



## Seasonal Influenza vaccine uptake in Wales Winter 2010/11

### Key Findings

- **Uptake of influenza immunisation was 66% in those aged 65 years and over in Wales during 2010/11. This is below the Welsh Assembly Government uptake target of 75%.**
- **Uptake was 48% in patients aged under 65 years in one or more clinical risk groups. Uptake among clinical risk groups was highest in patients with diabetes (64%) and lowest in patients with chronic liver disease (36%).**
- **This is the fourth year that data on uptake of influenza immunisation in Wales has been collected using the Audit+ General Practice software. These figures are based on a 99% response rate from the 482 practices in Wales.**

### 1 Background

1.1 The aim of the Welsh Assembly Government (WAG) influenza immunisation campaign is to minimise flu related morbidity, mortality, and hospital admissions.

1.2 In Wales in 2010/11, free seasonal influenza immunisation was offered to all people aged 65 years and over, and people between 6 months and 65 years in clinical risk groups (chronic respiratory disease, chronic heart disease, chronic renal disease, chronic liver disease, chronic neurological conditions, diabetes mellitus, and immunosuppression), residents of long-stay care homes and those who were the main carer for an elderly or disabled person whose welfare may be at risk if the carer fell ill. During the 2010/11 season, free seasonal influenza immunisation was also offered to healthy pregnant women, from December 30<sup>th</sup> 2010 this offer was regardless of previous influenza A(H1N1) vaccination history.

1.3 For 2010/11 WAG set a target immunisation uptake rate of 75% for people aged 65 years and over, this target also applied to those aged under 65 years in clinical risk groups. This is an increase on the 2009/10 target of 70% that had been in place since 2002.

### 2 Data collection

2.1 Data concerning influenza immunisation for the 2010/11 campaign were captured directly from General Practice using the Audit+ Data Quality System. Audit+ interrogates general practice systems using specified Read-codes and automatically relays the relevant anonymous aggregate data to a central database. This provides the information required to monitor uptake of influenza immunisation in Wales without adding to practice workloads. Data were collected on immunisations given and recorded on general practice systems between September 2010 and April 2011 (this report contains data submitted by April 12<sup>th</sup> 2011), using a roll up methodology. Manual submissions of data were received from six practices that were unable to submit data through Audit+. The submission rate for 2010/11 through Audit+ was 97.7%, this rose to 99.0% when manual submissions were taken in to account.

**2.2** Using Audit+, data were collected on immunisations given to those aged 65 years and over (defined as aged 65 years on or before April 12<sup>th</sup> 2011) and those aged between 6 months and 65 years recorded as belonging to one or more clinical risk category (in total and by specific risk category). Data was extracted using the Read codes defined in the Primis+ Seasonal Influenza Query Definition (V3.14).

### **3 Results**

- 3.1** Uptake in those aged 65 years and over was 65.7%. This is below the WAG target of 75% but is an increase of 2.2% from the uptake recorded for 2009/10. Uptake varied by HB from 63.2% (Powys Teaching HB) to 68.2% (Betsi Cadwaladr University HB, Figure 1 and Table 1) and ranged by Local Authority (LA) from 59.8% (Ceredigion) to 71.6% (Monmouthshire). No Health Board or LA met the 75% target, but uptake in three LAs exceeded 70% (Table 2).
- 3.2** Uptake in those aged under 65 years and in an 'at risk' group was 48.5%. This is a decrease of 0.6% from the uptake in 2009/10 (49.1%). Uptake ranged by HB from 45.6% (Abertawe Bro Morgannwg University HB) to 52.0% (Betsi Cadwaladr University HB) and by LA from 44.3% (Pembrokeshire) to 56.1% (Wrexham). According to the data submitted, the proportion of all patients aged under 65 years recorded in one or more clinical risk categories was 13.0% (an increase of 2.4% from the percentage recorded in 2009/10).
- 3.3** Data was submitted by 477 of the 482 (99.0%) General Practices in Wales (Table 1). This was an increase compared to 2009/10 (89.2%). It should be noted the 2009/10 annual report was based on a snapshot of data submitted on February 15<sup>th</sup>, the 2010/11 figures are based on the most recent figures submitted by General Practice as at April 12<sup>th</sup> 2011. The increase in submission rate reflects both an increase in the number of practices using Audit+ and the use of a 'roll up' methodology.
- 3.4** Data submission rates varied by HB from 95.7% (Aneurin Bevan HB) to 100% (Betsi Cadwaladr University HB, Cardiff and Vale University HB, Cwm Taf HB, Hywel Dda HB and Powys Teaching HB).
- 3.5** Chronic heart disease or a related condition was recorded in 2.2% of patients under 65 years of age. Of these 51.7% were immunised against influenza, uptake by HB ranged from 48.6% (Abertawe Bro Morgannwg University HB) to 54.6% (Aneurin Bevan HB) (Table 3).
- 3.6** Chronic respiratory disease was recorded in 6.6% of patients under 65 years of age. Of these 47.8% were immunised against influenza, ranging by HB from 44.3% (Hywel Dda HB) to 52.4% (Betsi Cadwaladr University HB).
- 3.7** Chronic kidney disease was recorded in 0.7% of patients under 65 years of age. Of these 50.1% were immunised against influenza, ranging by HB from 44.4% (Hywel Dda HB) to 54.5% (Betsi Cadwaladr University HB).
- 3.8** Diabetes was recorded in 3.1% of patients under 65 years of age. Of these 64.3% were immunised against influenza, ranging by HB from 61.6% (Abertawe Bro Morgannwg UHB) to 66.6% (Betsi Cadwaladr University HB).
- 3.9** Immunosuppression due to disease or treatment was recorded in 0.8% of patients under 65 years of age. Of these 55.4% were immunised against influenza, ranging by HB from 50.2% (Cwm Taf HB) to 58.2% (Betsi Cadwaladr University HB).

