years) and 80.2% were less than 35 years of age. Figure 8 shows the age specific rates per 100,000 population of confirmed cases of pandemic (H1N1) 2009 by week of notification. The highest age specific rates are in the 0-4 year age group since week 40 but have decreased in recent weeks. During week 50, the age specific notification rate decreased in all age groups, except in the 45-55 year age group where a slight increase was noted.

[§§] As WHO has advised Member States to reduce laboratory testing of suspect cases and to move to clinical diagnosis of influenza-like illness, the number of laboratory confirmed cases of pandemic (H1N1) 2009 reported here understates the actual number of cases in the population.

[***] Week number on figure 7 is based on infectious disease notification week number, which is one week behind the international influenza week number. Therefore weeks 17-50 above is equivalent to weeks 18-51 on the influenza system.

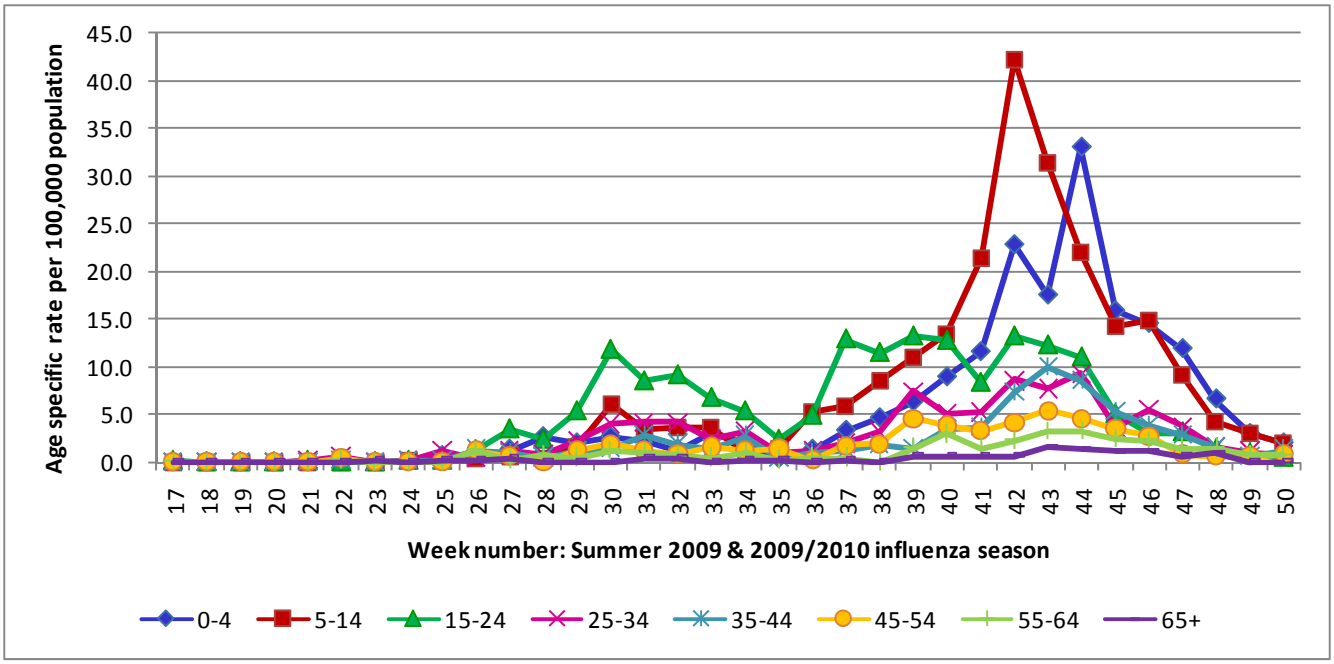

Figure 8: Age specific notification rate per 100,000 population of confirmed cases of pandemic (H1N1) 2009 by week of notification[†††]

Source: CIDR

HSE area

All HSE areas have reported confirmed cases. The numbers and rates by HSE area are shown in table 4. The highest rate for week 50 was in HSE-SE (2.2 per 100,000 population).

