

Pneumococcal polysaccharide vaccination (PPV) uptake in Wales in 2022/23

Annual Report

Key Points

- Uptake of pneumococcal vaccine in people aged two to 64 years in a clinical risk group was 36.4% during 2022/23. Uptake ranged from 29.7% in Cwm Taf Morgannwg UHB to 45.3% in Betsi Cadwaladr UHB.
- Uptake of pneumococcal vaccine in people aged 65 years and over was 62.4%. Uptake ranged from 59.2% in Hywel Dda UHB to 67.3% in Betsi Cadwaladr UHB
- For those aged 65 and over, uptake increased with age (and time since eligibility). Uptake in those turning 65 was 26.5% whilst nearly 75% of those aged 75 and over were vaccinated.
- Amongst those patients aged two to 64 years in a clinical risk group, uptake was highest in patients with a cochlear implant (72.2%), followed by patients with chronic respiratory disease (48.7%). Uptake was lowest in patients suffering from cerebrospinal fluid leak (28.5%).
- There are notable variations in uptake between and within health boards, especially in those under 65 years of age in clinical risk groups.

Background

The pneumococcal polysaccharide vaccination (PPV) is currently offered to those aged 65 years and older and people aged two to 64 years in select clinical risk groups. PPV protects against 23 serotypes of *Streptococcus pneumoniae* that can cause pneumonia or serious invasive infections.

Data are presented by Local Authority/Health Board of GP and are based on all general practices in Wales as at end March 2023. All ages in this report are as at March 2023.

Data from one practice was excluded from this report due to data quality.