- 3.10 Chronic liver disease was recorded in 0.4% of patients under 65 years of age. Of these 36.5% were immunised against influenza, ranging by HB from 31.8% (Cwm Taf HB) to 39.3% (Betsi Cadwaladr University HB).
- 3.11 Chronic neurological conditions (including Stroke and TIA) were recorded in 1.3% of patients under 65 years of age. Of these 44.1% were immunised against influenza, ranging by HB from 41.5% (Cardiff and Vale University HB) to 47.8% (Betsi Cadwaladr University HB).
- 3.12 Between September 2010 and April 2011, 11,296 healthy (not in another risk group) women were recorded as pregnant. Of these, 39.6% were immunized against influenza. Uptake ranged by HB from 33.8% (Hywel Dda HB) to 44.1% (Aneurin Bevan HB).
- 3.13 The number of individuals recorded as being immunised against influenza in responding practices during the winter 2010/11 was 369,480 for those aged 65 years and over and 150,790 for those aged under 65 and in 'at risk' groups, giving a total of 520,270. The true figure for the number of individuals receiving influenza immunisation is likely to be slightly higher than this, since data was received for 98.6% of practices in Wales. Assuming that non-responding practices are similar in size and nature to responding practices the total number of individuals in age or disease related risk groups immunised in Wales in the 2010/11 season can be estimated as 527,657. This is more than the estimated figure for 2009/10 (500,209).

#### 4 **Comment**

The 2010/11 influenza immunisation uptake rate was 65.7%, this is an improvement on 2009/10, but falls short of the 75% target. None of the seven HB areas in Wales achieved an uptake in this age group of 75%, however three LA areas achieved an uptake in excess of 70% (Figures 1 and 2, Tables 1 and 2). National uptake of influenza immunisation in those aged below 65 years, with one or more clinical risk conditions decreased slightly between the 2009/10 and 2010/11 seasons to 48.5% and a similar range in HB level uptakes was seen (46.3% to 52.2% and 45.6% to 52.0% for seasons 2009/10 and 2010/11 respectively, Figure 3).

During the 2010/11 influenza immunisation campaign, pregnant women who are otherwise healthy were offered immunisation. Uptake in this group was 39.6%. This group will also be offered seasonal influenza immunisation for the 2011/12 influenza season<sup>1</sup>.

Immunisation uptake data submission rates increased substantially from 89.2% of practices in Wales during 2009/10 to 99.0% of practices in Wales during 2010/11. In addition, Public Health Wales were able to access in season immunisation uptake data for the first time during the 2010/11 season and published weekly in-season updates of immunisation uptake to assist General Practice and Health Boards in assessing progress in the campaign.

Influenza A(H1N1) predominated during the 2010/11 season, with smaller numbers of influenza B cases seen. Activity peaked in 2010/11 during late December, at levels similar to those seen during the second wave of the 2009 pandemic in Wales<sup>2</sup>, highlighting the importance of offering protection through vaccination to those most vulnerable early on in the season. Achieving the target of 75% uptake in patients aged 65 years and over, and in those younger than 65 years in clinical risk groups for the 2011/12 remains a considerable challenge.

**References:**

1. 2011-12 seasonal flu vaccination programme CMO Letter (CMO(2011)14). Cardiff: Welsh Assembly Government; 8 April 2011. Available from: <http://wales.gov.uk/topics/health/ocmo/publications/cmo/2011/seasonal/?lang=en>
2. Public Health Wales Weekly Influenza Surveillance Report – Week 3 2011. Cardiff: Public Health Wales; 26 January 2011. Available from: <http://www.wales.nhs.uk/sites3/page.cfm?orgid=457&pid=34338>

**Further information on influenza and influenza immunisation can be found using the links below:**

Information for Health Professionals on influenza immunisation (NHS Wales only):

<http://howis.wales.nhs.uk/sites3/page.cfm?orgid=474&pid=35590>

Information on influenza:

