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Childhood Immunisation Statistics



Summary

- 1 Introduction
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- 3 The 6-in-1 Vaccine (DTaP/IPV/Hib/HepB)
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[Amanda Mills: Baby having scheduled immunisation](#)

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Summary

The World Health Organisation (WHO) recommends that 95% coverage is reached for all routine childhood immunisations in the UK by age five. In 2023/24 the UK vaccination coverage rates by age five were below the 95% target for all vaccines. Immunisation rates are lowest in England followed by Northern Ireland. At the regional level, London has the lowest immunisation rates while the North East tends to have the highest levels.

Vaccination coverage by age five

2023/24

	6-in-1 Primary	6-in-1 Booster	MMR 1st dose	MMR 2nd dose	Hib/MenC Booster
England	92.6%	82.7%	91.9%	83.9%	89.4%
Wales	95.2%	89.1%	94.9%	88.9%	93.2%
Scotland	96.7%	89.6%	95.5%	89.2%	94.8%
Northern Ireland	94.5%	86.0%	93.3%	85.6%	92.8%
United Kingdom	93.1%	83.6%	92.3%	84.5%	90.1%

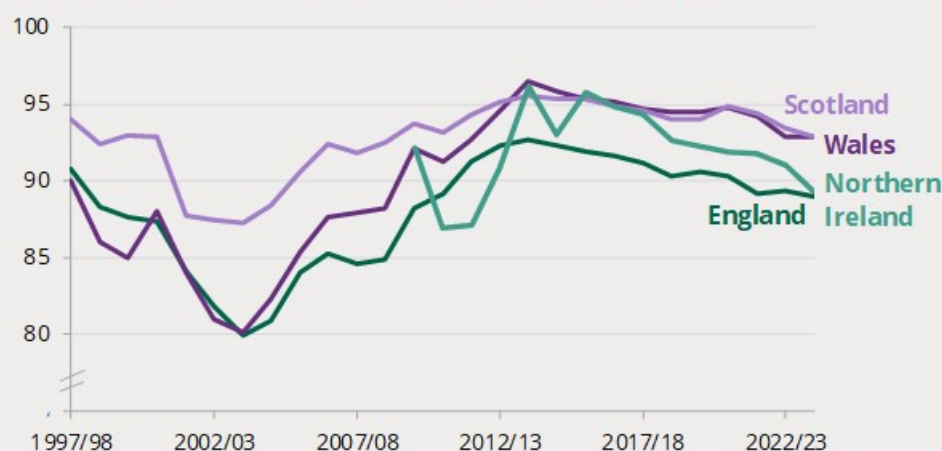
Note: 6-in-1 vaccine is for diphtheria, tetanus, polio, pertussis, Hib and HepB.

Source: [NHS Digital Childhood Vaccination Coverage Statistics, Table 5c](#)

MMR immunisation rates have shown the most fluctuation over time. The substantial decline in rates from the late 1990's to around 2003/04 is likely to be due to controversy around the link between MMR and autism. Once such a link was discredited immunisation rates improved. However, rates have decreased again in recent years. This decrease in recent years can be observed in the other childhood vaccination rates too.

MMR immunisation rates have fallen in recent years

% of children who have had first MMR immunisation by second birthday



Source: [NHS Digital Childhood Vaccination Coverage Statistics](#)

1

Introduction

The European Region of the World Health Organization (WHO) currently recommends that on a national basis at least 95% of children are immunised against diseases preventable by immunisation and targeted for elimination or control (specifically, diphtheria, tetanus, pertussis, polio, Hib, measles, mumps and rubella).¹

Accordingly, there is an expectation that UK coverage for all routine childhood immunisations evaluated up to five years of age achieve 95%. This note reports on vaccinations that are given to children up to five years of age.

The report covers five main childhood vaccination programmes:

- Measles, Mumps and Rubella (MMR)
- Diphtheria, tetanus, pertussis, polio and Haemophilus influenzae type b HepB vaccine (DTaP/IPV/Hib/HepB 6-in 1)
- Pneumococcal Conjugate Vaccine (PCV)
- Combined Hib/MenC vaccine
- Meningitis B vaccine

Data is presented for constituent countries of the UK and at regional and local authority level in England.

The majority of data in this briefing is sourced from NHS Digital's [Childhood Vaccination Coverage Statistics](#). More details, including local level data over time, including local area maps can be accessed from their useful [Childhood Immunisation Interactive Dashboard](#).