Figure 1: Pneumococcal vaccine coverage, by age group, data as at March 2023

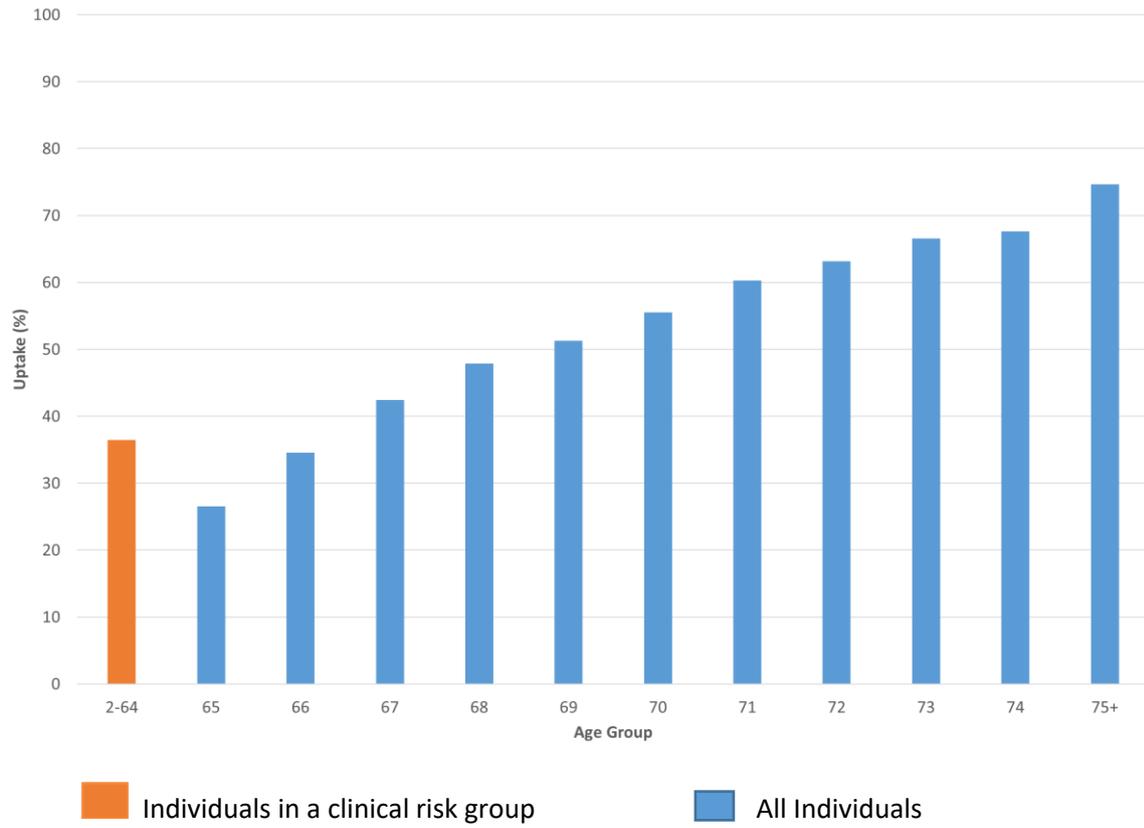


Figure 2. Box and whisker plot showing distribution of practice pneumococcal immunisation uptake (%) in patients aged 2-64 years in a clinical risk group, by health board; Wales

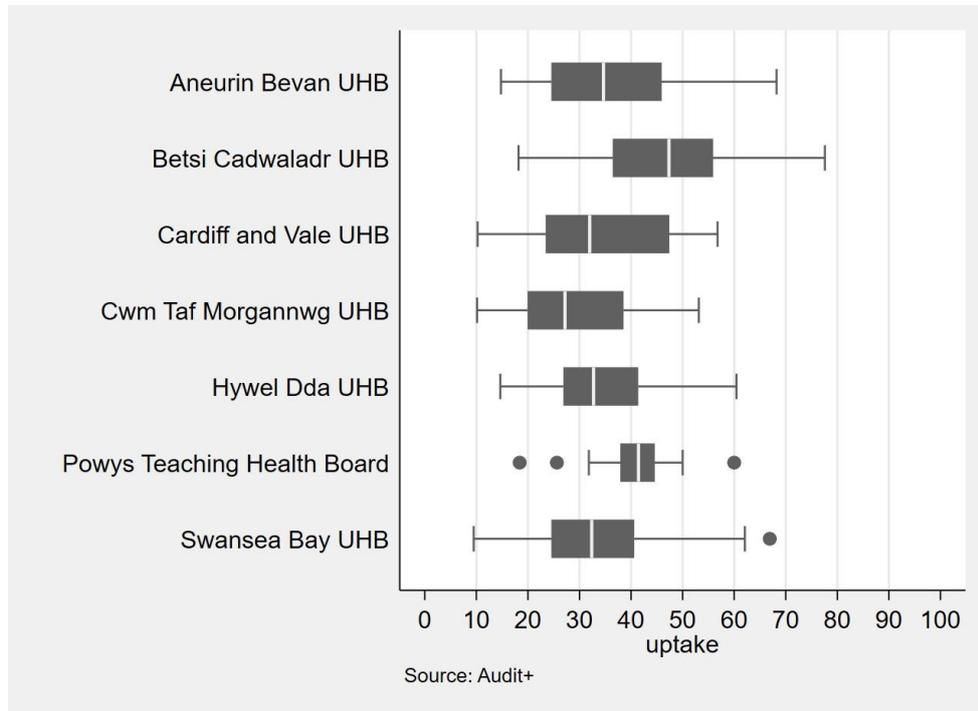


Figure 3. Box and whisker plot showing distribution of practice pneumococcal immunisation uptake (%) in patients aged 65 years and over, by health board; Wales

