

# Influenza Surveillance in Ireland – Interim Report

## Influenza Week 51 2010 (20<sup>th</sup> – 26<sup>th</sup> December 2010)



### Summary

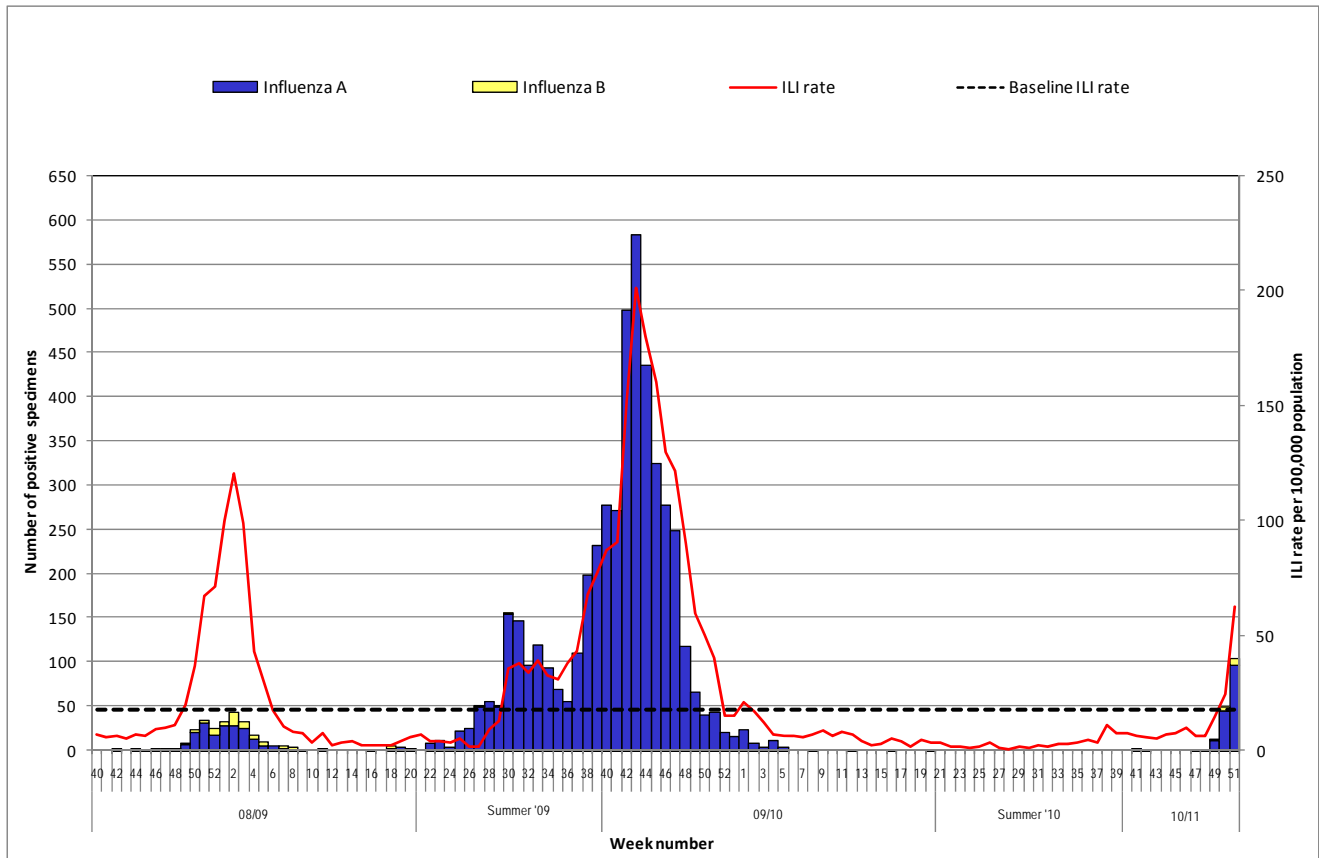
- During week 51 2010, influenza activity increased significantly across Ireland.
- The sentinel GP influenza-like illness (ILI) consultation rate was 62.7 per 100,000 population in week 51 2010, an increase from the updated rate of 24.7 per 100,000 reported during week 49 2010.
- ILI rates are above baseline levels, with highest rates reported in 0-4 and 5-14 year olds.
- Influenza A (H1N1 2009) is the predominant influenza virus circulating in Ireland.
  - 91 positive influenza A (H1N1 2009) specimens were detected by the NVRL in week 51, more than double the number in the previous week.
  - Six influenza A (unsubtyped) specimens and eight influenza B specimens were also detected by the NVRL in week 51.
- The number of hospitalised cases of influenza A (H1N1 2009) has continued to increase, with 36 cases hospitalised to date (as of December 30<sup>th</sup> 2010) and reports of five cases admitted to ICU.