Table 4: Number and rate per 100,000 population for confirmed cases of pandemic (H1N1) 2009 by HSE area[†††]

Source: CIDR

HSE Area	Week 50: 13th to 19th December 2009		Week 17 - Week 50 2009	
	Number of confirmed cases	Rate per 100,000 population	Number of confirmed cases	Rate per 100,000 population
HSE-E	15	1.0	1449	96.6
HSE-M	1	0.4	165	65.6
HSE-MW	3	0.8	320	88.6
HSE-NE	6	1.5	322	81.7
HSE-NW	1	0.4	218	91.9
HSE-SE	10	2.2	393	85.3
HSE-S	5	0.8	903	145.4
HSE-W	0	0.0	724	174.8
Total	**41**	**1.0**	**4494**	**106.0**

[†††] Week number in figure 8 and table 4 is based on infectious disease notification week number, which is one week behind the international influenza week number. Therefore week 50 above is equivalent to week 51 on the influenza system.

Severity of illness

As of 19th December 2009, clinical illness continues to be mild in the majority of cases. Of the 4,494 confirmed cases, outcome was reported for 1,339 (29.9%) cases. Of the 1,339 confirmed cases where outcome was reported, 1,249 have recovered or are recovering (93.3%) and 68 are still ill (5.1%). To date (23rd December) 22 laboratory confirmed cases have died. Table 5 shows the number of deaths in confirmed cases of pandemic (H1N1) 2009 by week.

Table 5: Number of deaths due to pandemic (H1N1) 2009

Week number	Number of deaths due to pandemic (H1N1) 2009
31	1
32	0
33	1
34	0
35	0
36	0
37	0
38	0
39	2
40	0
41	1
42	4
43	3
44	2
45	4
46	2
47	0
48	0
49	2
50	0
51	0
Total	**22**

Reported complications have been mostly respiratory in nature; 173 cases developed pneumonia and 66 developed acute respiratory distress syndrome (ARDS). Other reported complications included chest infections, acute renal failure and multi-organ failure.

Hospitalised cases

Of the 4,494 confirmed cases, 1,019 (22.7%) were admitted to hospital. Of these, 92 (9.03%) were admitted to ICU. The number of laboratory confirmed cases who were hospitalised and admitted to ICU in week 50 was two, the same as the number of cases admitted to ICU in week 49.[‡‡‡] Table 6 shows the number of hospitalised cases by age group (years), sex and age-specific hospitalisation rate while figure 9 shows the cumulative numbers and age specific rates by hospitalisation status.

[‡‡‡] ICU figures taken from the pandemic (H1N1) ICU enhanced surveillance system. Week number is based on infectious disease notification week number, which is one week behind the international influenza week number. Therefore weeks 49 and 50 above are equivalent to weeks 50 and 51, respectively on the influenza system.

The highest age-specific rates for hospitalised patients are seen in the 0-4 year age group while the highest age-specific rates for non-hospitalised cases are seen in the 5-14 year age group. The median age of hospitalised cases was 17 years. Of the 1,019 hospitalised cases, 519 (50.9%) were female, 495 (48.6%) were male and sex was not reported for five cases (0.5%).