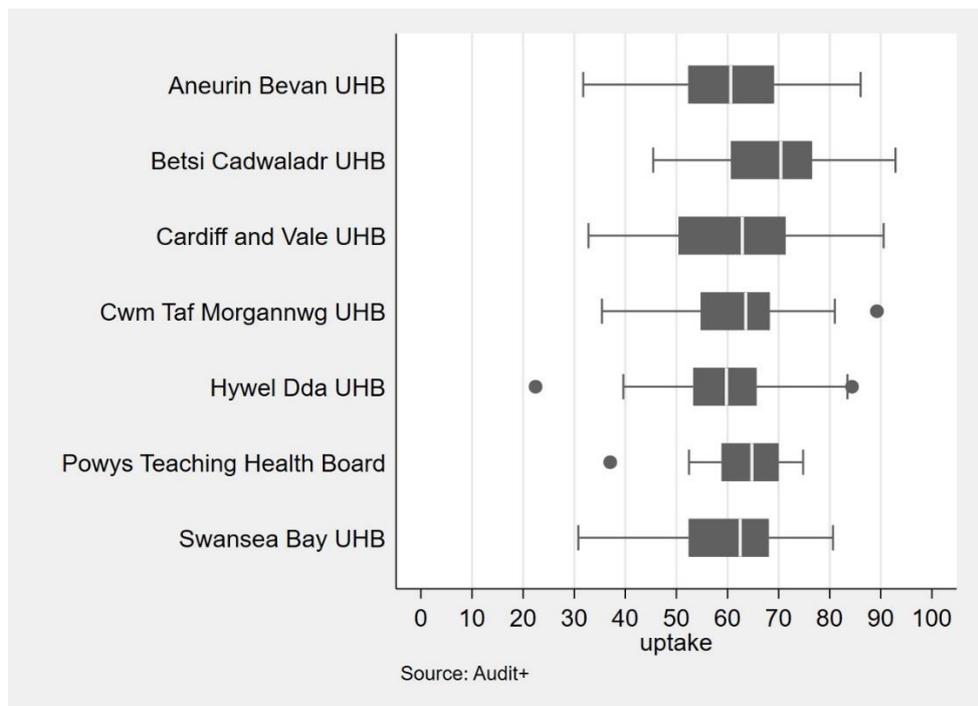




Table 1: Pneumococcal vaccine coverage, by health board and local authority, data as at March 2023

Local Authority	Patients aged 65+			Patients in clinical at-risk group aged 2-64 years		
	n	d	%	n	d	%
Aneurin Bevan ULHB	78,071	129,607	60.2	15,278	43,264	35.3
Blaenau Gwent	8,404	14,576	57.7	2,090	5,717	36.6
Caerphilly	23,309	37,722	61.8	4,443	12,760	34.8
Monmouthshire	17,061	26,285	64.9	2,625	6,391	41.1
Newport	17,897	30,842	58.0	3,714	10,932	34.0
Torfaen	11,400	20,182	56.5	2,406	7,464	32.2
Betsi Cadwaladr ULHB	112,046	166,562	67.3	20,615	45,461	45.3
Anglesey	11,703	17,647	66.3	2,001	4,277	46.8
Conwy	19,415	31,488	61.7	2,816	7,192	39.2
Denbighshire	16,761	25,116	66.7	2,960	7,209	41.1
Flintshire	24,380	32,934	74.0	5,106	10,008	51.0
Gwynedd	18,303	28,885	63.4	3,058	7,196	42.5
Wrexham	21,484	30,492	70.5	4,674	9,579	48.8
Cardiff & Vale ULHB	53,534	86,209	62.1	11,166	31,277	35.7
Cardiff	35,846	57,517	62.3	8,707	23,404	37.2
Vale of Glamorgan	17,688	28,692	61.6	2,459	7,873	31.2
Cwm Taf Morgannwg ULHB	58,957	94,107	62.6	9,697	32,608	29.7
Bridgend	21,815	33,704	64.7	3,736	11,446	32.6
Merthyr Tydfil	6,672	11,505	58.0	1,101	4,428	24.9
Rhondda Cynon Taf	30,470	48,898	62.3	4,860	16,734	29.0
Hywel Dda ULHB	59,263	100,135	59.2	8,806	25,791	34.1
Carmarthenshire	25,949	44,114	58.8	3,725	12,040	30.9
Ceredigion	12,570	24,070	52.2	1,684	5,478	30.7
Pembrokeshire	20,744	31,951	64.9	3,397	8,273	41.1
Powys Teaching LHB	24,633	39,091	63.0	3,473	8,736	39.8
Powys	24,633	39,091	63.0	3,473	8,736	39.8
Swansea Bay ULHB	48,958	82,114	59.6	8,596	25,857	33.2
Neath Port Talbot	17,744	30,299	58.6	3,069	9,822	31.2
Swansea	31,214	51,815	60.2	5,527	16,035	34.5
Wales	435,462	697,825	62.4	77,631	212,994	36.4



Table 2a: Pneumococcal vaccine coverage for those at risk, by health board and local authority, as at March 2023

