

Shingles vaccine coverage report (adults eligible from April to September 2021 and vaccinated to the end of December 2021): England

Quarter 2 report of the financial year 2021 to 2022

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Main points

This is the second quarterly shingles report of the financial year 2021 to 2022. This report evaluates vaccine uptake in those turning 70 years old from 1 July 2021 to 30 September 2021 and provides updated vaccine uptake in those who turned 70 years old from 1 April 2021 to 30 June 2021, both assessed at the end of December 2021. This report also presents vaccine coverage in cohorts turning 71 to 80 years old between 1 April 2021 and 31 March 2022, again assessed at the end of December 2021.

The shingles vaccination programme was introduced in September 2013. The routine programme offers the vaccine to those turning 70 and patients remain eligible for the vaccine until their 80th birthday.

Uptake in those who turned 70 years old in quarter 2 of 2021 to 2022 was 22.3%. This compares to an uptake of 28.8% seen in quarter 2 of 2019 to 2020.

Uptake in the cohort who turned 70 years old from 1 April 2021 to 30 June 2021 was 27.5% when measured at the end of December 2021. This cohort had a coverage of 18.0% when assessed at the end of September 2021.

Cumulative shingles vaccine coverage for all adults aged between 71 and 80 years old continues to increase year on year through opportunistic vaccination and was highest among 78 year olds (79.4%) and lowest among 71 year olds (35.4%).

Introduction

The aim of the routine shingles (*herpes zoster*) vaccination programme is to prevent severe morbidity from shingles in groups at the highest risk. The shingles vaccination programme began on 1 September 2013, offering the Zostavax shingles vaccine to all 70 years olds, together with a catch-up programme for older cohorts. Since then, the eligibility criteria have changed several times (see the <u>Appendix</u>). In the 2021 to 2022 financial year, adults become eligible at 70 years old and all those who have previously been offered the shingles vaccine remain eligible until their 80th birthday (<u>1 to 4</u>).

For the first 5 years of the vaccination programme, vaccine coverage was monitored in England by Public Health England (PHE) through monthly collections via automatic uploads of GP practice-level data using the ImmForm¹ website. To continue to accurately evaluate cumulative vaccine coverage following a change in eligibility criteria on 1 April 2017, PHE changed the monthly collections to quarterly extractions, and vaccine coverage was also calculated each quarter to reflect the new delivery model (see the <u>Appendix</u>). It is important to note that vaccine coverage for adults who have become eligible under the revised criteria is not directly comparable to previous cumulative vaccine coverage estimates using the former eligibility criteria (<u>5</u>).

As a live viral vaccine, the Zostavax shingles vaccine is contraindicated for immunosuppressed individuals. From 1 September 2021, these individuals have been offered the recombinant Shingrix vaccine (6). Coverage data for the Shingrix vaccine will be published in a separate report when these data have been submitted by GP IT suppliers and have been validated by UK Health Security Agency (UKHSA).

This quarterly report evaluates vaccine uptake in those turning 70 years old from 1 July 2021 to 30 September 2021 and provides updated vaccine uptake in those who turned 70 years old from 1 April 2021 to 30 June 2021, both assessed at the end of December 2021. This report also presents vaccine coverage in cohorts turning 71 to 80 years old between 1 April 2021 and 31 March 2022, again assessed at the end of December 2021.

^{1.} ImmForm is the system used by the UKHSA to record vaccine coverage data for some immunisation programmes and to provide vaccine ordering facilities for NHS England.

Methods

The coverage data presented in this report were collected at GP practice level and were automatically uploaded via participating GP IT suppliers to the ImmForm website each quarter. These data were then validated and analysed by UKHSA to check data completeness, identify, and query any anomalous results and describe epidemiological trends.

Quarter 2 vaccine uptake in the 70 year old cohort was defined as the total number of patients turning 70 in quarter two (1 July 2021 to 30 September 2021) who received the shingles vaccine before 23 December (numerator) as a proportion of the total number of registered patients turning 70 in quarter 2 (denominator). By collecting the data in late December, those becoming eligible in quarter 2 have between 3 and 6 months to receive the vaccine, depending on their date of birth.

