

Seasonal Influenza vaccine uptake in Wales Winter 2009/10 (April 2010)



Key Findings

- Uptake of influenza immunisation was 64% in those aged 65 years and over in Wales during 2009/10. This is below the Welsh Assembly Government uptake target of 70%.
- Uptake in patients aged under 65 years in one or more clinical risk groups was 49%. Among the clinical risk groups, uptake was highest in patients with diabetes (67%) and lowest in patients with chronic neurological conditions (34%).
- This is the third year that data on uptake of influenza immunisation in Wales has been collected using the Audit+ General Practice software. These figures are based on an 89% response rate from the 489 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 2009/10, 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.
- 1.3 For 2009/10 WAG again set a target immunisation uptake rate of 70% for people aged 65 years and over. This target has been in place since 2002. For 2010/11 seasonal influenza immunisation campaign the national uptake target has been raised to the WHO target of 75% uptake in recommended groups. For the 2010/11 season a 75% uptake target is also in place for those younger than 65 years in 'at-risk' groups.

2 Data collection

- 2.1 Data concerning influenza immunisation for the 2009/10 campaign were captured directly from General Practice systems using 'Audit+' (data submitted by February 15th 2010). The response rate from General Practice in Wales was 89%. 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 2009 and February 2010.
- 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 March 31st 2010) 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).

3 Results

- 3.1** Uptake in those aged 65 years and over was 63.5%. This is below the WAG target of 70% but is an increase of 4.0% from the uptake recorded for 2008/9. Uptake varied by LHB from 59.0% (Powys Teaching LHB) to 65.5% (Betsi Cadwaladr University LHB). No LHB met the 70% target, but uptake in six of the seven LHBs exceeded 60% (Figure 1).
- 3.2** Uptake in those aged under 65 years and in an 'at risk' group was 49.1%. This is an increase of 8.3% from the uptake in 2008/9 (40.8%). Uptake ranged by LHB from 46.3% (Abertawe Bro Morgannwg University LHB) to 52.2% (Betsi Cadwaladr University LHB). According to the data submitted, the proportion of all patients aged under 65 years recorded in one or more clinical risk categories was 10.6% (an increase of 0.4% from the percentage recorded in 2008/9).
- 3.3** Data was submitted by 436 of the 489 (89.2%) General Practices in Wales (Table 1). This was a decrease compared to 2008/9 (92.2%).
- 3.4** Data submission rates varied by LHB from 81.8% (Betsi Cadwaladr University LHB) to 98.1% (Cwm Taf LHB).
- 3.5** Chronic heart disease or a related condition was recorded in 1.8% of patients under 65 years of age. Of these 53.1% were immunised against influenza, uptake by LHB ranged from 49.3% (Powys Teaching LHB) to 55.8% (Betsi Cadwaladr University LHB) (Table 3).
- 3.6** Chronic respiratory disease was recorded in 5.4% of patients under 65 years of age. Of these 48.4% were immunised against influenza, ranging by LHB from 45.1% (Abertawe Bro Morgannwg University LHB) to 52.0% (Betsi Cadwaladr University LHB).
- 3.7** Chronic renal disease was recorded in 0.7% of patients under 65 years of age. Of these 49.9% were immunised against influenza, ranging by LHB from 43.2% (Powys Teaching LHB) to 53.2% (Betsi Cadwaladr University LHB).
- 3.8** Diabetes was recorded in 2.3% of patients under 65 years of age. Of these 66.9% were immunised against influenza, ranging in LHB from 62.7% (Powys Teaching LHB) to 68.9% (Betsi Cadwaladr University LHB).
- 3.9** Immunosuppression due to disease or treatment was recorded in 0.7% of patients under 65 years of age. Of these 54.1% were immunised against influenza, ranging by LHB from 49.5% (Powys Teaching LHB) to 56.7% (Betsi Cadwaladr University LHB).
- 3.10** Chronic liver disease was recorded in 0.3% of patients under 65 years of age. Of these 37.7% were immunised against influenza, ranging by LHB from 32.8% (Hywel Dda) to 41.6% (Cardiff and Vale University LHB).
- 3.11** Chronic neurological conditions were recorded in 0.7% of patients under 65 years of age. Of these 34.0% were immunised against influenza, ranging by LHB from 30.5% (Cwm Taf LHB) to 37.3% (Betsi Cadwaladr University LHB). Stroke was recorded as affecting 0.5% of patients under 65 years of age, of these patients 53.9% had been immunised against influenza. Uptake ranged by LHB from 45.3% (Powys Teaching LHB) to 56.9% (Aneurin Bevan LHB and Betsi Cadwaladr University LHB).
- 3.12** The number of individuals recorded as being immunised against influenza in responding practices during the winter 2009/10 was 322,593 for those aged 65 years and over and 122,803 for those aged under 65 and in 'at risk' groups, giving a total of 445,186. The true figure for the number of individuals receiving influenza immunisation is likely to be higher than this, since data was received for only 89% 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 2009/10 season can be estimated as 500,209. This is more than the estimated figure for 2008/9 (440,437).