<http://www.wales.nhs.uk/sites3/page.cfm?orgid=457&pid=27522>

General information on influenza immunisation in Wales:

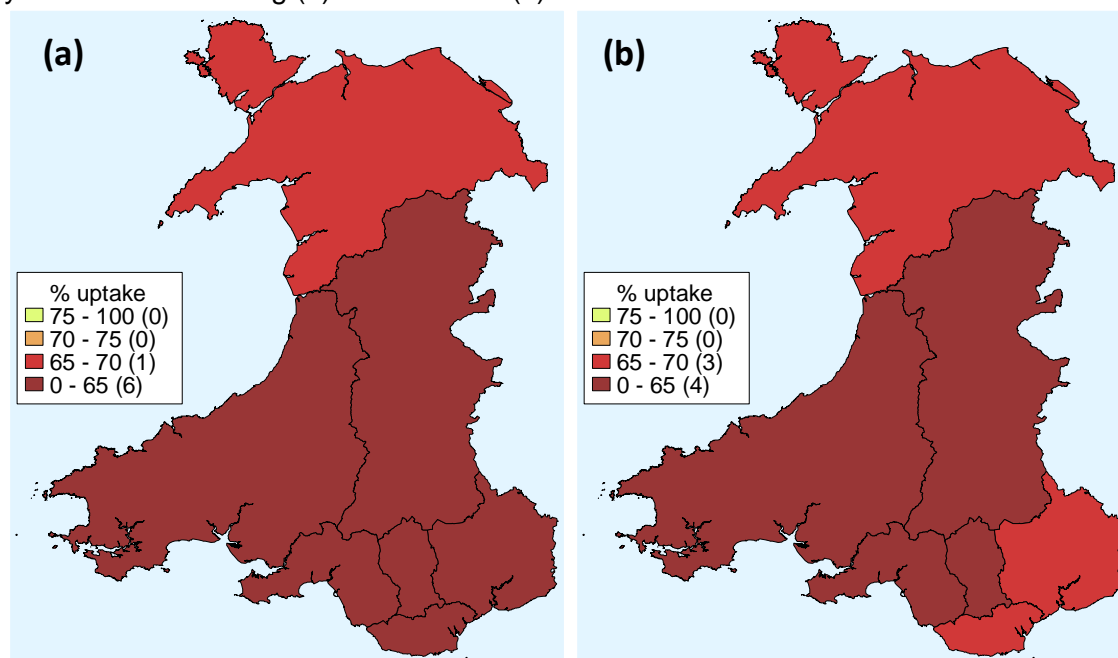
<http://www.wales.nhs.uk/sites3/page.cfm?orgid=457&pid=25480>

Influenza surveillance in Wales:

<http://www.wales.nhs.uk/sites3/page.cfm?orgid=457&pid=27922>

Report prepared by Public Health Wales Vaccine Preventable Disease Programme (VPDP) and Communicable Disease Surveillance Centre (CDSC) in collaboration with the NHS Wales Informatics Service Primary Care Informatics Programme.  
May 2011

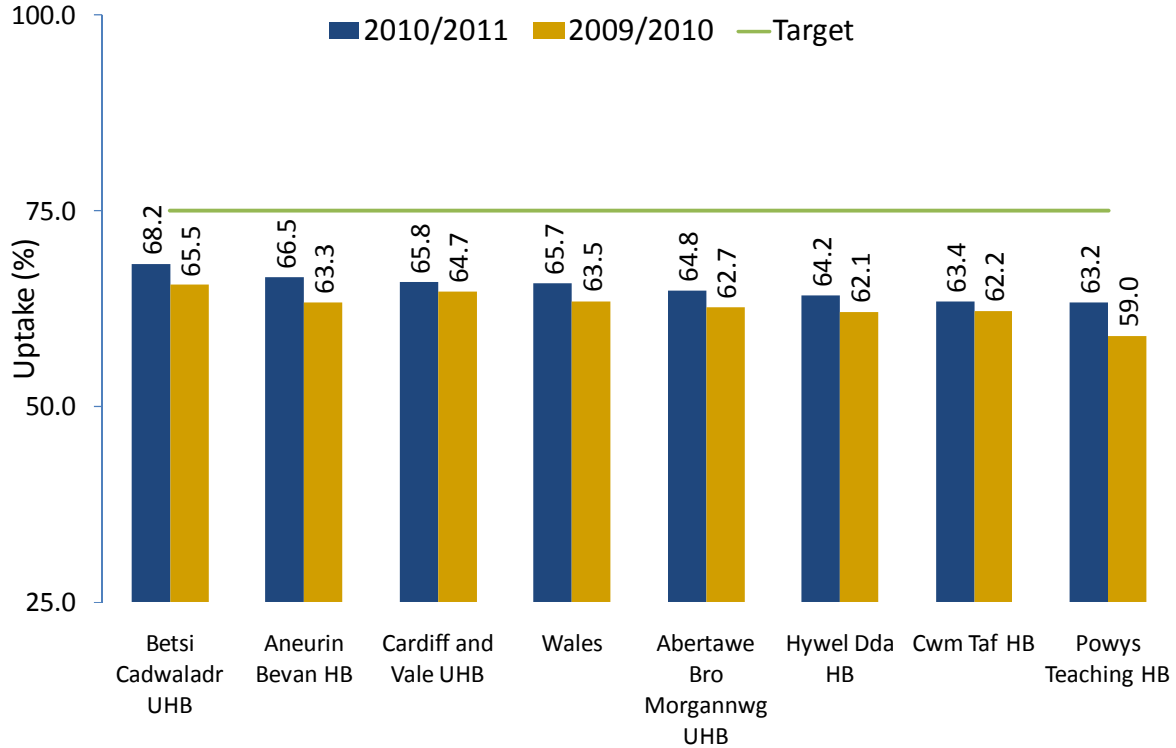
**Figure 1.** Uptake of influenza immunisation in Welsh Health Boards in patients aged 65 years and over during (a) 2009/10 and (b) 2010/11



