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# Shingles (quarter 3) vaccine coverage report (adults eligible from April to December 2019 and vaccinated to end-March 2020) in England

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## Shingles (quarter 3) vaccine coverage report (adults eligible from April to December 2019 and vaccinated to end-March 2020) in England

#### Key points

- the routine and catch-up shingles vaccination programme offers the shingles vaccine to those turning 70 and 78 years old. Adults remain eligible until their 80th birthday
- this is the third quarterly shingles report of the fiscal year 2019/20 based on current eligibility criteria, evaluating those eligible for the shingles vaccine from 1 April 2019 to 31 December 2019, assessed at the end of March 2020
- cumulative shingles vaccine coverage for all earlier routine cohorts (offered at 70 and now aged 71 to 76 years old) continues to increase year-on-year through opportunistic vaccination
- cumulative shingles vaccine coverage at the end of March 2020 was highest among 76 year olds (76.9%) the first cohort offered the shingles vaccine and lowest among 77 year olds (47.5%) half of whom need to wait until their 78<sup>th</sup> birthday to become eligible for the vaccine as part of the final catch-up cohort.
- provisional vaccine coverage estimates for adults who first became eligible for the shingles vaccine from 1 October 2019 to 31 December 2019 was 21.5% for the 70 year old routine cohort and 22.0% for the 78 year old catch-up cohort, compared to 22.2% and 22.8% for the 70 and 78 year olds, respectively, in the same quarter last year

#### Key points: coverage for earlier 2019-20 quarterly birth cohorts

- updated vaccine coverage estimates for adults who became eligible for the shingles vaccine during quarter 1 (from 1 April 2019 to 30 June 2019) show 38.2% coverage for the 70 year old routine cohort and 37.3% for the 78 year old catch-up cohort
- this is slightly lower than quarter 3 coverage last year for the quarter 1 birth cohorts, which were 38.3% for 70 year olds and 38.1% for 78 year olds
- updated vaccine coverage estimates for adults that became eligible for the shingles vaccine during quarter 2 (from 1 July 2019 to 30 September 2019) show 34.4% coverage for the 70 year old routine cohort and 33.5% for the 78 year old catch-up cohort.
- coverage last year in quarter 3 for the quarter 2 birth cohort was 34.4% for 70 and 33.9% for 78 year olds
- the highest initial vaccine coverage occurred during quarter 2 for both 70 and 78 year olds.
  This is most likely due to more adults receiving both the influenza and the shingles vaccine
  simultaneously during the influenza season which runs from September through to the
  following January

#### Introduction

The herpes zoster (shingles) vaccination programme began on 1 September 2013. The aim of the programme is to offer routine vaccination to all 70 year olds each year, with a catch-up programme for older cohorts each year until 2020/21 to capture individuals born up to 1 September 1942 (that is, aged 71 to 79 years on 1 September 2013 at the programme launch). For the first 5 years, vaccine coverage of the vaccination programme was monitored in England by PHE through monthly cumulative collections via automatic uploads of GP practice-level data using the ImmForm website and regular estimates of coverage published on the PHE website [1].

From 1 April 2017 the eligibility criteria for receiving shingles vaccine changed and individuals become eligible on their 70th birthday (routine cohort) or their 78th birthday (catch-up cohort) and remain eligible up to their 80th birthday [2-5]. GPs may continue to offer immunisation to anyone who was eligible for shingles vaccine in the first 5 years of the programme but has not yet been vaccinated, up until their 80th birthday [1]. This includes people currently aged 71 through to those aged 77 years old born after 1 September 1942, or 78 to 79 years old [1-4]. As a live viral vaccine, the shingles vaccine is contraindicated for immunosuppressed individuals. It is essential to assess the eligibility of individuals prior to offering the shingles vaccine and ensure that those who can benefit are not excluded. Further information on shingles vaccine eligibility is available in 'Immunisation against infectious disease' (the Green Book) [5].

To continue to accurately evaluate vaccine coverage for the shingles programme in 2018/19, PHE has changed the specification for the ImmForm data extractions from GP IT systems and the methodology for the calculation of vaccine coverage to reflect the new delivery model. This is the second year reporting quarterly cumulative coverage reflecting the new delivery model.

This third quarterly report of data extracted using the revised specification presents the initial shingles vaccine coverage data for adults who turned 70 for the routine cohort or 78 for the catch-up cohort between 1 October 2019 and 31 December 2019, evaluated at the end of March 2020. This report also provides updated vaccine coverage among adults that turned 70 and 78 years old during quarter 1 (from 1 April 2019 to 30 June 2019) and quarter 2 (from 1 July 2019 to 30 September 2019), evaluated at the end of March 2020. Vaccine coverage this quarter may be compared to coverage in quarter 3 in 2018/19, however, 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 from the 2017/18, 2016/17, 2015/16, 2014/15 and 2013/14 programmes [6].