Figure 1. Uptake of influenza immunisation in Welsh LHBs in patients aged 65 years and over during the 2009/10 immunisation season.

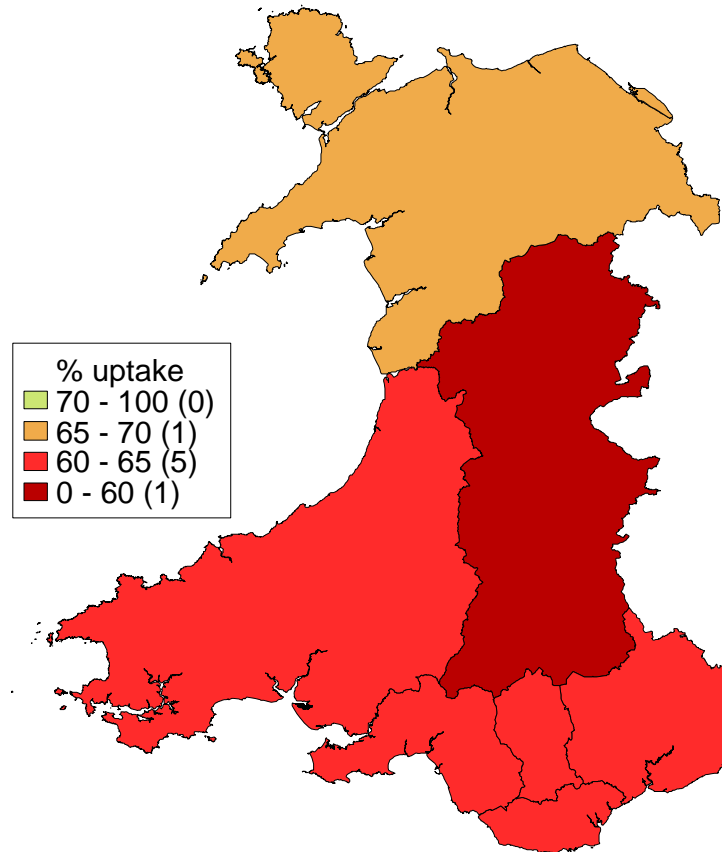


Table 1. Uptake of influenza immunisation in Wales comparison between 2008/9 and 2009/10 seasons.

Health Board	Patients 65y and over		Patients under 65y in 'at risk' groups		Practices submitting data	
	% immunised		% immunised		% response	
	2008/9	2009/10	2008/9	2009/10	2008/9	2009/10
ABM ULHB	61.1	62.7	39.0	46.3	96.1	92.2
Aneurin Bevan LHB	61.8	63.3	44.9	51.2	91.5	91.5
Betsi Cadwaladr ULHB	59.8	65.5	44.6	52.2	90.0	81.8
Cardiff and Vale ULHB	59.5	64.7	38.1	48.1	98.6	94.4
Cwm Taf LHB	52.3	62.2	36.6	48.5	94.5	98.1
Hywel Dda LHB	56.8	62.1	36.9	47.7	83.9	82.5
Powys Teaching LHB	63.7	59.0	43.5	46.8	94.1	88.2
Wales	59.5	63.5	40.8	49.1	92.2	89.2

4 Comment

The 2009/10 influenza immunisation uptake rate was 64% in those aged 65 years and over, which fell short of the 70% target. None of the seven newly formed LHB areas in Wales achieved an uptake in this age group of 70% (Figures 1 and 2).