Local Authority	Patients in asplenia at risk group			Patients in cerebrospinal fluid leak at-risk group			Patients in chronic heart disease at-risk group		
	n	d	%	n	d	%	n	d	%
Aneurin Bevan ULHB	984	2,686	36.6	51	186	27.4	3,952	13,853	28.5
Blaenau Gwent	94	294	32.0	<10	25	24.0	546	1,794	30.4
Caerphilly	270	749	36.0	24	70	34.3	1,207	4,093	29.5
Monmouthshire	216	524	41.2	<10	31	22.6	673	2,321	29.0
Newport	229	641	35.7	<10	26	11.5	865	3,199	27.0
Torfaen	175	478	36.6	11	34	32.4	661	2,446	27.0
Betsi Cadwaladr ULHB	1,284	2,936	43.7	115	297	38.7	5,469	14,694	37.2
Anglesey	136	263	51.7	10	30	33.3	471	1,284	36.7
Conwy	190	507	37.5	20	51	39.2	750	2,378	31.5
Denbighshire	177	441	40.1	20	44	45.5	818	2,353	34.8
Flintshire	322	636	50.6	26	66	39.4	1,394	3,312	42.1
Gwynedd	175	481	36.4	13	39	33.3	755	2,197	34.4
Wrexham	284	608	46.7	26	67	38.8	1,281	3,170	40.4
Cardiff & Vale ULHB	913	2,348	38.9	37	164	22.6	2,598	9,826	26.4
Cardiff	656	1,755	37.4	26	114	22.8	1,977	7,175	27.6
Vale of Glamorgan	257	593	43.3	11	50	22.0	621	2,651	23.4
Cwm Taf Morgannwg ULHB	605	1,771	34.2	39	180	21.7	2,687	11,157	24.1
Bridgend	246	670	36.7	17	74	23.0	1,112	4,261	26.1
Merthyr Tydfil	67	196	34.2	<10	24	29.2	310	1,502	20.6
Rhondda Cynon Taf	292	905	32.3	15	82	18.3	1,265	5,394	23.5
Hywel Dda ULHB	595	1,521	39.1	36	147	24.5	2,576	9,131	28.2
Carmarthenshire	231	611	37.8	17	70	24.3	1,167	4,403	26.5
Ceredigion	127	393	32.3	<10	23	17.4	494	1,954	25.3
Pembrokeshire	237	517	45.8	15	54	27.8	915	2,774	33.0
Powys Teaching LHB	283	633	44.7	11	58	19.0	962	3,186	30.2
Powys	283	633	44.7	11	58	19.0	962	3,186	30.2
Swansea Bay ULHB	560	1,431	39.1	55	177	31.1	2,520	8,817	28.6
Neath Port Talbot	198	490	40.4	16	64	25.0	917	3,449	26.6
Swansea	362	941	38.5	39	113	34.5	1,603	5,368	29.9
Wales	5,224	13,326	39.2	344	1209	28.5	20,764	70,664	29.4

Table 2b: Pneumococcal vaccine coverage for those at risk, by health board and local authority, as at March 2023