#### Methods

This report presents cumulative vaccine coverage for all adults eligible for the shingles vaccine (turning 70 to 77 and 78 to 80 years old between 1 April 2019 and 31 December 2019), vaccinated by 23 March 2020. GP practice-level shingles vaccine coverage data are automatically uploaded via participating GP IT suppliers to the ImmForm website on a quarterly basis. These data are then validated and analysed by PHE to check data completeness, identify and query any anomalous results and describe epidemiological trends.

This quarterly survey extracted coverage estimates as at 23 March 2020 for each financial year birth cohort (1 April to 31 March births) for individuals born between 1 April 1939 and 31 March 1950, that is aged 71 years to 80 years (minus future catch-up cohorts born 1 April 1942 to 2 September 1942 inclusive).

This report also presents vaccine coverage for adults who turned 70 (routine cohort) and 78 years old (catch-up cohort) during quarter 3 (between 1 October 2019 and 31 December 2019) and were vaccinated by March 2020. The survey measures vaccine coverage as the total number of patients turning 70 or 78 during quarter 3 who received the shingles vaccine prior to 23 March 2020 (numerator) as a proportion of the total number of registered patients turning 70 or 78 between 1 October 2019 to 31 December 2019 (quarter 3), (denominator). By collecting the data in late March, we allowed those eligible in quarter 3 between 3 to 6 months to receive the vaccine, depending on date of birth. The survey also presents updated vaccine coverage for adults who turned 70 and 78 during quarter 1 (between 1 April 2019 and 30 June 2019) and quarter 2 (between 1 July 2019 and 30 September 2019), vaccinated by March 2020 (Table 1).

Table 1. Birth range and collection dates for both the routine (70 year olds) and catchup (78 year olds) cohorts for quarter 1, quarter 2, and quarter 3 of 2019/20.

Quarter and age		Eligible birth dates	Duration of eligibility as at 23 March 2020			
Quarter 1	70 years	01/04/1949 to 30/06/1949	9-12 months			
	78 years	01/04/1941 to 30/06/1941	9-12 1110111115			
Quarter 2	70 years	01/07/1949 to 30/09/1949	6.0 mantha			
	78 years	01/07/1941 to 30/09/1941	6-9 months			

#### Results

#### Participation and data quality

A total of 6,473/6,754 (95.8%) GP practices reported shingles vaccine coverage data for the third quarter. The smallest IT supplier was not able to provide data for a number of practices, data from which are therefore excluded from this report.

#### Vaccine coverage for fiscal year (April to March) birth cohorts, as at 23 December 2019

Vaccine coverage for each of the earlier routine cohorts (aged 71 to 75 years) continues to increase year-on-year through opportunistic vaccination.

The highest coverage is observed among 76 year olds (76.7%), who were offered the shingles vaccine in the earliest routine cohort 5 years ago (Table 2).

The lowest coverage is observed among 71 (45%) and 79 year olds (46.4%) who became eligible for the routine and catch-up vaccination in 2018/19 (Table 2).

Vaccine coverage was also low among 77 year olds, as half of 77 year olds will not be eligible for the vaccine until their 78th birthday as part of the final catch-up cohort.

## Routine and catch-up cohort coverage for adults turning 70/78 during quarter 2 (born between 1 July and 30 September), as at 23 December 2019

Overall 28.8% of adults that turned 70 and 27.8% of adults that turned 78 during quarter 2 (from 1 July 2019 to 30 September 2019) were vaccinated by the end of December 2019 (Table 3).

Coverage for the routine 70-year-old cohort in quarter 2, as at 23 December 2019 was 0.2 percentage points higher than coverage for the routine 70 year-old-cohort in quarter 2 in 2018. Coverage for the 78 year old catch-up cohort in quarter 2, as at 23 December 2019, was 0.7 percentage points lower than vaccine coverage for the 78 year old catch-up cohort in quarter 2 in 2018.

As at 23 December 2019, coverage was 7.7 and 6.5 percentage points higher among adults turning 70 and 78 years in quarter 2, than coverage in quarter 1 this year (Figure 1). This is most likely due to adults receiving the influenza and shingles vaccine simultaneously.