Updated quarter one vaccine uptake in the 70 year old cohort was defined as the total number of patients turning 70 in quarter one (1 April 2021 to 30 June 2021) who received the shingles vaccine before 23 December (numerator) as a proportion of the total number of registered patients turning 70 in quarter one (denominator). By collecting the data in late December, those becoming eligible in quarter one have between 6 and 9 months to receive the vaccine, depending on their date of birth.

Cumulative vaccine coverage for all adults born between 1 April 1941 and 31 March 1951 (that is, adults turning 71 to 80 years old between 1 April 2021 and 31 March 2022) and who were vaccinated by 23 December 2021 was calculated for each financial year birth cohort. Vaccine coverage in these cohorts is defined as the number of patients in each annual birth cohort, who received the shingles vaccine before 23 December 2021 (numerator) as a proportion of the total number of registered patients in that birth cohort (denominator). A more detailed breakdown of the different cohorts can be found in <u>Table 1</u>.

Birth range of cohort	Year first eligible for the shingles vaccine	Age in April 2021 to March 2022		Period first eligible for shingles vaccine				
1 April 1941 to 31 March 1942	2019 to 2020	80	Catch-up	April 2019 to March 2020				
				Patients remain eligible until their 80th birthday				
1 April 1942 to 1 September 1942	2020 to 2021	79	Catch-up	April 2020 to March 2021				
2 September 1942 to 31 March 1943	2013 to 2014	79	Routine	September 2013 to August 2014				
1 April 1943 to 31 March 1944	2013 to 2014	78	Routine	September 2013 to August 2014 and September 2014 to August 2015				
1 April 1944 to 31 March 1945	2014 to 2015	77	Routine	September 2014 to August 2015 and September 2015 to August 2016				
1 April 1945 to 31 March 1946	2015 to 2016	76	Routine	September 2015 to August 2016 and September 2016 to August 2017				
1 April 1946 to 31 March 1947	2016 to 2017	75	Routine	September 2016 to August 2017				
1 April 1947 to 31 March 1948	2017 to 2018	74	Routine	April 2017 to March 2018				
1 April 1948 to 31 March 1949	2018 to 2019	73	Routine	April 2018 to March 2019				
1 April 1949 to 31 March 1950	2019 to 2020	72	Routine	April 2019 to March 2020				
1 April 1950 to 31 March 1951	2020 to 2021	71	Routine	April 2020 to March 2021				
1 April 1951 to 31 March 1952	2021 to 2022	70	Routine	April 2021 to March 2022				

Results

A total of 6,407 out of a total of 6,545 (97.9%) GP practices reported shingles vaccine coverage data for the second quarter. All 3 GP IT suppliers (EMIS, TPP and INPS) provided these coverage data.

Vaccine uptake for birth cohort turning 70 in quarter 2 (July 2021 to September 2021), at 23 December 2021

22.3% of adults turning 70 during quarter 2 were vaccinated by 23 December 2021 which was 6.5 percentage points lower than coverage for the routine 70 year old cohort in quarter 2 of 2019 to 2020 (at 23 December 2019).²

Uptake varied by commissioning region and was highest in North East and Yorkshire (30.5%), and the South West (26.0%) and lowest in London (19.4%) as shown in <u>Table 2</u>.

Updated vaccine uptake for birth cohort turning 70 in quarter 1 (April 2021 to June 2021), at 23 December 2021

27.5% of adults turning 70 during quarter 1 were vaccinated by 23 December 2021.

This uptake was 6.2 percentage points lower compared to the equivalent cohort in 2019 to 2020.

^{2.} Data from 2020 to 2021 was excluded from these comparisons due to data quality issues.