### Surveillance Systems

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

1. Irish College of General Practitioners (ICGP) GP sentinel surveillance system
2. Virological data from the National Virus Reference Laboratory (NVRL)
3. GP Out-of-Hours surveillance system
4. Influenza notifications reported on the Computerised Infectious Disease Reporting system (CIDR)
5. Enhanced surveillance of all hospitalised confirmed influenza cases aged 0-14 years
6. Intensive Care Society of Ireland (ICSI) enhanced surveillance of all critical care patients with confirmed influenza A (H1N1 2009)
7. Outbreak reporting on CIDR
8. Network of sentinel schools reporting absenteeism and sentinel hospitals reporting admission data

## 1. GP sentinel surveillance system

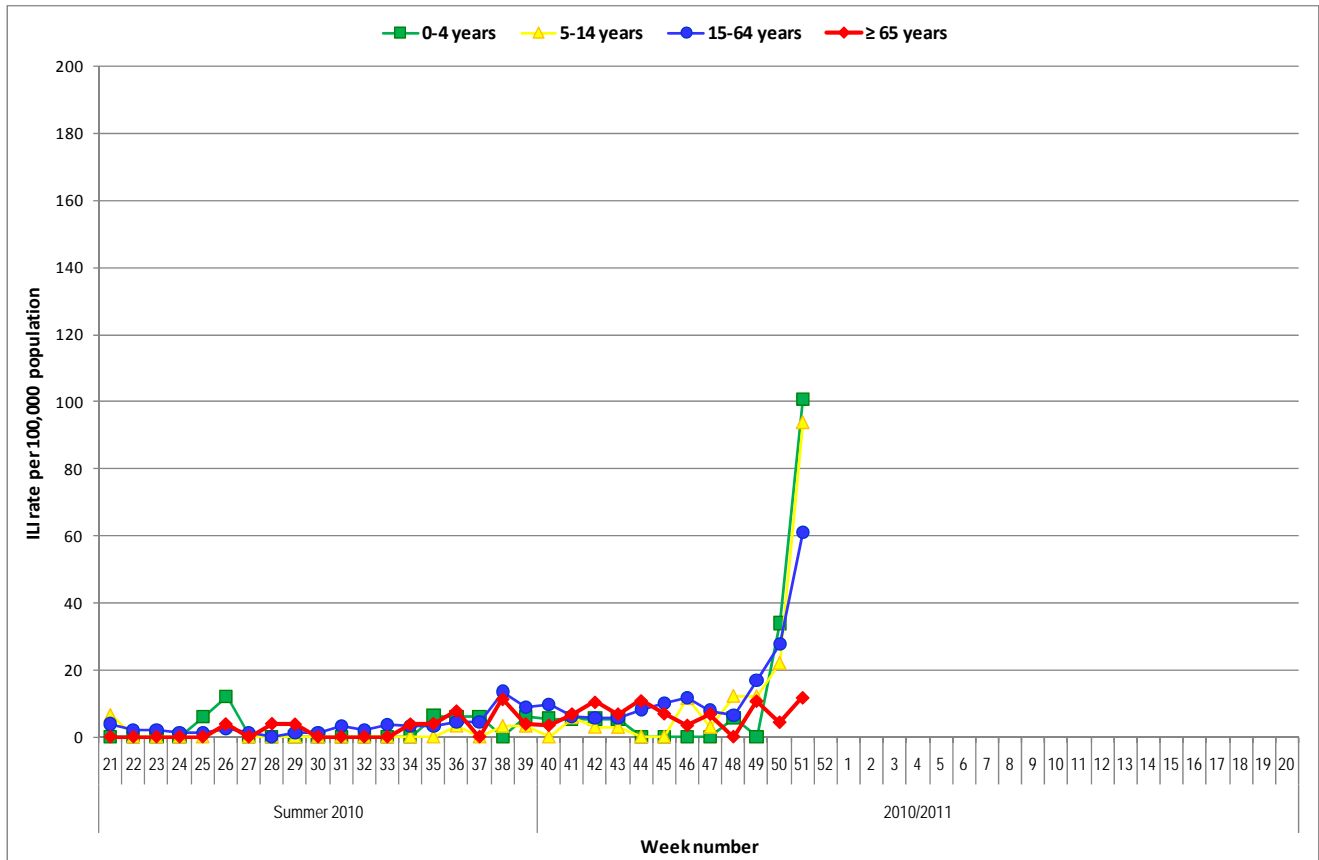


**Figure 1. ILI GP consultation rates per 100,000 population, baseline ILI threshold rate, and number of positive influenza A and B specimens, by influenza week and season.**