## Updated routine and catch-up cohort coverage for adults turning 70/78 during quarter 1 (born between 1 April and 30 June), as at 23 December 2019

Overall 33.7% of adults that turned 70 and 32.9% of adults that turned 78 during quarter 1 (from 1 April 2019 to 30 June 2019) were vaccinated by the end of December 2019 (Table 3). This is an additional 12.6% and 11.6% percentage points respectively compared with coverage in these groups at the end of September 2019 (Figure 1).

Coverage for adults that turned 70 and 78 years old during quarter 1 – and updated as at 23 December 2019 – was 0.5 and 1.3 percentage points lower than vaccine coverage in the corresponding cohort during quarter 2 in 2018.

Whereas, 34.4% of adults that turned 70, and 33.5% of adults that turned 78, during quarter 2 (from 1 July to 30 September 2019) were vaccinated by the end of March 2020. This is an additional 5.6% and 5.7% percentage points respectively compared with coverage in these groups at the end of December 2019 (Figure 1). Coverage for adults that turned 70 and 78 years old during quarter 2 – and updated as at 23 March 2020 – was 0.0 and 0.4 percentage points lower than vaccine coverage in the corresponding cohort during quarter 3 in 2018.

**Table 2.** National cumulative shingles vaccine coverage for adults turning 71 to 77 (previous routine cohorts) and 79 to 80 (previous catch-up cohorts) years old between 1 April 2019 and 31 March 2020 and vaccinated by end-March 2020, by NHS Local Team

	Routine cohort							Catch-up cohort			
NHS Local Team	Per cent practices reporting data on 23/3/20	71 year olds	72 year olds	73 year olds	74 year olds	75 year olds	76 year olds	77 year olds*		79 year olds**	80 year olds
		Eligible since 2018	Eligible since 2017	Eligible since 2016	Eligible since 2015	Eligible since 2014	Eligible since 2013	Eligible since 2013		Eligible since 2018	Eligible since 2017
East of England	97.8	47.9	55.6	61.4	67.8	73.8	76.0	48.2		47.9	54.8
London	95.1	44.1	53.1	59.2	65.2	69.8	72.3	46.1		46.1	51.2
Midlands (Central Midlands)	99.7	44.0	53.1	59.5	68.4	73.3	77.5	47.9		45.3	52.6
Midlands (North Midlands)	95.8	49.0	57.4	63.5	69.9	75.4	78.2	47.9		50.8	55.9
Midlands (West Midlands)	95.2	45.9	55.1	61.4	68.7	73.6	76.5	46.9		48.3	55.1
North East and Yorkshire (Cumbria and North East)	95.4	50.3	57.8	64.1	71.1	76.0	78.3	47.7		51.4	56.1
North East and Yorkshire (Yorkshire and Humber)	98.1	48.8	57.9	63.2	69.1	74.5	77.2	47.3		49.2	55.6
North West (Cheshire and Merseyside)	96.7	48.0	55.4	63.1	70.5	75.4	77.7	47.1		50.2	54.8
North West (Greater Manchester)	94.7	45.8	54.7	62.2	68.6	74.3	76.1	46.3		47.2	53.4
North West (Lancashire and South Cumbria)	93.4	49.8	57.3	63.8	71.3	75.6	78.0	46.6		51.6	55.9
South East (Hampshire, Isle of Wight and Thames Valley)	96.7	52.0	60.0	66.2	72.4	77.3	79.9	49.1		54.5	59.6
South East (Kent, Surrey and Sussex)	94.3	48.3	56.6	63.7	69.7	74.2	76.6	47.1		51.5	56.5
South West (South West North)	96.3	49.3	58.4	64.8	71.3	75.8	78.8	47.9		52.1	58.3
Sout West (South West South)	91.5	46.5	55.4	61.8	68.8	74.2	76.4	47.9		49.4	57.8
England	95.8	47.8	56.2	62.6	69.2	74.3	76.9	47.5		49.5	55.4

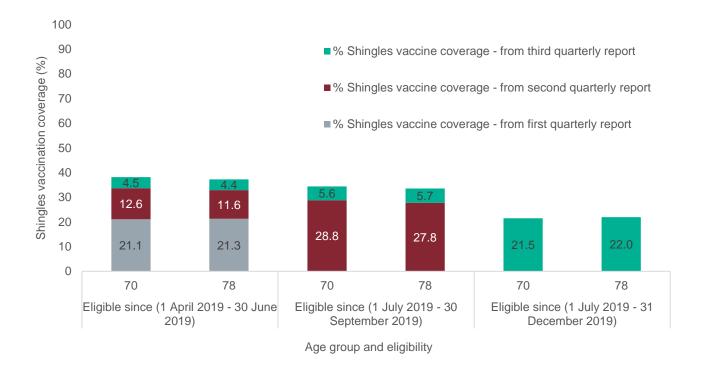
<sup>\*</sup> Observed coverage is low in the 77 year olds as half (those born in 1 April 1942 to 1 Sept. 1942) will not become eligible until their 78th brithday in 2020, whereas half (those born 2 Sept. 1942 to 31 March 1943) were offered the vaccine as part of the first routine programme in 2013/14