¹ NHS Digital, [Childhood Vaccination Coverage Statistics - 2020-21](#), 30 September 2021

2

Measles, Mumps and Rubella (MMR) vaccine

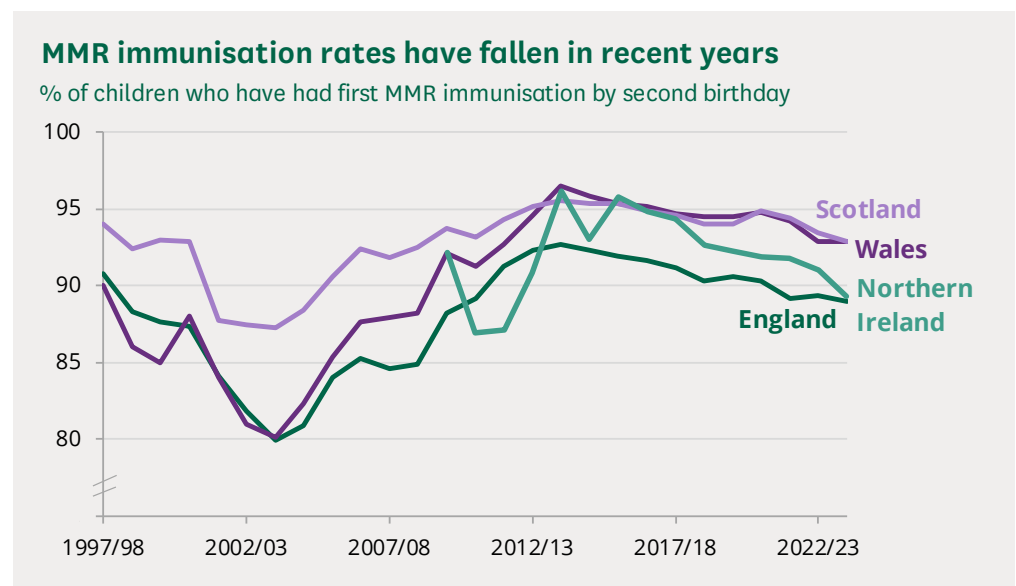
The Measles, Mumps and Rubella (MMR) triple vaccine has been used in the UK since 1988. Children are scheduled to receive a first dose of MMR vaccine (MMR1) after their first birthday and a second dose (MMR2) between three years four months and five years old.

2.1

National data

The chart below shows trends in the proportion of children immunised against MMR by their second birthday (ie receiving the first dose) in each of the constituency countries of the UK. ²

In 2023/24, coverage for this vaccine by age two was highest in Wales (92.9%). This was followed closely by Scotland (92.8%), while Northern Ireland (89.3%) and England (88.9%) reported lower rates. ³



Source: [NHS Digital Childhood Vaccination Coverage Statistics, \(Table 5b\)](#)

The chart above shows that immunisation rates fell year-on-year in England between 1997/98 and 2003/04. A particularly significant decline was

² Comparable data for Northern Ireland is only available from 2009/10.

³ NHS Digital, [Childhood Vaccination Coverage Statistics \(Table 5b\)](#)

observed between 2000 and 2004, which can arguably be attributed to deterioration in public confidence about the safety of MMR.

In February 1998, Wakefield et al suggested a link between the MMR vaccine and the development of autistic spectrum disorders in children⁴. The Wakefield study was subsequently discredited, and MMR uptake began to recover between 2003/04 and 2013/14. Rates then fell year on year before rising slightly in 2019/20, then falling once again in recent years.

Some children may not receive their first dose of MMR vaccine by age two, but this may be addressed at a later stage. The table below shows that immunisation rates for the first dose of MMR at age 5 were above 95% in Scotland and only just below the target in Wales (94.9%). As in previous years, England (91.9%), and Northern Ireland (93.3%) were below the target in 2023/24.

The proportion of children receiving their first and second dose of MMR vaccine in 2023/24 was below the 95% recommended threshold for all constituent countries of the UK, with the lowest rate being observed in England (83.9%).

MMR Immunisation rates are lowest in England			
% of children vaccinated against MMR, 2023/24			
	First dose		First and second dose
	By age 2	By age 5	
England	88.9%	91.9%	83.9%
Wales	92.9%	94.9%	88.9%
Scotland	92.8%	95.5%	89.2%
Northern Ireland	89.3%	93.3%	85.6%
United Kingdom	89.4%	92.3%	84.5%

Source: [NHS Digital Childhood Vaccination Coverage Statistics, \(Table 5b and 5c\)](#)

2.2

Regional and local authority data in England

The table below shows that in 2022/23 no region in England met the 95% recommended threshold. As in previous years, the North East had the highest rates of MMR immunisation and London had the lowest.