Table 2. Shingles vaccine uptake for adults turning 70 in quarter 1 (April 2021 to June 2021) and quarter 2 (July 2021 to September 2021), assessed on 23 December 2021, by commissioning region

Commissioning region	Practices reporting data on 23 December 2021 (%)	Shingles uptake for those turning 70 years old in quarter 1	Shingles uptake for those turning 70 years old in quarter 2
London	98.2	24.3	19.4
South West	98.7	29.8	24.1
South East	96.1	25.2	20.2
Midlands	98.4	27.6	22.0
East of England	98.2	30.8	24.0
North West	97.8	24.1	19.5
North East and Yorkshire	97.7	30.5	26.0
Total	97.9	27.5	22.3

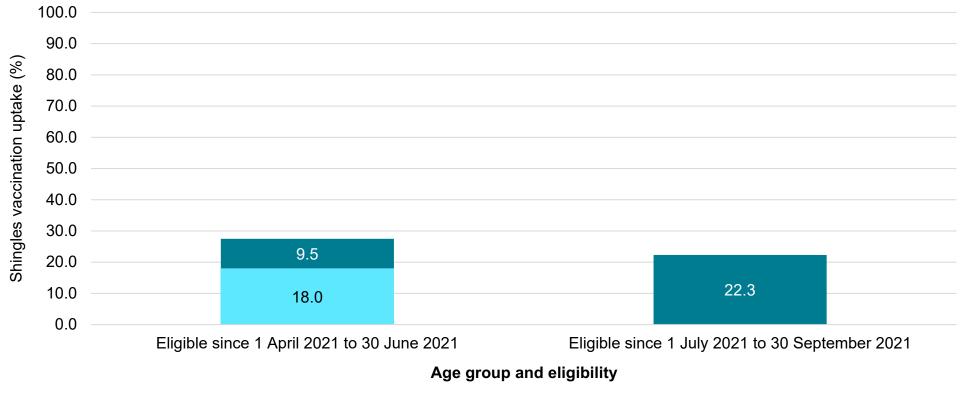


Figure 1. Shingles vaccine uptake in quarter 1 and quarter 2 for cohorts turning 70 in April 2021 to June 2021 and July 2021 to September 2021

Shingles vaccine uptake measured at 23 September 2021

Shingles vaccine uptake measured at 23 December 2021

Vaccine coverage for birth cohorts turning 71 to 80 years old from 1 April 2021 to 31 March 2022, at 23 December 2021

Cumulative vaccine coverage for each earlier routine cohort (now aged 71 to 78) continues to increase each quarter through opportunistic vaccination (Table 3). Compared to <u>quarter 1</u>, coverage in each birth cohort increased on average by 2.4% and ranged from increases of 6.7% in 71 year olds to 0.6% in the 77 and 78 year olds.

The highest cumulative coverage was observed among those turning 78 years old (79.4%), who were offered the shingles vaccine in the earliest routine cohort from 2013 to 2014.

The lowest cumulative coverage is observed among cohorts aged 71 (35.4%) and aged 72 (49.1%), who became eligible for the routine vaccination in 2019 to 2020 and 2020 to 2021, respectively. This compares to cumulative coverage of 39.2% and 53.0% in adults aged 71 and 72 years old in the same quarter of the 2020 to 2021 financial year, a reduction in coverage which may be explained by the impact of the COVID-19 pandemic.

Coverage among 79 year olds was 66.4%. This is 13.0% lower than cumulative coverage in 78 year olds. Only half of the 79 year old birth cohort were offered the vaccine as part of the routine programme from 2013 to 2014 at 70 years, whilst the other half of this birth cohort were offered the shingles vaccine as part of the catch-up programme from 2020 to 2021.