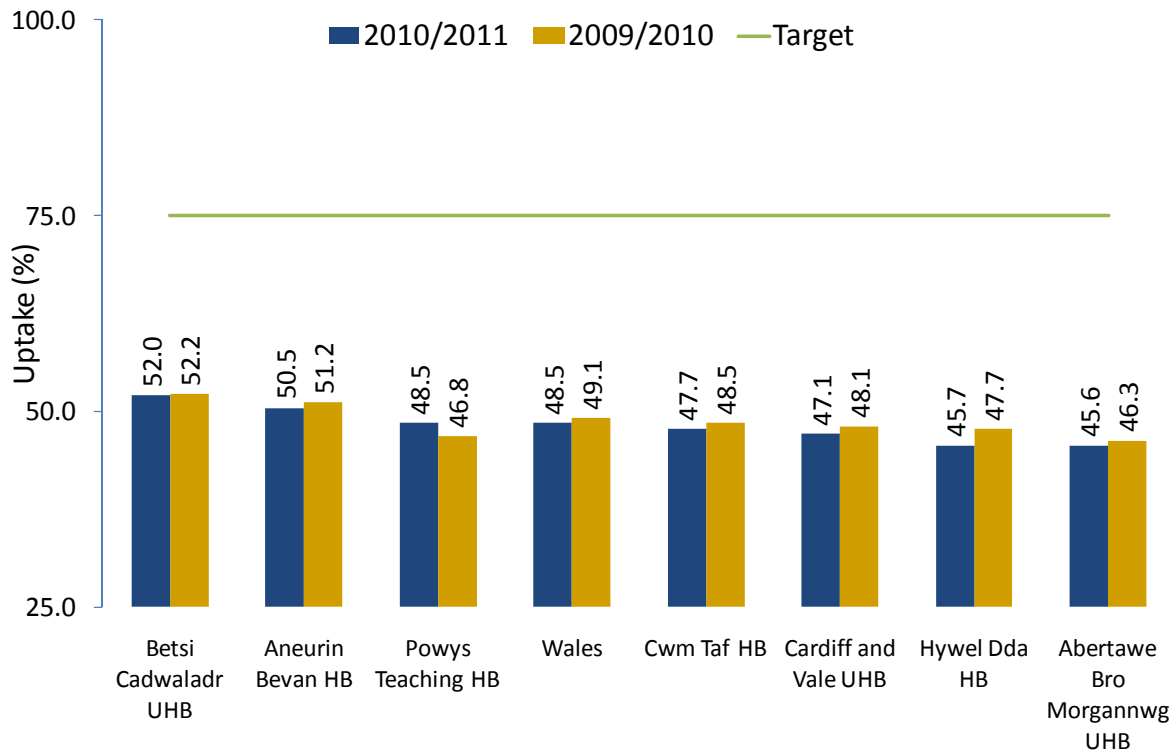
**Table 1.** Uptake of influenza immunisation in Wales comparison between 2010/11 and 2009/10 seasons.

Health Board	Uptake in patients aged 65y and over (%)		Uptake in patients aged under 65y at risk (%)		Practices submitting data (%)	
	2010/2011	2009/2010	2010/2011	2009/2010	2010/2011	2009/2010
Abertawe Bro Morgannwg UHB	64.8	62.7	45.6	46.3	98.7	92.2
Aneurin Bevan HB	66.5	63.3	50.5	51.2	95.7	91.5
Betsi Cadwaladr UHB	68.2	65.5	52.0	52.2	100.0	81.8
Cardiff and Vale UHB	65.8	64.7	47.1	48.1	100.0	94.4
Cwm Taf HB	63.4	62.2	47.7	48.5	100.0	98.1
Hywel Dda HB	64.2	62.1	45.7	47.7	100.0	82.5
Powys Teaching HB	63.2	59.0	48.5	46.8	100.0	88.2
<b>Wales</b>	<b>65.7</b>	<b>63.5</b>	<b>48.5</b>	<b>49.1</b>	<b>99.0</b>	<b>89.2</b>

**Figure 2.** Uptake of influenza immunisation in Welsh Health Boards in patients aged 65 years and over during the 2010/11 and 2009/10 immunisation seasons.