The 2009/10 immunisation uptake rate of 64%, in patients aged 65 and over, is higher than the rate seen in 2008/9 (60%). Data for both seasons were collected directly from General Practice systems using the same automated software (Audit+). Extraction parameters for both seasons were also the same and response rates in both seasons were good. Therefore, it seems likely that there has been a genuine increase in uptake of seasonal influenza vaccine recorded in General Practice during 2009/10.

National uptake of influenza immunisation in those aged below 65 years, with one or more clinical risk conditions increased notably from 41% seen during 2008/9 to 49%. Uptake in all seven LHB areas increased, although there is still a wide variation in uptake in the different risk groups and also a wide variation between LHBs (Figure 3).

The 2009/10 influenza immunisation season has been unusual, with primary care playing a vital role in the 2009 influenza A(H1N1) pandemic and subsequent pandemic vaccination campaign. Uptake of seasonal influenza immunisation increased this season, both in those aged 65 years and over and in those aged 6 months to 64 years in seasonal influenza risk groups. The extent to which pandemic related media attention and special healthcare measures put in place for the pandemic vaccination campaign have affected the increase in uptake of seasonal influenza immunisation is unknown. Achieving the 2010/11 target of 75% uptake remains a considerable challenge.

Figure 2. Uptake of influenza immunisation in Welsh LHBs in patients aged 65 years and over during the 2009/10 immunisation season.