Local Authority	Patients in chronic kidney disease at-risk group			Patients in chronic liver disease at-risk group			Patients in chronic respiratory disease at-risk		
	n	d	%	n	d	%	n	d	%
Aneurin Bevan ULHB	432	984	43.9	683	2,306	29.6	2,597	5,496	47.3
Blaenau Gwent	58	142	40.8	95	331	28.7	425	839	50.7
Caerphilly	114	282	40.4	176	670	26.3	723	1,596	45.3
Monmouthshire	70	126	55.6	130	327	39.8	359	645	55.7
Newport	106	260	40.8	160	580	27.6	618	1,347	45.9
Torfaen	84	174	48.3	122	398	30.7	472	1,069	44.2
Betsi Cadwaladr ULHB	599	1,084	55.3	963	2,673	36.0	3,643	6,679	54.5
Anglesey	44	97	45.4	89	220	40.5	351	661	53.1
Conwy	85	162	52.5	142	434	32.7	540	997	54.2
Denbighshire	76	149	51.0	160	447	35.8	591	1,229	48.1
Flintshire	135	213	63.4	213	579	36.8	792	1,322	59.9
Gwynedd	93	187	49.7	132	388	34.0	619	1,171	52.9
Wrexham	166	276	60.1	227	605	37.5	750	1,299	57.7
Cardiff & Vale ULHB	315	819	38.5	445	1,565	28.4	1,803	3,828	47.1
Cardiff	235	617	38.1	353	1,187	29.7	1,441	2,859	50.4
Vale of Glamorgan	80	202	39.6	92	378	24.3	362	969	37.4
Cwm Taf Morgannwg ULHB	290	817	35.5	447	1,882	23.8	1,915	4,600	41.6
Bridgend	108	281	38.4	146	556	26.3	657	1,425	46.1
Merthyr Tydfil	37	115	32.2	45	271	16.6	243	684	35.5
Rhondda Cynon Taf	145	421	34.4	256	1,055	24.3	1,015	2,491	40.7
Hywel Dda ULHB	257	647	39.7	392	1,375	28.5	1,692	3,480	48.6
Carmarthenshire	106	292	36.3	127	581	21.9	688	1,539	44.7
Ceredigion	57	133	42.9	74	283	26.1	338	749	45.1
Pembrokeshire	94	222	42.3	191	511	37.4	666	1,192	55.9
Powys Teaching LHB	93	213	43.7	186	447	41.6	611	1,142	53.5
Powys	93	213	43.7	186	447	41.6	611	1,142	53.5
Swansea Bay ULHB	236	600	39.3	455	1,717	26.5	1,738	3,504	49.6
Neath Port Talbot	98	239	41.0	144	578	24.9	626	1,382	45.3
Swansea	138	361	38.2	311	1,139	27.3	1,112	2,122	52.4
Wales	2,222	5,164	43.0	3,571	11,965	29.8	13,999	28,729	48.7

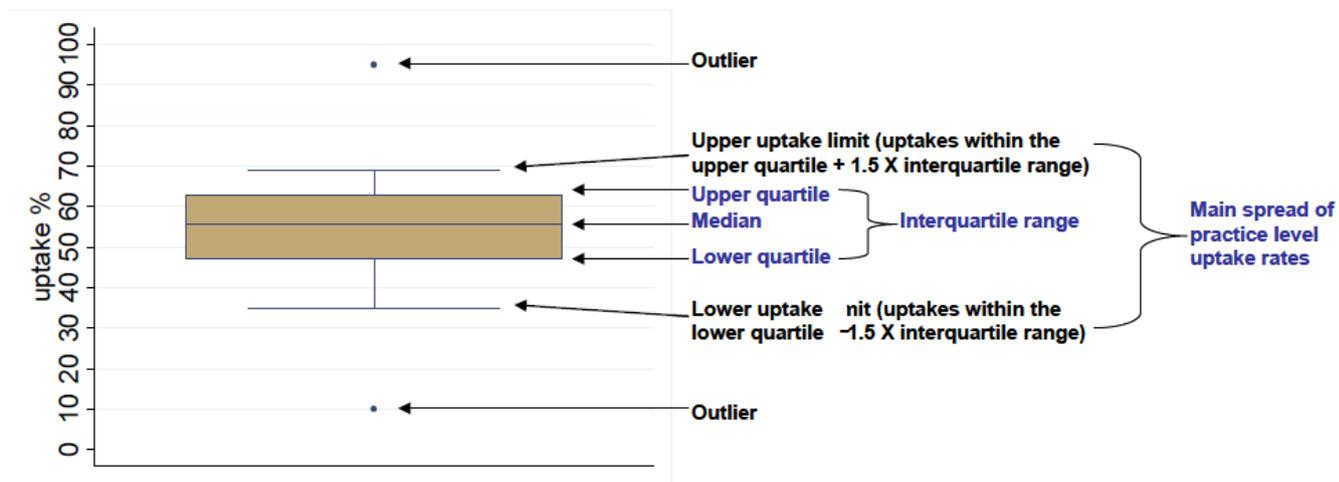


Table 2c: Pneumococcal vaccine coverage for those at risk, by health board and local authority, as at March 2023