**Figure 3.** Uptake of influenza immunisation in Welsh Health Boards in patients aged under 65 years with one or more clinical risks during 2010/11 and 2009/10 immunisation seasons.



**Table 2.** Uptake of influenza immunisation in Wales 2010/11

Area	Patients aged 65y and over			Patients aged under 65y at risk			Practices	Practices submitting data	Submission rate
	Total	Immunised	(%)	Total	Immunised	(%)			
<b>Abertawe Bro Morgannwg UHB</b>	(n)	(n)	(%)	(n)	(n)	(%)	(n)	(n)	(%)
Bridgend	27274	18364	67.3	16559	7422	44.8	19	19	100.0
Neath Port Talbot	26161	16635	63.6	15626	7248	46.4	23	23	100.0
Swansea	43064	27570	64.0	24398	11160	45.7	35	34	97.1
<b>Health Board Total</b>	<b>96499</b>	<b>62569</b>	<b>64.8</b>	<b>56583</b>	<b>25830</b>	<b>45.6</b>	<b>77</b>	<b>76</b>	<b>98.7</b>
<b>Aneurin Bevan HB</b>									
Blaenau Gwent	13042	8246	63.2	8273	4180	50.5	15	15	100.0
Caerphilly	26709	17226	64.5	17740	8801	49.6	29	27	93.1
Monmouthshire	14378	10299	71.6	6345	3542	55.8	14	12	85.7
Newport	23946	16182	67.6	14812	7518	50.8	22	22	100.0
Torfaen	16542	10926	66.1	10352	4984	48.1	13	13	100.0
<b>Health Board Total</b>	<b>94617</b>	<b>62879</b>	<b>66.5</b>	<b>57522</b>	<b>29025</b>	<b>50.5</b>	<b>93</b>	<b>89</b>	<b>95.7</b>
<b>Betsi Cadwaladr UHB</b>									
Anglesey	14460	9322	64.5	6720	3356	49.9	11	11	100.0
Conwy	27377	18460	67.4	10990	5624	51.2	19	19	100.0
Denbighshire	20964	14288	68.2	10469	5167	49.4	17	17	100.0
Flintshire	25879	18247	70.5	14830	7960	53.7	24	24	100.0
Gwynedd	24471	16164	66.1	11058	5479	49.5	27	27	100.0
Wrexham	24635	17535	71.2	13502	7579	56.1	23	23	100.0
<b>Health Board Total</b>	<b>137786</b>	<b>94016</b>	<b>68.2</b>	<b>67569</b>	<b>35165</b>	<b>52.0</b>	<b>121</b>	<b>121</b>	<b>100.0</b>
<b>Cardiff and Vale UHB</b>									
Cardiff	47977	31312	65.3	33833	16116	47.6	51	51	100.0
Vale of Glamorgan	22007	14760	67.1	12410	5673	45.7	17	17	100.0
<b>Health Board Total</b>	<b>69984</b>	<b>46072</b>	<b>65.8</b>	<b>46243</b>	<b>21789</b>	<b>47.1</b>	<b>68</b>	<b>68</b>	<b>100.0</b>
<b>Cwm Taf HB</b>									
Merthyr Tydfil	9617	6244	64.9	6194	3017	48.7	11	11	100.0
Rhondda Cynon Taff	40995	25854	63.1	25403	12060	47.5	40	40	100.0
<b>Health Board Total</b>	<b>50612</b>	<b>32098</b>	<b>63.4</b>	<b>31597</b>	<b>15077</b>	<b>47.7</b>	<b>51</b>	<b>51</b>	<b>100.0</b>
<b>Hywel Dda HB</b>									
Carmarthenshire	36001	23324	64.8	18397	8676	47.2	24	24	100.0
Ceredigion	19402	11610	59.8	8368	3732	44.6	16	16	100.0
Pembrokeshire	25903	17226	66.5	12841	5689	44.3	15	15	100.0
<b>Health Board Total</b>	<b>81306</b>	<b>52160</b>	<b>64.2</b>	<b>39606</b>	<b>18097</b>	<b>45.7</b>	<b>55</b>	<b>55</b>	<b>100.0</b>
<b>Powys Teaching HB</b>	<b>31148</b>	<b>19686</b>	<b>63.2</b>	<b>11979</b>	<b>5807</b>	<b>48.5</b>	<b>17</b>	<b>17</b>	<b>100.0</b>
<b>Wales</b>	<b>561952</b>	<b>369480</b>	<b>65.7</b>	<b>311099</b>	<b>150790</b>	<b>48.5</b>	<b>482</b>	<b>477</b>	<b>99.0</b>