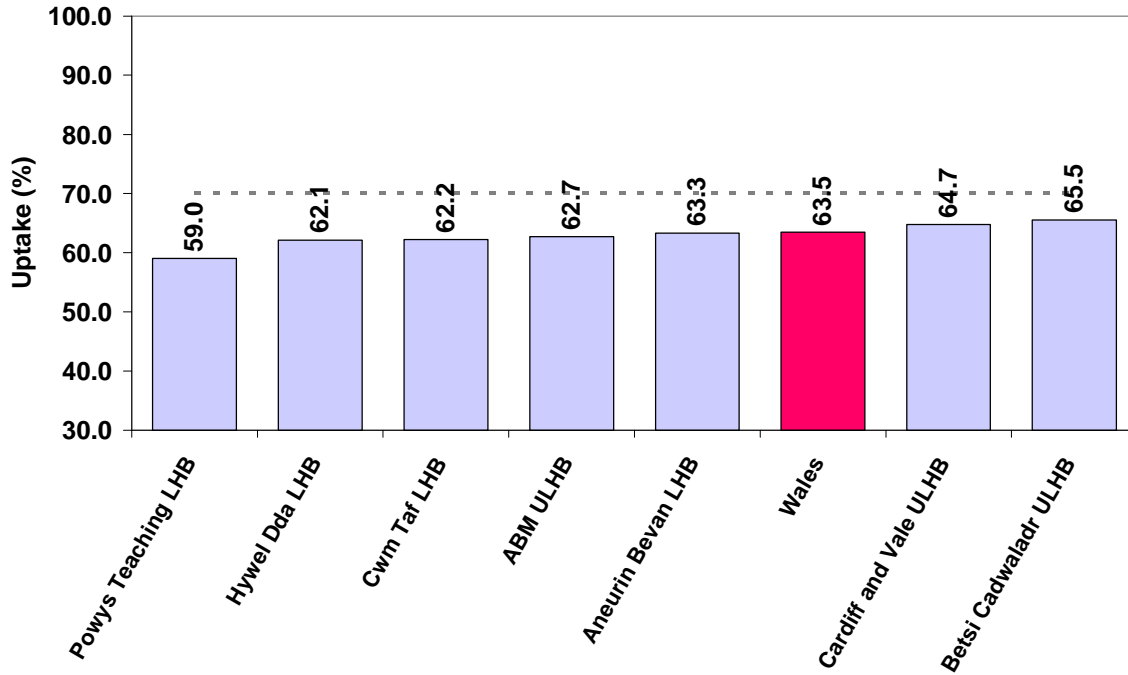


Figure 3. Uptake of influenza immunisation in Welsh LHBs in patients aged under 65 years with one or more clinical risks during the 2009/10 immunisation season.

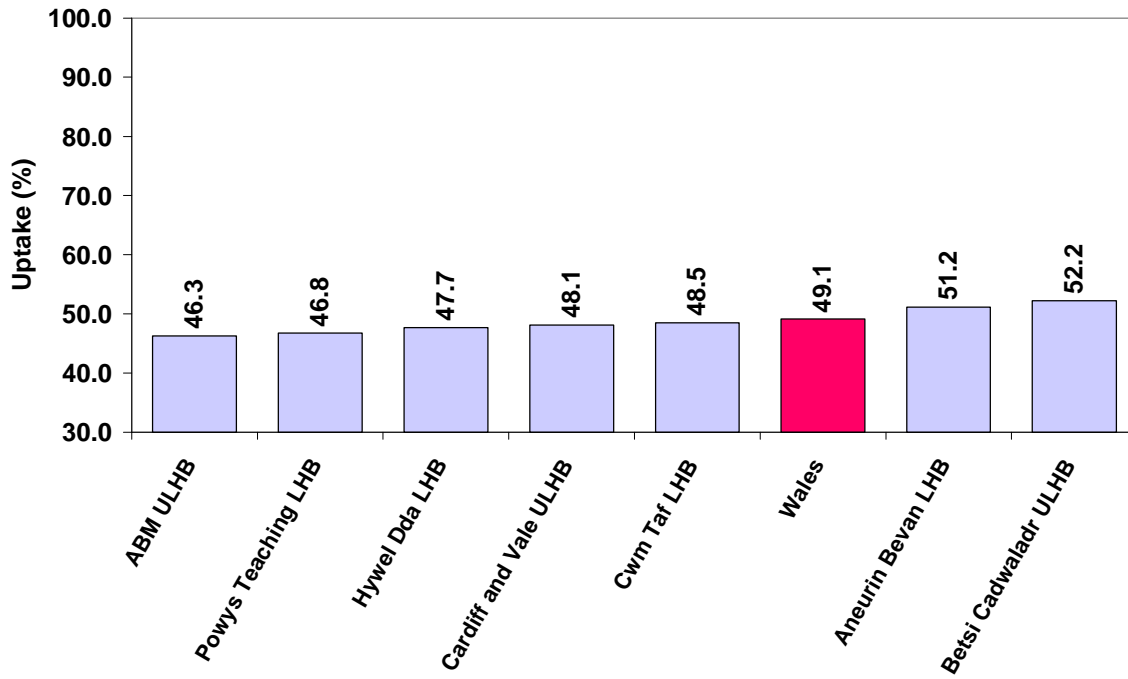


Table 2. Uptake of influenza immunisation in those aged 65years and over in Wales 2009/10

Health Board	Patients 65y and over			Patients under 65y in one or more clinical risk groups			Number of practices	Practices submitting data	Participation rate
	Total patients (n)	Immunisation uptake (n)	(%)	Total patients (n)	Immunisation uptake (n) (%)				
							(n)	(n)	(%)
ABM ULHB	90236	56579	62.7	46880	21702	46.3	77	71	92.2
Aneurin Bevan LHB	92950	58859	63.3	49038	25084	51.2	94	86	91.5
Betsi Cadwaladr ULHB	119741	78463	65.5	50276	26233	52.2	121	99	81.8
Cardiff and Vale ULHB	67375	43624	64.7	38830	18676	48.1	71	67	94.4
Cwm Taf LHB	46723	29076	62.2	26414	12803	48.5	52	51	98.1
Hywel Dda LHB	67216	41754	62.1	29548	14087	47.7	57	47	82.5
Powys Teaching LHB	24134	14238	59.0	9022	4218	46.8	17	15	88.2
Wales	508375	322593	63.5	250008	122803	49.1	489	436	89.2

