

# Wales COVID-19 Vaccination Enhanced Surveillance Report 2

18 March 2021

This report summarises surveillance of equality in coverage of COVID-19 vaccination in Wales, from 8th December 2020 up to 15th March 2021, by sex, socioeconomic deprivation and ethnic group.

## Key findings

- Coverage of vaccination has increased in all reported socioeconomic and ethnic groups since February.
- Significant inequalities in coverage of COVID-19 vaccine in Wales remain between ethnic and socioeconomic groups, however inequality gaps in coverage between these groups in older adults have mainly narrowed since February.
- The largest inequality in coverage was seen between ethnic groups in adults aged 65 to 69 years. Coverage for the combined Black, Asian, Mixed and Other ethnic groups in this age-group was 75.3% compared to 88.6% in White ethnic groups.
- The gap in coverage between the combined Black, Asian, Mixed and Other ethnic groups and White ethnic groups was:
  - 11.3% for adults aged 80 years and older (compared to 14.1% in February)
  - 12.1% for adults aged 75 to 79 years (compared to 12.8% in February)
  - 12.9% for adults aged 70 to 74 years (compared to 10.0% in February)
  - 13.3% for adults aged 65 to 69 years (new information since February)
- Inequalities were also seen between adults living in the most and least deprived areas of Wales. In older adults, the inequality gap between those living in the most deprived and least deprived quintiles of areas in Wales was:
  - 4.8% for adults aged 80 years and older (compared to 5.7% in February)
  - 2.7% for adults aged 75 to 79 (compared to 4.4% in February)
  - 3.5% for adults aged 70 to 74 (compared to 5.2% in February)
  - 2.9% for adults aged 65 to 69 (new information since February)
- Little difference was seen in coverage between those with a recorded sex of male or female.
- These inequalities show that vaccination coverage was lower in groups who are at increased risk of COVID-19.
- The reasons for these differences may relate to individual, community or service characteristics.
- The COVID-19 vaccination programme is ongoing and coverage figures are not final, therefore there remains opportunity to reduce inequities. The narrowing of inequalities seen in coverage between some groups over the past month highlights the importance of offering opportunities to catch-up and local public health interventions.

## Methods and data sources

Vaccination data are sourced from the COVID-19 Welsh Immunisation System (WIS). Paper records may still need to be entered at the time of data extraction and reporting. Actual numbers vaccinated will be higher and updated in future reports. Data are undergoing continuous quality assurance and may change in the future.

For analysis of coverage by sex and socioeconomic status, denominator data are based on records in WIS. Calculation of coverage by sex is based on sex as recorded in WIS. Underlying WIS data for the population of Wales have been sourced from the Welsh Demographic Service (WDS), based on the NHS-registered population. Analysis includes all those resident in Wales registered in the WIS system. For analyses by sex coverage reflects vaccination statuses recorded as at end of 15/03/2021.

Analysis of coverage by level of socioeconomic deprivation is at ecological level based on the Welsh Index of Multiple Deprivation (WIMD) ranking of the Lower Super Output Area (LSOA) of residence. WIS data were linked WIMD data at LSOA level. The WIMD provides a composite ranking deprivation for each LSOA in Wales, weighted across eight domains: income, employment, health, education, access to services, community safety, physical environment and housing. For this report, LSOAs were allocated into quintiles based on overall WIMD deprivation ranking, to provide an indication of the deprivation status of the LSOA in which person lives. In this report, Quintile 1 refers to those living in the most deprived fifth of LSOAs in Wales and Quintile 5 refers to those who were living in the least deprived fifth of LSOAs in Wales. All analyses of socioeconomic inequalities in this report use 2014 WIMD national quintiles of deprivation. For analyses by quintile of socioeconomic deprivation coverage reflects vaccination statuses recorded as at end of 15/03/2021.

Ethnicity analysis were carried out in SAIL Databank using WDS (Welsh Demographic Service Dataset) and CVVD (WIS) data. The denominator includes all those alive and resident in Wales as at 31/01/2021. The vaccination (numerator) data are as at end 10/03/2021. Ethnicity has been derived into the standardised ethnic grouping as a composite variable from data available in the SAIL Databank including the ONS 2011 census and over 20 routine electronic health record (EHR) data sources.

This report highlights significant differences in coverage between population groups, but it does not report causative factors for the inequalities, which can be numerous and complex. The reasons for differences in coverage of vaccination between ethnic groups and deprived areas may include access to services and mobility, service delivery, health literacy, vaccine acceptability or other characteristics. Similarly, reasons for inequalities in severe outcomes from COVID-19 in some ethnic groups and areas of deprivation are complex, and may be related to factors such as health conditions, employment or social characteristics.