**Table 3.** Uptake of influenza immunisation in those aged under 65 years and with one or more clinical risks (by risk category) 2010/11

Area	Total patients aged under 65y	Chronic heart disease		Chronic respiratory disease		Chronic kidney disease		Diabetes		Immunosuppression											
		Number with condition	Immunisation uptake	Number with condition	Immunisation uptake	Number with condition	Immunisation uptake	Number with condition	Immunisation uptake	Number with condition	Immunisation uptake										
<b>Abertawe Bro Morgannwg UHB</b>	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)				
Bridgend	117131	3055	2.6	1468	48.1	8350	7.1	3576	42.8	860	0.7	419	48.7	4120	3.5	2560	62.1	921	0.8	472	51.2
Neath Port Talbot	107688	2740	2.5	1330	48.5	7903	7.3	3607	45.6	1058	1.0	501	47.4	3968	3.7	2494	62.9	829	0.8	443	53.4
Swansea	186466	3965	2.1	1942	49.0	12799	6.9	5764	45.0	971	0.5	460	47.4	5714	3.1	3442	60.2	1363	0.7	685	50.3
<b>Health Board Total</b>	<b>411285</b>	<b>9760</b>	<b>2.4</b>	<b>4740</b>	<b>48.6</b>	<b>29052</b>	<b>7.1</b>	<b>12947</b>	<b>44.6</b>	<b>2889</b>	<b>0.7</b>	<b>1380</b>	<b>47.8</b>	<b>13802</b>	<b>3.4</b>	<b>8496</b>	<b>61.6</b>	<b>3113</b>	<b>0.8</b>	<b>1600</b>	<b>51.4</b>
<b>Aneurin Bevan HB</b>																					
Blaenau Gwent	56539	1468	2.6	818	55.7	4060	7.2	2081	51.3	551	1.0	262	47.5	2245	4.0	1447	64.5	493	0.9	277	56.2
Caerphilly	127267	3188	2.5	1761	55.2	8611	6.8	4157	48.3	1160	0.9	619	53.4	4748	3.7	3140	66.1	1115	0.9	605	54.3
Monmouthshire	51003	1056	2.1	590	55.9	3022	5.9	1645	54.4	384	0.8	217	56.5	1509	3.0	1077	71.4	418	0.8	276	66.0
Newport	115042	2425	2.1	1310	54.0	7419	6.4	3726	50.2	829	0.7	441	53.2	3996	3.5	2520	63.1	805	0.7	472	58.6
Torfaen	72176	1732	2.4	908	52.4	5228	7.2	2410	46.1	534	0.7	306	57.3	2622	3.6	1695	64.6	625	0.9	372	59.5
<b>Health Board Total</b>	<b>422027</b>	<b>9869</b>	<b>2.3</b>	<b>5387</b>	<b>54.6</b>	<b>28340</b>	<b>6.7</b>	<b>14019</b>	<b>49.5</b>	<b>3458</b>	<b>0.8</b>	<b>1845</b>	<b>53.4</b>	<b>15120</b>	<b>3.6</b>	<b>9879</b>	<b>65.3</b>	<b>3456</b>	<b>0.8</b>	<b>2002</b>	<b>57.9</b>
<b>Betsi Cadwaladr UHB</b>																					
Anglesey	48530	1046	2.2	552	52.8	3513	7.2	1764	50.2	443	0.9	224	50.6	1415	2.9	923	65.2	463	1.0	272	58.7
Conwy	85303	1911	2.2	983	51.4	5627	6.6	2924	52.0	569	0.7	314	55.2	2407	2.8	1570	65.2	663	0.8	378	57.0
Denbighshire	75317	1929	2.6	1029	53.3	5366	7.1	2641	49.2	488	0.6	259	53.1	2351	3.1	1500	63.8	630	0.8	334	53.0
Flintshire	115512	2481	2.1	1402	56.5	7524	6.5	4060	54.0	708	0.6	393	55.5	3317	2.9	2252	67.9	1045	0.9	624	59.7
Gwynedd	94515	1746	1.8	866	49.6	5612	5.9	2819	50.2	735	0.8	369	50.2	2283	2.4	1496	65.5	811	0.9	483	59.6