Table 3. Uptake of influenza immunisation in those aged under 65 years and with one or more clinical risks (by risk category) 2009/10

Health Board	Total patients aged < 65y	Chronic heart disease or related conditions				Chronic respiratory disease				Chronic renal disease				Diabetes			
		Number with condition		Immunisation uptake		Number with condition		Immunisation uptake		Number with condition		Immunisation uptake		Number with condition		Immunisation uptake	
	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)
ABM ULHB	414846	8217	2.0	4175	50.8	24379	5.9	10988	45.1	2730	0.7	1307	47.9	10211	2.5	6539	64.0
Aneurin Bevan LHB	447579	8735	2.0	4842	55.4	24162	5.4	12187	50.4	3616	0.8	1868	51.7	11542	2.6	7920	68.6
Betsi Cadwaladr ULHB	489507	8796	1.8	4908	55.8	25491	5.2	13266	52.0	3087	0.6	1643	53.2	10162	2.1	7006	68.9
Cardiff and Vale ULHB	409329	5954	1.5	2988	50.2	20426	5.0	9525	46.6	2078	0.5	1016	48.9	8151	2.0	5598	68.7
Cwm Taf LHB	235181	5247	2.2	2741	52.2	13115	5.6	6412	48.9	1616	0.7	811	50.2	5957	2.5	3894	65.4
Hywel Dda LHB	263583	4864	1.8	2604	53.5	15193	5.8	7058	46.5	1866	0.7	884	47.4	6218	2.4	4055	65.2
Powys Teaching LHB	89085	1583	1.8	780	49.3	4357	4.9	2130	48.9	813	0.9	351	43.2	1746	2.0	1095	62.7
Wales	2349110	43396	1.8	23038	53.1	127123	5.4	61566	48.4	15806	0.7	7880	49.9	53987	2.3	36107	66.9

Health Board	Total patients aged < 65y	Immunosuppression due to disease or treatment				Chronic liver disease				Neurological condition				Stroke			
		Number with condition		Immunisation uptake		Number with condition		Immunisation uptake		Number with condition		Immunisation uptake		Number with condition		Immunisation uptake	
	(n)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)
ABM ULHB	414846	2750	0.7	1398	50.8	1245	0.3	462	37.1	2953	0.7	1000	33.9	2393	0.6	1231	51.4
Aneurin Bevan LHB	447579	3103	0.7	1718	55.4	1417	0.3	552	39.0	3127	0.7	1059	33.9	2455	0.5	1397	56.9
Betsi Cadwaladr ULHB	489507	3500	0.7	1985	56.7	1372	0.3	547	39.9	3240	0.7	1208	37.3	2420	0.5	1378	56.9
Cardiff and Vale ULHB	409329	2673	0.7	1452	54.3	935	0.2	389	41.6	2574	0.6	829	32.2	1751	0.4	932	53.2
Cwm Taf LHB	235181	1712	0.7	880	51.4	642	0.3	213	33.2	1693	0.7	516	30.5	1447	0.6	744	51.4
Hywel Dda LHB	263583	2069	0.8	1157	55.9	798	0.3	262	32.8	1977	0.8	673	34.0	1480	0.6	793	53.6
Powys Teaching LHB	89085	675	0.8	334	49.5	272	0.3	91	33.5	658	0.7	235	35.7	397	0.4	180	45.3
Wales	2349110	16482	0.7	8924	54.1	6681	0.3	2516	37.7	16222	0.7	5520	34.0	12343	0.5	6655	53.9

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=28240>

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.
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