## Findings

### Uptake of COVID-19 Vaccination by sex

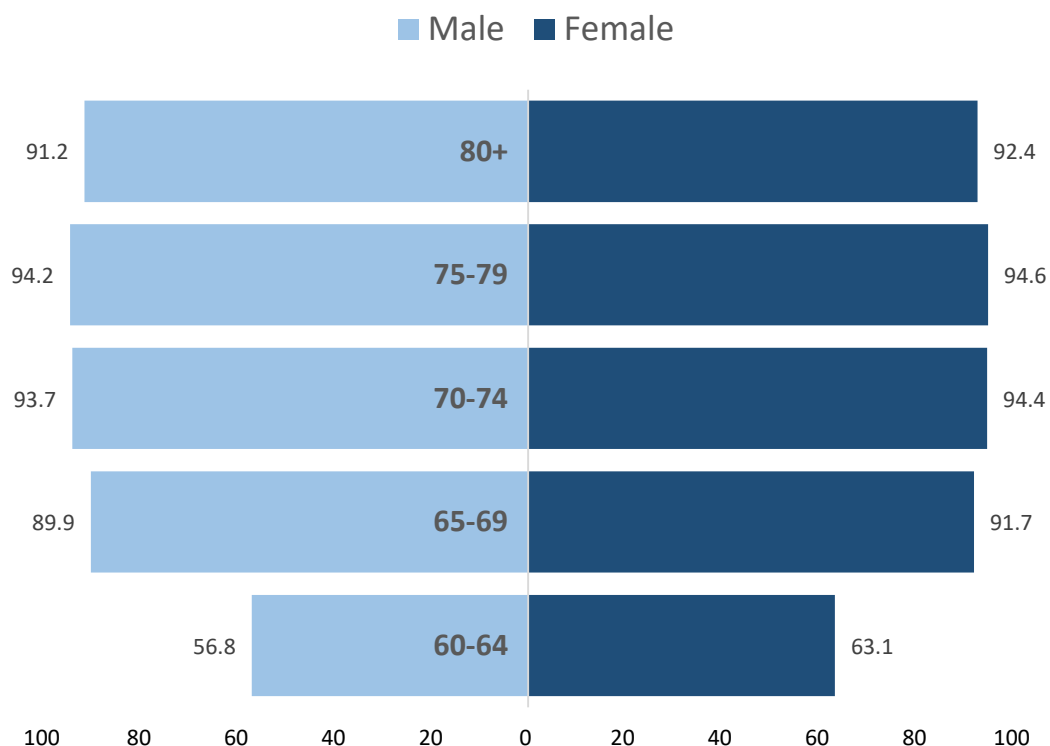
**Table 1.1.** Uptake of at least one dose of COVID-19 vaccination by age group and sex, Wales, at 15/03/2021.

Age Group	Male				Female			
	Denominator	(n)	(%)	95% CI	Denominator	(n)	(%)	95% CI
80+	75794	69157	91.2	(91.0-91.4)	107131	98971	92.4	(92.2-92.5)
75-79	63297	59638	94.2	(94.0-94.4)	71362	67507	94.6	(94.4-94.8)
70-74	89882	84254	93.7	(93.6-93.9)	94746	89483	94.4	(94.3-94.6)
65-69	88499	79534	89.9	(89.7-90.1)	92118	84466	91.7	(91.5-91.9)
60-64	102265	58096	56.8	(56.5-57.1)	103088	65017	63.1	(62.8-63.4)

**Table 1.2.** Uptake of at least one dose of COVID-19 vaccination by risk group and sex, Wales, at 15/03/2021.

Priority Group	Male				Female			
	Denominator	(n)	(%)	95% CI	Denominator	(n)	(%)	95% CI
Care home residents	5074	4274	84.2	(83.2-85.2)	11134	9731	87.4	(86.8-88.0)
Care home workers	7040	6056	86.0	(85.2-86.8)	30378	26144	86.1	(85.7-86.4)
Health care workers	33381	29911	89.6	(89.3-89.9)	107737	95755	88.9	(88.7-89.1)
CEV aged 16-69years	36660	32636	89.0	(88.7-89.3)	42959	38268	89.1	(88.8-89.4)

**Figure 1.1.** Uptake of at least one dose of COVID-19 vaccination by sex and age group, Wales, at 15/03/2021.



## Uptake of COVID-19 Vaccination by level of socioeconomic deprivation

**Table 2.1.** Uptake of **at least one dose** of COVID-19 vaccination by age and WIMD quintile of deprivation of area of residence, Wales, at 15/03/2021.