Wrexham	112950	2573	2.3	1450	56.4	6652	5.9	3775	56.7	817	0.7	491	60.1	3033	2.7	2120	69.9	891	0.8	530	59.5
<b>Health Board Total</b>	<b>532127</b>	<b>11686</b>	<b>2.2</b>	<b>6282</b>	<b>53.8</b>	<b>34294</b>	<b>6.4</b>	<b>17983</b>	<b>52.4</b>	<b>3760</b>	<b>0.7</b>	<b>2050</b>	<b>54.5</b>	<b>14806</b>	<b>2.8</b>	<b>9861</b>	<b>66.6</b>	<b>4503</b>	<b>0.8</b>	<b>2621</b>	<b>58.2</b>
<b>Cardiff and Vale UHB</b>																					
Cardiff	299381	5171	1.7	2532	49.0	18044	6.0	8379	46.4	1386	0.5	711	51.3	7761	2.6	5110	65.8	2096	0.7	1172	55.9
Vale of Glamorgan	95528	2022	2.1	983	48.6	6561	6.9	2858	43.6	539	0.6	268	49.7	2751	2.9	1769	64.3	714	0.7	376	52.7
<b>Health Board Total</b>	<b>394909</b>	<b>7193</b>	<b>1.8</b>	<b>3515</b>	<b>48.9</b>	<b>24605</b>	<b>6.2</b>	<b>11237</b>	<b>45.7</b>	<b>1925</b>	<b>0.5</b>	<b>979</b>	<b>50.9</b>	<b>10512</b>	<b>2.7</b>	<b>6879</b>	<b>65.4</b>	<b>2810</b>	<b>0.7</b>	<b>1548</b>	<b>55.1</b>
<b>Cwm Taf HB</b>																					
Merthyr Tydfil	45880	1286	2.8	639	49.7	3168	6.9	1626	51.3	224	0.5	115	51.3	1461	3.2	889	60.8	384	0.8	187	48.7
Rhondda Cynon Taff	189637	4726	2.5	2464	52.1	12401	6.5	5856	47.2	1551	0.8	727	46.9	6190	3.3	3960	64.0	1587	0.8	802	50.5
<b>Health Board Total</b>	<b>235517</b>	<b>6012</b>	<b>2.6</b>	<b>3103</b>	<b>51.6</b>	<b>15569</b>	<b>6.6</b>	<b>7482</b>	<b>48.1</b>	<b>1775</b>	<b>0.8</b>	<b>842</b>	<b>47.4</b>	<b>7651</b>	<b>3.2</b>	<b>4849</b>	<b>63.4</b>	<b>1971</b>	<b>0.8</b>	<b>989</b>	<b>50.2</b>
<b>Hywel Dda HB</b>																					
Carmarthenshire	130355	3132	2.4	1611	51.4	9576	7.3	4326	45.2	822	0.6	438	53.3	4328	3.3	2670	61.7	1114	0.9	618	55.5
Ceredigion	73426	1437	2.0	693	48.2	4087	5.6	1762	43.1	558	0.8	240	43.0	1882	2.6	1159	61.6	612	0.8	312	51.0
Pembrokeshire	91536	2301	2.5	1298	56.4	6274	6.9	2746	43.8	933	1.0	349	37.4	2966	3.2	1927	65.0	842	0.9	518	61.5
<b>Health Board Total</b>	<b>295317</b>	<b>6870</b>	<b>2.3</b>	<b>3602</b>	<b>52.4</b>	<b>19937</b>	<b>6.8</b>	<b>8834</b>	<b>44.3</b>	<b>2313</b>	<b>0.8</b>	<b>1027</b>	<b>44.4</b>	<b>9176</b>	<b>3.1</b>	<b>5756</b>	<b>62.7</b>	<b>2568</b>	<b>0.9</b>	<b>1448</b>	<b>56.4</b>
<b>Powys Teaching HB</b>																					
Powys Teaching HB	104890	2444	2.3	1190	48.7	6384	6.1	3150	49.3	957	0.9	441	46.1	2718	2.6	1696	62.4	933	0.9	519	55.6
<b>Wales</b>	<b>2396072</b>	<b>53834</b>	<b>2.2</b>	<b>27819</b>	<b>51.7</b>	<b>158181</b>	<b>6.6</b>	<b>75652</b>	<b>47.8</b>	<b>17077</b>	<b>0.7</b>	<b>8564</b>	<b>50.1</b>	<b>73785</b>	<b>3.1</b>	<b>47416</b>	<b>64.3</b>	<b>19354</b>	<b>0.8</b>	<b>10727</b>	<b>55.4</b>