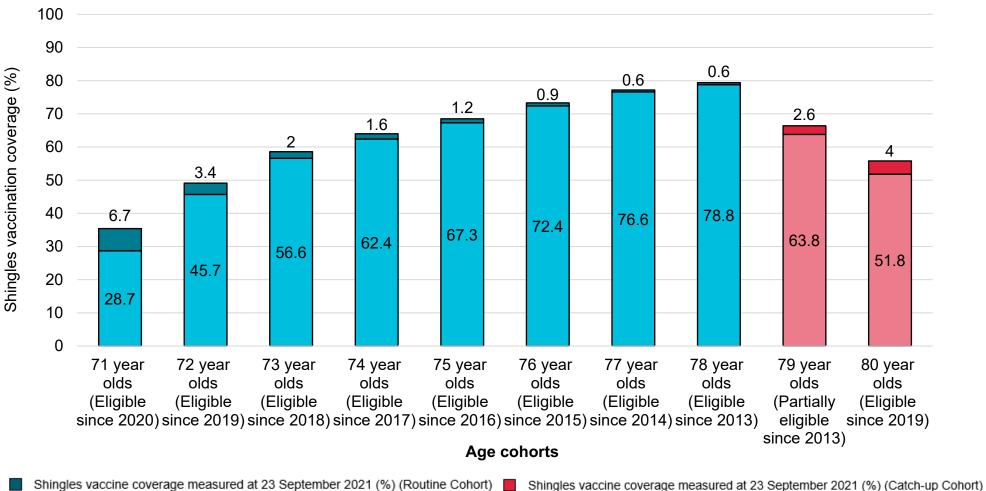
In general, coverage across the cohorts was lowest in London and highest in the North East and Yorkshire.

Table 3. National cumulative shingles vaccine coverage for adults turning 71 to 80 years old between 1 April 2021 and 31 March 2022 and vaccinated by 2
clinical commissioning region. Those aged 79 born between 2 September 1942 and 31 March 1943 were eligible for vaccination since 1 September 2013.
between 1 April 1942 and 1 September 1942 were eligible at age 78 as a catch-up cohort in 2020 to 2021

Commissioning region	Practices reporting data on 23 December 2021 (%)	71 year olds (Eligible since 2020)	72 year olds (Eligible since 2019)	73 year olds (Eligible since 2018)	74 year olds (Eligible since 2017)	75 year olds (Eligible since 2016)	76 year olds (Eligible since 2015)	77 year olds (Eligible since 2014)	78 year olds (Eligible since 2013)	79 year olds (Eligible since 2013) ¹	80 year olds (Eligible since 2019)
London	98.2	33.5	46.9	55.5	61.0	65.3	69.2	72.7	75.0	62.4	50.9
South West	98.7	37.0	50.5	59.3	64.5	69.1	74.3	77.9	80.1	68.7	60.0
South East	96.1	34.1	49.0	59.8	65.3	70.1	74.7	78.3	80.3	66.6	57.6
Midlands	98.4	34.6	48.0	57.6	63.1	67.7	72.9	77.1	79.6	66.4	54.3
East of England	98.2	37.8	50.5	58.9	63.9	67.9	72.6	77.4	79.2	67.0	58.0
North West	97.8	32.9	47.7	57.9	63.0	68.4	73.6	77.3	79.2	64.0	51.7
North East and Yorkshire	97.7	37.7	51.1	60.5	65.9	69.8	74.2	78.3	80.4	68.0	57.2
England	97.9	35.4	49.1	58.6	64.0	68.5	73.3	77.2	79.4	66.4	55.8

by 23 December 2021, by I3. Those aged 79 and born

Figure 2. Shingles vaccine coverage at 23 September 2021 and 23 December 2021 for cohorts turning 71 to 80 from 01 April 2021 to 31 March 2022. Those aged 79 born between 2 September 1942 and 31 March 1943 were eligible for vaccination since 1 September 2013. Those aged 79 and born between 1 April 1942 and 1 September 1942 were eligible at age 78 as a catch-up cohort in 2020 to 2021



Shingles vaccine coverage measured at 23 December 2021 (%) (Routine Cohort) 📕 Shingles vaccine coverage measured at 23 December 2021 (%) (Catch-up Cohort)

Discussion

Shingles vaccine uptake estimates for those turning 70 years old during quarter 2 and vaccinated up to the end of December 2021 was 22.3%. These quarter 2 uptake estimates were 6.5 percentage points lower than the same quarter in 2019 to 2020. Uptake in the cohort who turned 70 years old during quarter 1 was 9.5 percentage points higher when measured in December 2021 when compared to September 2021. Cumulative vaccine coverage for each of the earlier routine cohorts (now aged 71 to 78) continues to increase each quarter.