Age Group	Quintile of deprivation of area of residence	Denominator	Dose 1		
			(n)	(%)	95% CI
<b>80+ Years</b>	1- Most deprived	26352	23470	89.1	(88.7-89.4)
	2	33369	30407	91.1	(90.8-91.4)
	3	38165	35223	92.3	(92.0-92.6)
	4	41665	38796	93.1	(92.9-93.4)
	5 -Least deprived	42554	39952	93.9	(93.7-94.1)
<b>75-79 Years</b>	1- Most deprived	18965	17675	93.2	(92.8-93.5)
	2	24363	22874	93.9	(93.6-94.2)
	3	28440	26899	94.6	(94.3-94.8)
	4	30945	29524	95.4	(95.2-95.6)
	5 -Least deprived	31247	29956	95.9	(95.6-96.1)
<b>70-74 Years</b>	1- Most deprived	27392	25225	92.1	(91.8-92.4)
	2	33871	31772	93.8	(93.5-94.1)
	3	39041	36904	94.5	(94.3-94.7)
	4	41741	39696	95.1	(94.9-95.3)
	5 -Least deprived	41756	39903	95.6	(95.4-95.8)
<b>65-69 Years</b>	1- Most deprived	28836	25647	88.9	(88.6-89.3)
	2	33777	30517	90.3	(90.0-90.7)
	3	38117	34617	90.8	(90.5-91.1)
	4	40189	37226	92.6	(92.4-92.9)
	5 -Least deprived	38418	35649	92.8	(92.5-93.0)
<b>60-64 Years</b>	1- Most deprived	35192	22166	63.0	(62.5-63.5)
	2	39058	23136	59.2	(58.7-59.7)
	3	42323	25194	59.5	(59.1-60.0)
	4	44006	26003	59.1	(58.6-59.5)
	5 -Least deprived	42013	26250	62.5	(62.0-62.9)

## Uptake of COVID-19 Vaccination by Ethnic Group

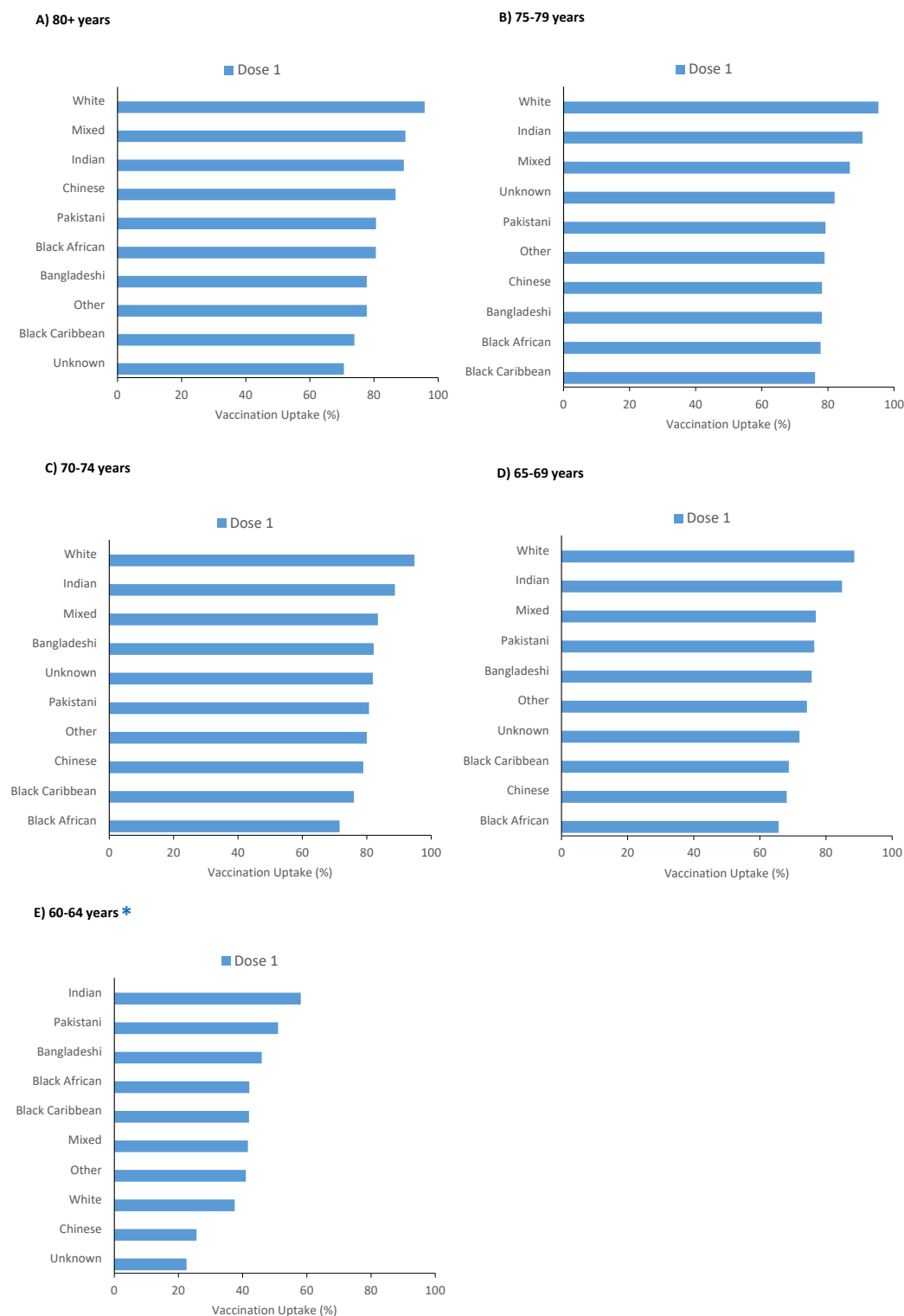
**Table 3.1.** Uptake of at least one dose of COVID-19 vaccination by age group and ethnic group, Wales, at 10/03/2021.