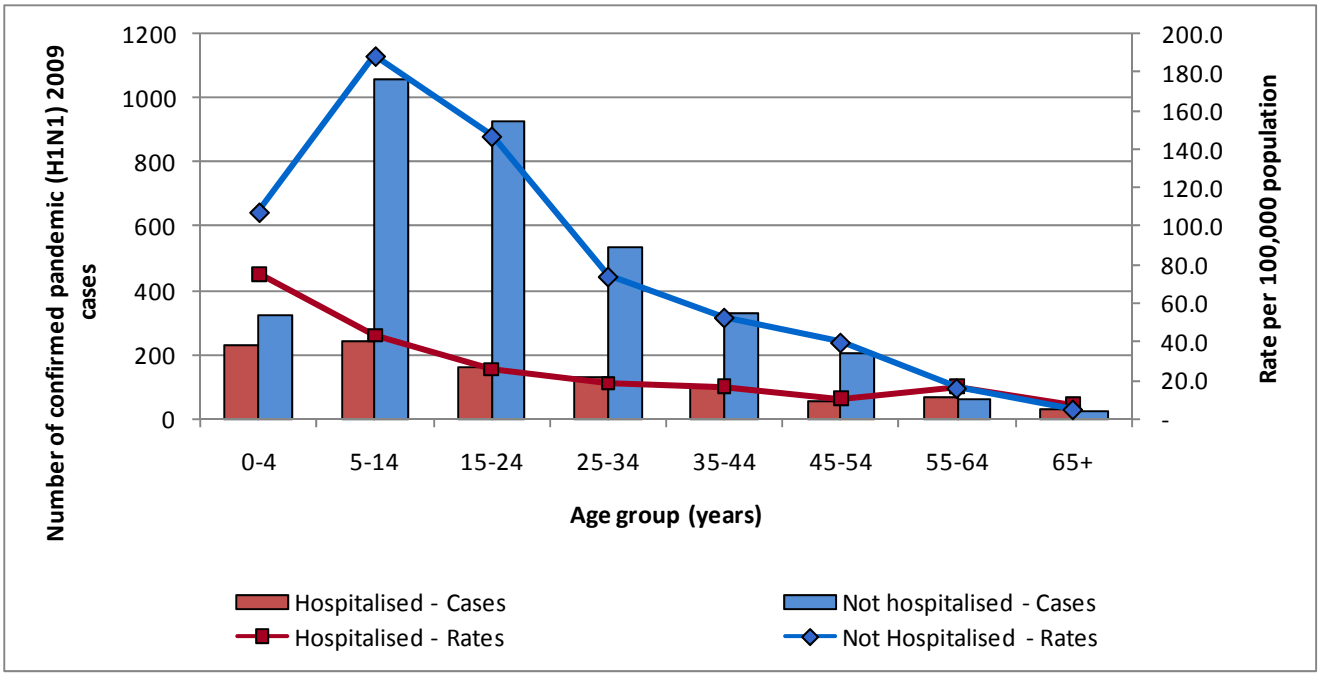

Figure 9: Cumulative numbers and age specific rates for confirmed cases of pandemic (H1N1) 2009 by hospitalisation status

Table 6: Cumulative number of hospitalised cases of confirmed pandemic (H1N1) 2009 by age group (years) and sex (Week 17 – 50)

Source: CIDR

Age group (years)	Female	Male	Unknown	Total	Age specific hospitalisation Rate per 100,000 population	% of Total
0-4	94	133	1	**228**	*75.4*	*22.4*
5-14	91	150	2	**243**	*43.2*	*23.8*
15-24	98	62	0	**160**	*25.3*	*15.7*
25-34	88	42	1	**131**	*18.1*	*12.9*
35-44	68	34	1	**103**	*16.5*	*10.1*
45-54	30	23	0	**53**	*10.2*	*5.2*
55-64	33	34	0	**67**	*16.5*	*6.6*
65+	16	16	0	**32**	*6.8*	*3.1*
Age unknown	1	1	0	2	*n/a*	*0.2*
Total	**519**	**495**	**5**	**1019**	*24.0*	*100.0*

Of the 1,019 confirmed cases hospitalised, 436 (42.8%) of the hospitalised cases had pre-existing clinical conditions including chronic heart disease, chronic liver disease, chronic renal disease, chronic respiratory disease, chronic neurological disease, asthma, haemoglobinopathy, immunosuppression, diabetes mellitus, severe obesity (BMI ≥40) and pregnancy.

Table 7: Cumulative number of hospitalised cases of confirmed pandemic (H1N1) 2009 by risk group (Wk 17 – 50)[§§§]
Source: CIDR

Risk group	Number of cases	% of hospitalised cases
Medication for asthma	119	11.7
Chronic respiratory disease	107	10.5
Pregnant	66	6.5
Immunosuppressed	65	6.4
Chronic heart disease	56	5.5
Chronic neurological disease	52	5.1
Diabetes mellitus	39	3.8
Haemoglobinopathies	28	2.7
Renal disease	22	2.2
Severely obese (BMI ≥40)	13	1.3
Chronic liver disease	11	1.1

5. Outbreak surveillance (CIDR)

No new outbreaks of pandemic (H1N1) 2009, influenza or ILI were reported during week 50 2009. As of 19th December 2009, 109 general outbreaks of pandemic (H1N1) 2009 and ILI have been reported in Ireland since week 23 2009. These outbreaks involved 2,399 people in total, of which 200 (8.3%) were laboratory confirmed cases of pandemic (H1N1) 2009. The number ill per outbreak has ranged between two and 150 people.

International summary

The total numbers of confirmed deaths reported worldwide by the World Health Organization (WHO) region are shown in table 8.