Source: Clinical ILI data from ICGP and virological data from the NVRL <sup>\*†</sup>

\* Please note that in addition to the NVRL, Cork University Hospital (CUH) and Galway University Hospital(s) (GUH) also tested for influenza A (H1N1 2009) during the pandemic period.

† Sentinel GP consultations and virological data are updated on an ongoing basis, ILI rates and virological data are adjusted accordingly.



**Figure 2: Age specific sentinel GP ILI consultation rate per 100,000 population by week during the summer of 2010 and the 2010/2011 influenza season to date**  
 Source: ICGP ILI clinical data

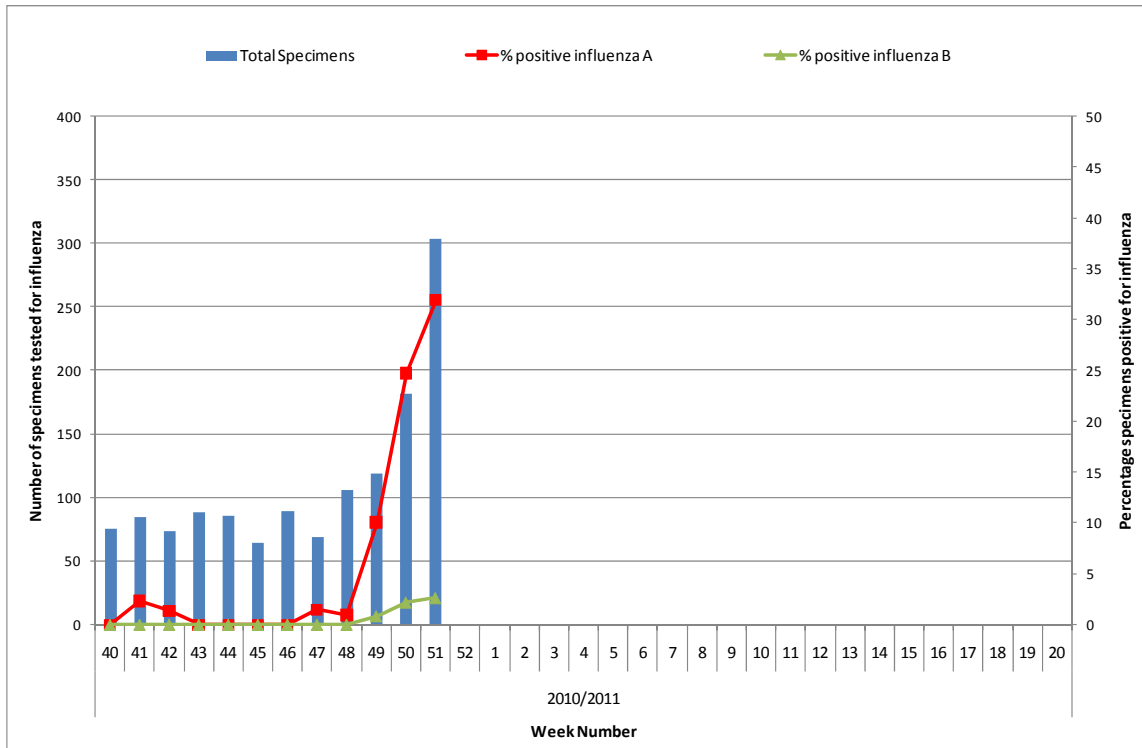


Figure 3: Number of sentinel and non-sentinel specimens tested for influenza and percentage influenza positive by week for the 2010/2011 influenza season. Source: NVRL<sup>‡</sup>