<sup>\*\*</sup> Adults aged 71 and 79 were first eligible for the vaccine in 2018/19

**Table 3.** Updated shingles vaccine coverage for adults turning 70 and 78 between 1 April 2019 and 30 June 2019 (quarter 1) and current shingles coverage for adults turning 70 and 78 between 1 July 2019 and 31 December 2019 (quarter 3) and vaccinated prior to 23 March 2020, by NHS England Local Team

NHS England Local Team	Practices (%) reporting data on 23 March 2020	Uptake: 70 year olds – Q1	Uptake: 70 year olds – Q2	Uptake: 70 year olds – Q3	Uptake: 78 year olds – Q1	Uptake: 78 year olds – Q2	Uptake: 78 year olds – Q3
East of England	97.8	40.6	35.6	23.2	37.5	33.7	24.0
London	95.1	32.1	29.8	18.5	30.8	28.1	18.5
Midlands (Central Midlands)	99.7	36.1	32.0	21.2	34.0	29.9	18.9
Midlands (North Midlands)	95.8	39.3	35.3	22.1	40.2	35.3	23.3
Midlands (West Midlands)	95.2	34.6	31.7	19.4	34.3	31.5	20.5
North East and Yorkshire (Cumbria and North East)	95.4	40.7	36.0	22.0	38.3	35.8	23.0
North East and Yorkshire (Yorkshire and Humber)	98.1	41.3	36.4	24.1	38.4	34.9	22.0
North West (Cheshire and Merseyside)	96.7	38.7	34.6	19.1	37.9	32.0	20.0
North West (Greater Manchester)	94.7	33.3	32.3	19.4	33.9	30.4	19.8
North West (Lancashire and South Cumbria)	93.4	40.4	36.8	20.6	40.4	36.5	21.2
South East (Hampshire, loW and Thames Valley)	96.7	41.8	36.6	22.5	40.9	36.2	23.2
South East (Kent, Surrey and Sussex)	94.3	37.9	34.0	20.5	38.9	34.5	23.2
South West (South West North)	96.3	40.1	36.3	23.3	39.6	36.7	22.6
South West (South West South)	91.5	36.7	35.0	22.6	37.9	34.5	24.1
England	95.8	38.2	34.4	21.5	37.3	33.5	22.0

**Figure 1.** Shingles vaccine coverage for adults turning 70 or 78 in quarter 3 (between 1 October 2019 to 31 December 2019) and updated vaccine coverage for adults turning 70 or 78 in quarter 1 (between 1 July 2019 to 30 September 2019) as at 23 March 2020 in England



#### Discussion

Shingles coverage for adults born during quarter 3 was similar to last year at 21.5% coverage for the 70 year old routine cohort and 22.0% for the 78 year old catch up cohort. Vaccine coverage cannot be compared with estimates prior to 2018 to 2019 estimates due to the new eligibility criteria and the coverage calculation methodology.

Coverage in adults that turned 70 or 78 during quarter 1 (1 April 2019 to 30 June 2019) was 38.2% and 37.3% respectively which is a 17.1 and 16.0 percentage point increase from coverage recorded in this cohort in quarter 1 as these adults continued to receive vaccinations in the year. Furthermore, coverage in adults that turned 70 or 78 during quarter 2 (1 July 2019 to 30 September 2019) was 34.4% and 33.5% respectively – which is a 5.6 and 5.7 percentage point increase from coverage recorded in this cohort in quarter 2 as these adults continued to receive vaccinations later in the year.

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 (Table 2) [7]. The large difference in coverage between 77 year olds and younger cohorts is likely, in part, to be associated to the eligibility criteria as half of the 77 year olds would have already received their vaccine on their 70th birthday as part of the routine programme in 2013/14 and the other half will not become eligible until their 78th birthday in 2020.

It is important that GPs continue to offer the shingles vaccine to all eligible patients from the current and previous cohorts (particularly the 71 and 79 year olds that may have missed the vaccine when there was a change in the eligibility criteria) in order to prevent an increased susceptibility to shingles among these cohorts.

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