Table 8: Reported number of confirmed pandemic (H1N1) 2009 deaths by WHO region
Source: WHO 13th December 2009

WHO Region	Cumulative total as of 13th December 2009
	Deaths
Africa (AFRO)	109
Americas (AMRO)	At least 6335
Eastern Mediterranean (EMRO)	572
Europe (EURO)	At least 1654
South-East Asia (SEARO)	892
Western Pacific (WPRO)	1020
Total	**At least 10,582**

United Kingdom

During week 50 (7-13th December), the weekly influenza/ILI consultation rate decreased to below baseline levels in all UK schemes. The cumulative number of deaths reported to be due to pandemic (H1N1) 2009 is 296. There were 1,082 new patients hospitalised in England with suspected pandemic influenza in the week from 10-16th December, a decrease from the previous week. The hospitalisation rates have decreased in all age groups. The main influenza virus circulating in the UK continues to be the pandemic (H1N1) 2009 strain, with few influenza H1 (non-pandemic), H3 and B viruses detected. An increase in respiratory syncytial virus (RSV) detections has been observed in recent weeks.
http://www.hpa.org.uk/web/HPAweb&HPAwebStandard/HPAweb_C/1243928258754

[§§§] Cases may belong to more than one risk group

Europe

During week 50 (7-13th December), three countries (Bulgaria, Hungary and Romania) reported an increasing trend in influenza-like illness (ILI) or acute respiratory infection (ARI) rates, while 18 countries reported a decreasing trend and four indicated stable activity. Nineteen countries reported decreasing rates of ILI/ARI for at least the last two weeks. Most countries are witnessing medium influenza intensity with only five countries reporting high to very high levels. In the majority of countries, activity is still widespread. While the proportion of influenza-positive sentinel samples continued to decline, the 2009 pandemic influenza A (H1N1) virus still accounted for 99% of all subtyped viruses in sentinel patients and for 97% in severe acute respiratory infection (SARI) patients. Approximately one third of reported SARI patients were known to have required ICU admission. Oseltamivir resistance was found in 13 of the 913 viruses tested and reported to EISN so far. Resistance to zanamivir was not detected in any of the 291 strains tested.

http://ecdc.europa.eu/en/healthtopics/Documents/091221_Influenza_A(H1N1)_Weekly_Executive_Update.pdf

USA

During week 50 (6-12th December), influenza activity continued to decrease. The proportion of outpatient visits for influenza-like illness (ILI) was 2.6% which is above the national baseline of 2.3%. Five of the ten regions reported ILI at or above region-specific baseline levels. The proportion of deaths attributed to pneumonia and influenza (7.6%) in week 50 was above the epidemic threshold (7.2%) for the eleventh consecutive week. Nine influenza associated paediatric deaths were reported during week 50 of which eight were pandemic influenza A (H1N1) 2009. During week 50, 391 (6.9%) specimens tested by collaborating laboratories and reported to CDC/Influenza Division were positive for influenza. Over 99% of all subtyped influenza A viruses being reported to CDC were pandemic influenza A (H1N1) 2009 viruses. Eleven states reported geographically widespread influenza activity.

http://www.cdc.gov/flu/weekly/

Canada

During week 50 (6-12th December), the overall influenza activity decreased for the fourth consecutive week. The ILI consultation rate was below the expected range for this time of the year and only 6% of specimens tested were positive for influenza. The number of hospitalised cases (159 vs. 307), ICU admissions (40 vs. 83) and deaths (21 vs. 33) were about half of those reported in the previous week. From August 30 to December 12th 2009, a total of 6,779 hospitalised cases including 1,081 cases admitted to ICU (15.9%), as well as 313 (4.6%) deaths have been reported.

http://www.phac-aspc.gc.ca/fluwatch/index-eng.php

New Zealand

During week 50 (7-13th December), there has been a decrease in consultations for influenza-like illness through sentinel surveillance (8.9 per 100,000 patient population). Up to 13 December 2009, a total of 4893 influenza viruses have been reported through sentinel (624, 13%) and non-sentinel surveillance (4269, 87%). Five influenza viruses were reported in week 50: A (not sub-typed) (2) and pandemic (H1N1) 2009 (3) from the non-sentinel surveillance.

http://www.surv.esr.cri.nz/virology/influenza_weekly_update.php

Australia

During week 50, (5-11th December), ILI rates at a national level were below the baseline level reached at the end of the 2007 and 2008 seasons. There were five new laboratory confirmed pandemic (H1N1) 2009 notifications in week 50. As of 11 December 2009, there were 37,484 confirmed cases of pandemic (H1N1) 2009 in Australia and 191 pandemic influenza-associated deaths.