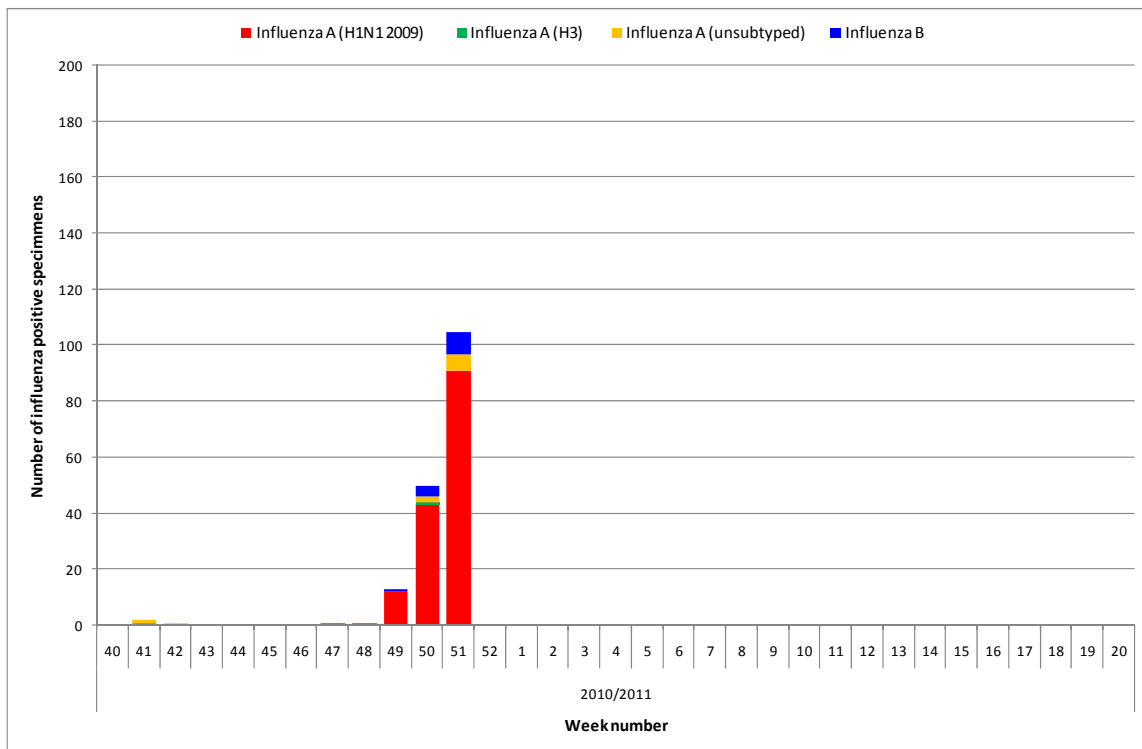


Figure 4: Number of sentinel and non-sentinel specimens positive for influenza by type/subtype and week for the 2010/2011 influenza season. Source: NVRL<sup>§</sup>

<sup>‡</sup> 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.