Local Authority	Patients in diabetes at-risk group			Patients in immunosuppression at-risk			Patients in cochlear implant at-risk group		
	n	d	%	n	d	%	n	d	%
Aneurin Bevan ULHB	7,731	18,532	41.7	2,466	5,798	42.5	27	40	67.5
Blaenau Gwent	1,030	2,482	41.5	343	746	46.0	<10	<10	87.5
Caerphilly	2,353	5,699	41.3	616	1,528	40.3	<10	<10	62.5
Monmouthshire	1,268	2,332	54.4	481	964	49.9	<10	<10	55.6
Newport	1,984	5,077	39.1	572	1,420	40.3	<10	<10	55.6
Torfaen	1,096	2,942	37.3	454	1,140	39.8	<10	<10	83.3
Betsi Cadwaladr ULHB	9,503	17,077	55.6	3,473	6,810	51.0	26	42	61.9
Anglesey	943	1,644	57.4	364	723	50.3	<10	<10	66.7
Conwy	1,223	2,662	45.9	484	1,042	46.4	<10	<10	71.4
Denbighshire	1,296	2,641	49.1	526	1,072	49.1	<10	<10	66.7
Flintshire	2,437	3,864	63.1	829	1,461	56.7	<10	<10	60.0
Gwynedd	1,374	2,601	52.8	551	1,169	47.1	<10	<10	66.7
Wrexham	2,230	3,665	60.8	719	1,343	53.5	<10	12	50.0
Cardiff & Vale ULHB	5,875	13,061	45.0	1,671	4,027	41.5	30	36	83.3
Cardiff	4,732	9,995	47.3	1,234	2,989	41.3	*	*	80.0
Vale of Glamorgan	1,143	3,066	37.3	437	1,038	42.1	*	*	100.0
Cwm Taf Morgannwg ULHB	4,957	13,797	35.9	1,138	3,462	32.9	19	25	76.0
Bridgend	1,883	4,676	40.3	393	1,135	34.6	*	*	84.6
Merthyr Tydfil	572	1,890	30.3	119	471	25.3	*	*	0.0
Rhondda Cynon Taf	2,502	7,231	34.6	626	1,856	33.7	*	*	80.0
Hywel Dda ULHB	3,985	10,121	39.4	1,428	3,309	43.2	21	28	75.0
Carmarthenshire	1,729	4,880	35.4	554	1,473	37.6	*	*	70.6
Ceredigion	752	2,013	37.4	249	699	35.6	<10	<10	100.0
Pembrokeshire	1,504	3,228	46.6	625	1,137	55.0	<10	<10	77.8
Powys Teaching LHB	1,537	3,019	50.9	576	1,271	45.3	<10	<10	37.5
Powys	1,537	3,019	50.9	576	1,271	45.3	<10	<10	37.5
Swansea Bay ULHB	4,071	10,754	37.9	925	2,678	34.5	25	30	83.3
Neath Port Talbot	1,472	4,172	35.3	350	964	36.3	11	14	78.6
Swansea	2,599	6,582	39.5	575	1,714	33.5	14	16	87.5
Wales	37,659	86,361	43.6	11,677	27,355	42.7	151	209	72.2

(*): Masked to comply with statistical disclosure control.

Appendix 1. Notes on interpretation - Diagram of a box and whisker plot.



The figure above provides an illustration as to how the box and whisker plots are constructed.

The box and whisker plots above show the spread of uptake rates of practices within health board areas. The line inside the shaded box represents the median practice uptake rate (half of the health board practices have an uptake higher than the median value and half have an uptake lower than the median value). The shaded box represents the spread in uptake rates of the central 50% of practices, this is called the interquartile range (IQR). The whiskers extending above and below the shaded box represent the spread in practice uptake rates for the majority of practices within the health board. Any practices with uptake rates that are very different from the majority of practices within the health board are termed 'outliers' and appear as dots outside the whiskers.

Report prepared by Public Health Wales Vaccine Preventable Disease Programme and Communicable Disease Surveillance Centre. Data in this report were provided by general practices through the Audit+ platform, as at March 2023, using automated Read code searches developed by Digital Health and Care Wales Primary Care Team.