http://www.healthemergency.gov.au/internet/healthemergency/publishing.nsf/Content/ozflucurrent.htm

Other countries

As of 18th December 2009

http://www.who.int/csr/disease/swineflu/updates/en/

- **Western and Central Asia:** Influenza transmission remains active. Disease activity continues to increase in Kazakhstan and Kyrgyzstan and has peaked in some countries including, Afghanistan, Israel and Oman. Pandemic influenza virus continues to circulate in Iran, Iraq, Jordan, Egypt and in much of the surrounding region but may have peaked in some parts.
- **East Asia**: Influenza activity remains active but appears to be declining overall. Influenza activity has recently peaked and begun to decline in Japan. ILI activity continued to decline but remained elevated in northern and southern China, Chinese Taipei and in Mongolia. In southern Asia, influenza activity continues to increase in the northern parts of India, Nepal, Sri Lanka, and the Maldives.
- **Central and South America and the Caribbean**: In the tropical region of Central and South America and the Caribbean, influenza transmission remains geographically widespread but overall disease activity has been declining.
- **Africa**: Pandemic H1N1 2009 virus appears to be the predominant influenza virus circulating in northern and eastern Africa. In West Africa, a mixture of pandemic and seasonal influenza viruses have been detected. Seasonal viruses have included both seasonal H1N1 and H3N2, with the latter predominating.

Further information on influenza in Ireland and internationally can be found on the following websites:

Ireland	www.hpsc.ie
Europe – ECDC	http://ecdc.europa.eu/
Europe – EISN	http://ecdc.europa.eu/en/activities/surveillance/EISN/Pages/home.aspx
Northern Ireland	http://www.cdscni.org.uk/

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Appendix A

Sentinel surveillance for influenza

This is the tenth season of influenza surveillance using computerised sentinel general practices in Ireland. The Health Protection Surveillance Centre (HPSC) is working in collaboration with the Irish College of General Practitioners (ICGP), the National Virus Reference Laboratory (NVRL) and the Departments of Public Health on this sentinel surveillance project. Sixty-one sentinel general practices covering 5.7% of the national population have been recruited to report on the number of patients with ILI on a weekly basis.

ILI is defined as the sudden onset of symptoms with a temperature of 38°C or more, with two or more of the following: headache, sore throat, dry cough and myalgia.

Sentinel GPs send a combined nasal and throat swab, to the NVRL, on at least five patients per week where a clinical diagnosis of ILI is made during the influenza season.

Influenza test results from the NVRL are provided on both sentinel and non-sentinel specimens. Influenza test results from Cork University Hospital (CUH) and University College Hospital, Galway (UCHG) are also provided on non-sentinel specimens.

Laboratory confirmed pandemic (H1N1) 2009

Since the end of April 2009, a case-based surveillance system for pandemic (H1N1) 2009 has been in operation in Ireland following the declaration by World Health Organization (WHO) of a public health emergency of international concern due to the virus. Basic demographic data are collected on all laboratory confirmed cases and additional enhanced data are collected on all hospitalised laboratory confirmed cases. Data are collated on the Computerised Infectious Disease Reporting (CIDR) system using information available from the National Virus Reference Laboratory (NVRL), Departments of Public Health, clinicians and a number of other laboratories. Data presented in this report are based on details recorded on the CIDR system.

ICU enhanced surveillance system:

On October 5th 2009, enhanced ICU surveillance system of confirmed cases of pandemic (H1N1) 2009 commenced in Ireland. It is a collaborative project between ICU medical and nursing staff, hospital administrators, departments of public health and the Health Protection Surveillance Centre. Forty hospitals (35 public and 5 private) currently participate in the surveillance scheme.

This system relates to adult, paediatric and neonatal confirmed and probable cases of pandemic (H1N1) 2009 admitted to intensive care units (ICU). The principal aim of the surveillance system is to report on the demographic profile (age, sex,) of all cases of pandemic (H1N1) 2009 admitted to ICU with details of predisposing risk factors, medical interventions and complications and clinical outcome. This information is used in conjunction with surveillance data from a number of other sources as follows: mortality data, data on laboratory confirmed cases, virology data and data on ILI consultation rates from sentinel GP practices.

A more detailed description of this system is available at:
http://ndsc.newsweaver.ie/newepiinsight/rqnq2ayeg0sugy02flxkl0