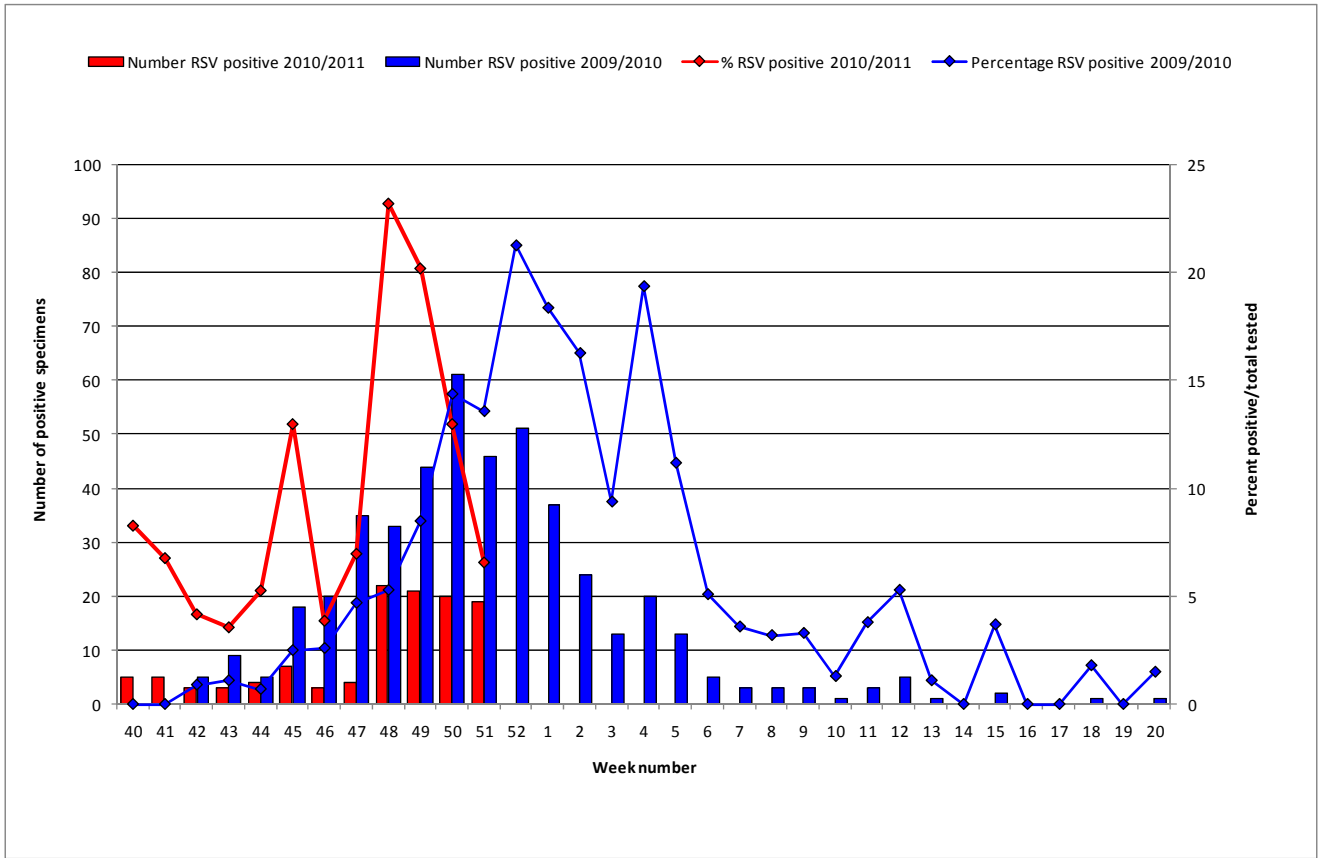


Figure 5: Number and percentage of non-sentinel RSV positive specimens detected by the NVRL during the 2010/2011 season, compared to the 2009/2010 season. Source: NVRL

**Table 1: Number of sentinel and non-sentinel\*\* respiratory specimens tested and positive influenza results, for week 51 and the season to date**

Source: NVRL

Week number	Specimen type	Total specimens tested	Number influenza positive	% Influenza positive	Influenza A					Influenza B
					Total influenza A	A (H1N1 2009)	A (H3)	A (H1)	A (unsubtyped)	
<b>51 2010</b>	Sentinel	16	8	50.0	6	6	0	0	0	2
	Non-sentinel	288	97	33.7	91	85	0	0	6	6
	<b>Total</b>	<b>304</b>	<b>105</b>	<b>34.5</b>	<b>97</b>	<b>91</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>8</b>
<b>2010/2011 season</b>	Sentinel	152	35	23.0	28	27	1	0	0	7
	Non-sentinel	1193	137	11.5	131	122	0	0	9	6
	<b>Total</b>	<b>1345</b>	<b>172</b>	<b>12.8</b>	<b>159</b>	<b>149</b>	<b>1</b>	<b>0</b>	<b>9</b>	<b>13</b>