Age Group	White				Black, Asian, Mixed and Other Combined			
	Denominator	(n)	(%)	95% CI	Denominator	(n)	(%)	95% CI
80+	155908	149380	95.8	(95.7-95.9)	1875	1585	84.5	(82.8-86.1)
75-79	119039	113402	95.3	(95.1-95.4)	1487	1236	83.1	(81.1-85.0)
70-74	161985	153543	94.8	(94.7-94.9)	2310	1893	81.9	(80.3-83.5)
65-69	154353	136712	88.6	(88.4-88.7)	3389	2551	75.3	(73.8-76.7)
60-64	171441	64299	37.5	(37.3-37.7)	4828	2066	42.8	(41.4-44.2)

**Table 3.2.** Uptake of at least one dose of COVID-19 vaccination by age and ethnic group, Wales, at 10/03/2021.

Age Group	Ethnic Group	Denominator	Dose 1		
			(n)	(%)	95% CI
80+ Years	White	155908	149380	95.8	(95.7-95.9)
	Black	281	214	76.2	(70.7-81.0)
	Asian	892	750	84.1	(81.5-86.4)
	Mixed	574	521	90.8	(88.1-93.0)
	Other	128	100	78.1	(70.0-84.9)
	Unknown	7582	5355	70.6	(69.6-71.7)
75-79 Years	White	119039	113402	95.3	(95.1-95.4)
	Black	186	139	74.7	(67.9-80.8)
	Asian	676	567	83.9	(80.9-86.6)
	Mixed	471	411	87.3	(83.9-90.1)
	Other	154	119	77.3	(69.8-83.6)
	Unknown	5675	4654	82.0	(81.0-83.0)
70-74 Years	White	161985	153543	94.8	(94.7-94.9)
	Black	247	177	71.7	(65.6-77.2)
	Asian	1178	990	84.0	(81.8-86.1)
	Mixed	649	543	83.7	(80.6-86.4)
	Other	236	183	77.5	(71.7-82.7)
	Unknown	9537	7807	81.9	(81.1-82.6)
65-69 Years	White	154353	136712	88.6	(88.4-88.7)
	Black	393	270	68.7	(63.9-73.3)
	Asian	1739	1344	77.3	(75.2-79.2)
	Mixed	895	685	76.5	(73.6-79.3)
	Other	362	252	69.6	(64.6-74.3)
	Unknown	12001	8639	72.0	(71.2-72.8)
60-64 Years	White	171441	64299	37.5	(37.3-37.7)
	Black	644	266	41.3	(37.5-45.2)
	Asian	2420	1089	45.0	(43.0-47.0)
	Mixed	1261	520	41.2	(38.5-44.0)
	Other	503	191	38.0	(33.7-42.4)
	Unknown	16177	3641	22.5	(21.9-23.2)

**Figure 3.1.** Uptake of **at least one dose** of COVID-19 vaccination by age group and ethnic group, as at 10/03/2021.



\* Current coverage data for adults aged 60 to 64 years may be largely based on health and social care staff, care home staff and those at higher risk who have been eligible for vaccination for longer.

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