The decrease in uptake in 70 year olds this year compared to the 2019 to 2020 cohort is likely due to COVID-19 restrictions. These restrictions were first initiated on 23 March 2020 and included nationwide social distancing measures and the guidance for elderly groups to shield. Consequently, those turning 70 from 1 April to 30 September 2020 may have been impacted by the first and subsequent lockdowns.

Previous routine and catch-up cohorts remain eligible for vaccination until their 80th birthday and longer-term vaccine coverage data has shown increases in coverage in these cohorts in subsequent years (see <u>Table 2</u>) (<u>5</u>). The lower coverage between 79 year olds and younger cohorts (76 to 78 year olds) is likely associated with the eligibility criteria, as only half of the 79 year old cohort were eligible for the vaccine as part of the routine cohort from 2013 to 2014, with the other half becoming eligible as part of a catch-up cohort in 2020 to 2021.

Results assessing the impact of shingles vaccination in the 5 years after the introduction of the programme in England showed large reductions in both GP consultations and hospitalisations for *herpes zoster* and post-herpetic neuralgia (<u>7</u>). Therefore, GPs must continue to offer the shingles vaccine to all eligible patients, particularly in regions with lower coverage and those impacted by the COVID-19 pandemic.

Appendix. Date and eligibility criteria for the shingles vaccination programme since 1 September 2013

1 September 2013

Eligibility criteria: In the first year of the programme (2013 to 2014), the vaccine was routinely offered to adults aged 70 years on 1 September 2013 (born between 2 September 1942 and 1 September 1943 and to adults aged 79 on 1 September 2013 (born between 2 September 1933 and 1 September 1934) as part of the catch-up campaign.

1 September 2014

Eligibility criteria: In the second year of the programme (1 September 2014 to 31 August 2015), the vaccine was routinely offered to adults aged 70 years on 1 September 2014 (born between 2 September 1943 and 1 September 1944). The second year of the programme also included 2 catch-up cohorts comprised of adults aged 78 on 1 September 2014 (born between 2 September 1935 and 1 September 1936), and adults aged 79 on 1 September 2014 (born between 2 September 1934 and 1 September 1935). In addition, those who became eligible as 70 year olds from 1 September 2013 but had not yet been immunised were also eligible.

1 September 2015

Eligibility criteria: In the third year of the programme (1 September 2015 to 31 August 2016), the vaccine was routinely offered to adults aged 70 years on 1 September 2015 (born between 2 September 1944 and 1 September 1945). The third year of the programme also included a catch-up cohort of adults aged 78 on 1 September 2015 (born between 2 September 1936 and 1 September 1937). In addition, patients who became eligible in the first 2 years of the programme but have not been vaccinated against shingles remain eligible until their 80th birthday (patients aged 71, 72 and 79 on 1 September 2015).

1 September 2016

Eligibility criteria: In the fourth year of the programme (1 September 2016 to 31 August 2017), the vaccine was routinely offered to adults aged 70 years on 1 September 2016 (born between 2 September 1945 and 1 September 1946). The fourth year of the programme also included a catch-up cohort of adults aged 78 on 1 September 2016 (born between 2 September 1937 and 1 September 1938). In addition, patients who became eligible in the first 3 years of the programme but have not been vaccinated against shingles remain eligible until their 80th birthday (patients aged 71, 72, 73 and 79 on 1 September 2016).

1 April 2017

Eligibility criteria: The eligibility criteria for receiving the shingles vaccine was simplified so that individuals become eligible on their 70th birthday (routine cohort) or their 78th birthday (catch-up cohort).

1 September 2020

Eligibility criteria: As of 1 September 2020, all individuals in the catch-up cohorts (born 2 September 1933 to 1 September 1942) have been offered the shingles vaccine as they became 78 years old, thus completing the catch-up programme which started on 1 September 2013.

References

4

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