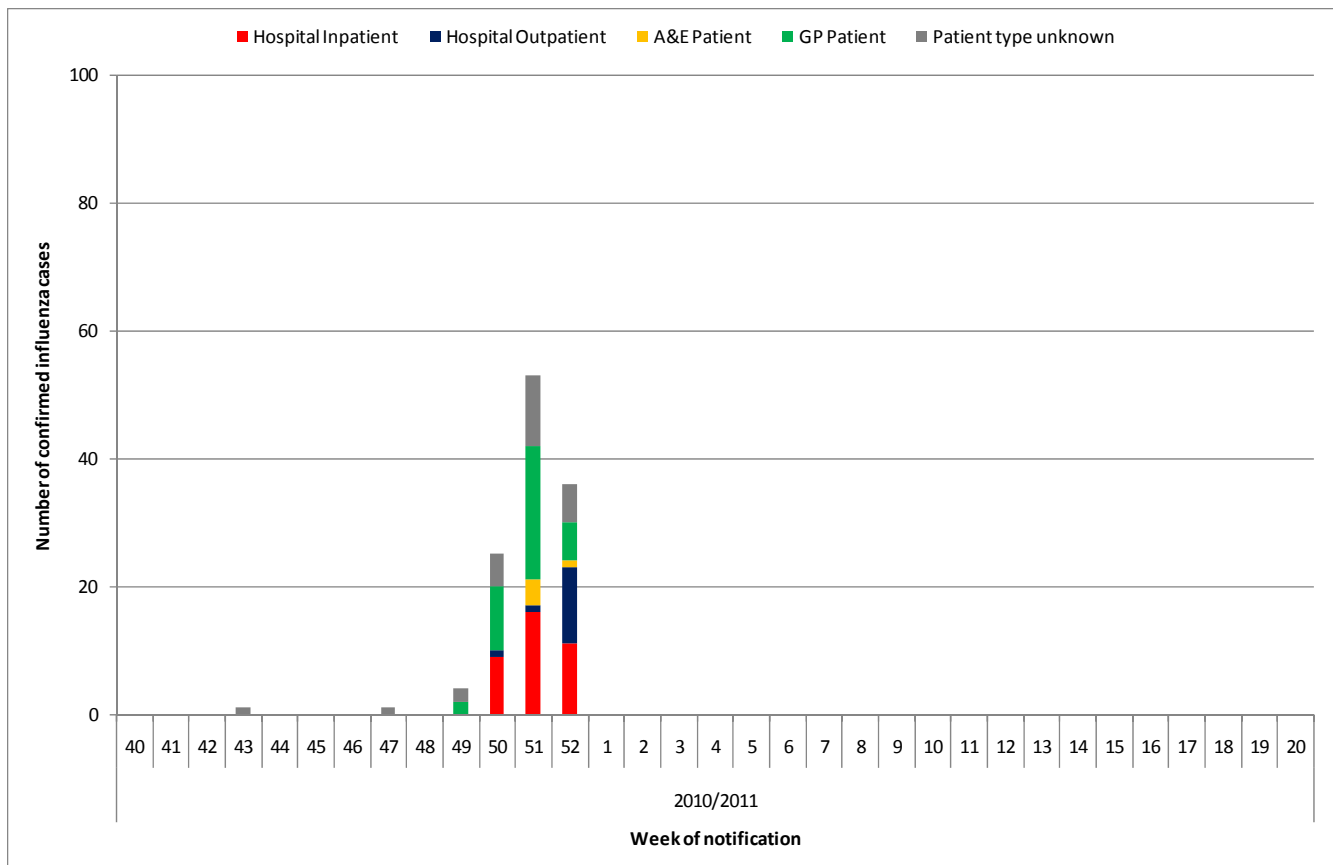
\*\* Please note that non-sentinel specimens relate to specimens referred to the NVRL (other than sentinel specimens) and may include more than one specimen from each case.

## 5. Influenza notifications (CIDR)

As of 30<sup>th</sup> December 2010 (14:56), 120 confirmed influenza cases were notified on CIDR for the 2010/2011 influenza season; 106/120 (88.3%) were confirmed influenza A (H1N1 2009), one (0.8%) was influenza A (H3) and 13 (10.8%) influenza B cases. It should be noted that data for week 52 2010 are incomplete and only include notified cases as of 30<sup>th</sup> December 2010 (14:56).

Thirty-six (30.0%) of the 120 confirmed influenza cases notified were hospitalised (i.e. hospital inpatient status), 34 of whom were confirmed influenza A (H1N1 2009) cases and two were influenza B cases. Fourteen (11.7%) of the 120 confirmed influenza cases were hospital outpatients, five (4.2%) cases were A&E patients, 39 (32.5%) were GP patients and hospital status was unknown for 26 (21.7%) cases (figure 8). Nineteen (15.8%) of the 120 cases were reported as either pregnant or postnatal related cases. Eighteen were confirmed influenza A (H1N1 2009) cases and one influenza B case. Eight cases were reported as hospitalised, 7 influenza A (H1N1 2009) and one influenza B.

Of the 120 notified confirmed cases, nine cases were in the 0-4 year age group, 10 cases were aged 5-14 years, 95 were in the 15-64 year age group, four cases were aged 65 years or older and age was unknown for two cases.



**Figure 8: Number of confirmed influenza cases reported to CIDR by patient type and week of notification for the 2010/2011 influenza season.**

Source: CIDR 30/12/2010 14:56