**Table 3 (cont).** Uptake of influenza immunisation in those aged under 65 years and with one or more clinical risks (by risk category) 2010/11

Area	Total patients aged under 65y	Chronic liver disease				Neurological conditions				Pregnant (no other risk condition)			
		Number with condition		Immunisation uptake		Number with condition		Immunisation uptake		Number with condition		Immunisation uptake	
	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)
<b>Abertawe Bro Morgannwg UHB</b>													
Bridgend	117131	454	0.4	166	36.6	1689	1.4	715	42.3	567	0.5	152	26.8
Neath Port Talbot	107688	516	0.5	201	39.0	1434	1.3	630	43.9	378	0.4	152	40.2
Swansea	186466	848	0.5	292	34.4	2387	1.3	1006	42.1	860	0.5	313	36.4
<b>Health Board Total</b>	<b>411285</b>	<b>1818</b>	<b>0.4</b>	<b>659</b>	<b>36.2</b>	<b>5510</b>	<b>1.3</b>	<b>2351</b>	<b>42.7</b>	<b>1805</b>	<b>0.4</b>	<b>617</b>	<b>34.2</b>
<b>Aneurin Bevan HB</b>													
Blaenau Gwent	56539	276	0.5	94	34.1	758	1.3	347	45.8	227	0.4	92	40.5
Caerphilly	127267	459	0.4	155	33.8	1761	1.4	758	43.0	491	0.4	180	36.7
Monmouthshire	51003	245	0.5	113	46.1	660	1.3	330	50.0	238	0.5	132	55.5
Newport	115042	484	0.4	203	41.9	1421	1.2	647	45.5	678	0.6	289	42.6
Torfaen	72176	389	0.5	136	35.0	1008	1.4	452	44.8	415	0.6	210	50.6
<b>Health Board Total</b>	<b>422027</b>	<b>1853</b>	<b>0.4</b>	<b>701</b>	<b>37.8</b>	<b>5608</b>	<b>1.3</b>	<b>2534</b>	<b>45.2</b>	<b>2049</b>	<b>0.5</b>	<b>903</b>	<b>44.1</b>
<b>Betsi Cadwaladr UHB</b>													
Anglesey	48530	236	0.5	110	46.6	649	1.3	290	44.7	262	0.5	104	39.7
Conwy	85303	378	0.4	149	39.4	1118	1.3	531	47.5	455	0.5	203	44.6
Denbighshire	75317	323	0.4	132	40.9	1075	1.4	483	44.9	394	0.5	180	45.7
Flintshire	115512	407	0.4	156	38.3	1314	1.1	663	50.5	574	0.5	267	46.5
Gwynedd	94515	422	0.4	149	35.3	997	1.1	420	42.1	523	0.6	233	44.6
Wrexham	112950	389	0.3	151	38.8	1291	1.1	694	53.8	681	0.6	257	37.7
<b>Health Board Total</b>	<b>532127</b>	<b>2155</b>	<b>0.4</b>	<b>847</b>	<b>39.3</b>	<b>6444</b>	<b>1.2</b>	<b>3081</b>	<b>47.8</b>	<b>2889</b>	<b>0.5</b>	<b>1244</b>	<b>43.1</b>
<b>Cardiff and Vale UHB</b>													
Cardiff	299381	1055	0.4	396	37.5	3189	1.1	1343	42.1	1474	0.5	548	37.2
Vale of Glamorgan	95528	300	0.3	118	39.3	1279	1.3	512	40.0	469	0.5	195	41.6
<b>Health Board Total</b>	<b>394909</b>	<b>1355</b>	<b>0.3</b>	<b>514</b>	<b>37.9</b>	<b>4468</b>	<b>1.1</b>	<b>1855</b>	<b>41.5</b>	<b>1943</b>	<b>0.5</b>	<b>743</b>	<b>38.2</b>
<b>Cwm Taf HB</b>													
Merthyr Tydfil	45880	172	0.4	68	39.5	618	1.3	256	41.4	183	0.4	79	43.2
Rhondda Cynon Taff	189637	834	0.4	252	30.2	2608	1.4	1107	42.4	744	0.4	290	39.0
<b>Health Board Total</b>	<b>235517</b>	<b>1006</b>	<b>0.4</b>	<b>320</b>	<b>31.8</b>	<b>3226</b>	<b>1.4</b>	<b>1363</b>	<b>42.3</b>	<b>927</b>	<b>0.4</b>	<b>369</b>	<b>39.8</b>
<b>Hywel Dda HB</b>													
Carmarthenshire	130355	489	0.4	184	37.6	1849	1.4	831	44.9	513	0.4	193	37.6
Ceredigion	73426	243	0.3	72	29.6	823	1.1	340	41.3	251	0.3	96	38.2
Pembrokeshire	91536	783	0.9	248	31.7	1216	1.3	511	42.0	487	0.5	134	27.5
<b>Health Board Total</b>	<b>295317</b>	<b>1515</b>	<b>0.5</b>	<b>504</b>	<b>33.3</b>	<b>3888</b>	<b>1.3</b>	<b>1682</b>	<b>43.3</b>	<b>1251</b>	<b>0.4</b>	<b>423</b>	<b>33.8</b>
<b>Powys Teaching HB</b>													
Powys Teaching HB	104890	442	0.4	155	35.1	1339	1.3	562	42.0	432	0.4	174	40.3
<b>Wales</b>	<b>2396072</b>	<b>10144</b>	<b>0.4</b>	<b>3700</b>	<b>36.5</b>	<b>30483</b>	<b>1.3</b>	<b>13428</b>	<b>44.1</b>	<b>11296</b>	<b>0.5</b>	<b>4473</b>	<b>39.6</b>