⁴ *Lancet* 2004;363:750

MMR immunisation rates are lowest in London by far

% of children vaccinated against MMR, 2023/24

	First dose		First and second dose
	By age 2	By age 5	
North East	93.9%	95.1%	89.7%
North West	88.6%	93.0%	84.5%
Yorkshire and the Humber	90.1%	93.2%	85.8%
East Midlands	90.6%	93.2%	85.3%
West Midlands	88.2%	91.9%	83.1%
East of England	91.0%	93.8%	87.7%
London	81.8%	85.2%	73.3%
South East	91.5%	93.5%	86.8%
South West	92.5%	94.5%	89.0%
England	88.9%	91.9%	83.9%

Source: [NHS Digital Childhood Vaccination Coverage Statistics, \(Table 9a and 10a\)](#)

This regional variation was reflected in local authority rates with the lowest rates reported in London areas, and the highest in the North East. More detail is shown in the maps and tables below.⁵

MMR: 1st dose by age two

Five highest

South Tyneside	96.3%
North Tyneside	96.0%
Northumberland	96.0%
Cumbria	95.8%
County Durham	95.7%

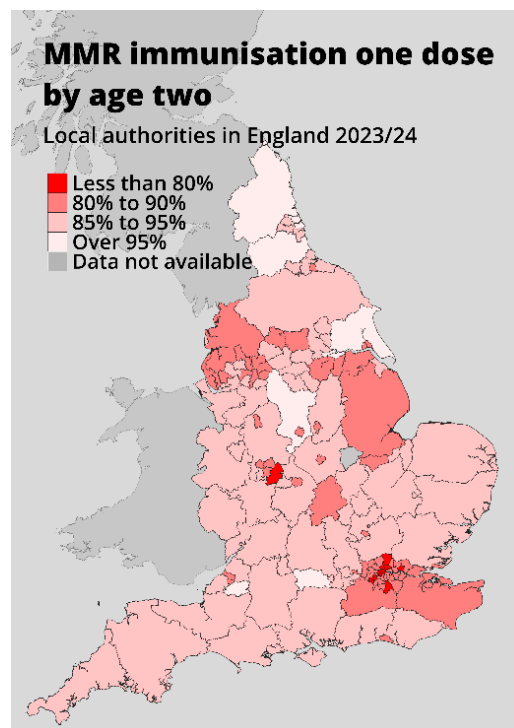
Five lowest

Hackney	67.7%
Kensington and Chelsea	71.3%
Enfield	75.0%
Hammersmith and Fulham	76.4%
Richmond upon Thames	76.9%

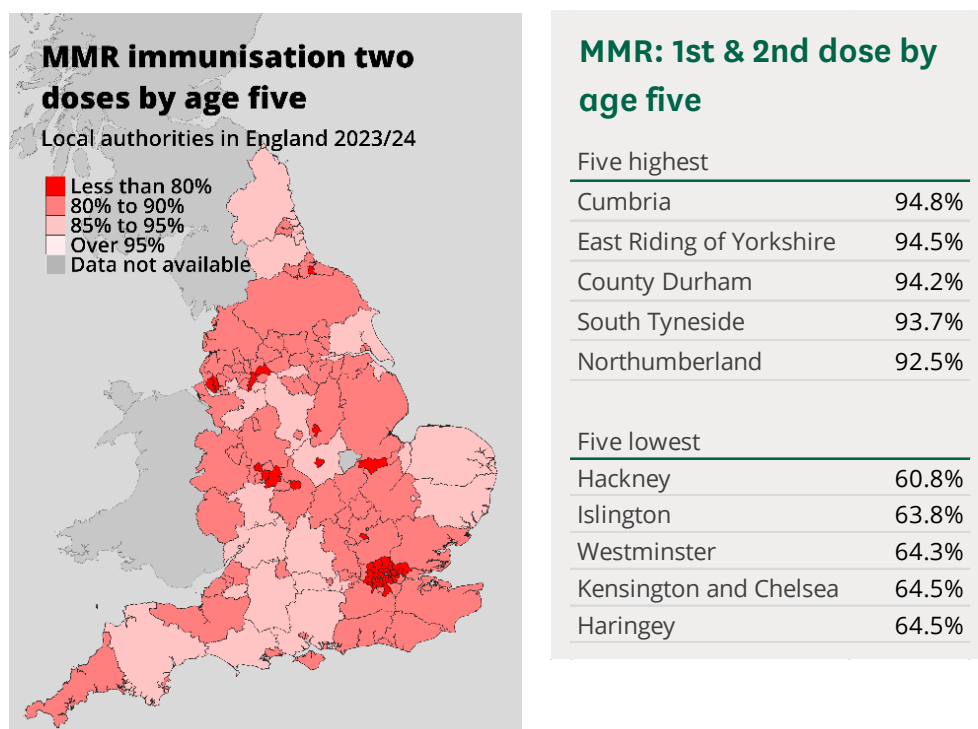
MMR immunisation one dose by age two

Local authorities in England 2023/24

■ Less than 80%
■ 80% to 90%
■ 85% to 95%
■ Over 95%
■ Data not available



⁵ Data for Rutland, Isles of Scilly and City of London is not available for each of the childhood vaccinations included in this paper. Data for these areas is included in Leicestershire, Cornwall and Hackney respectively.



2.3

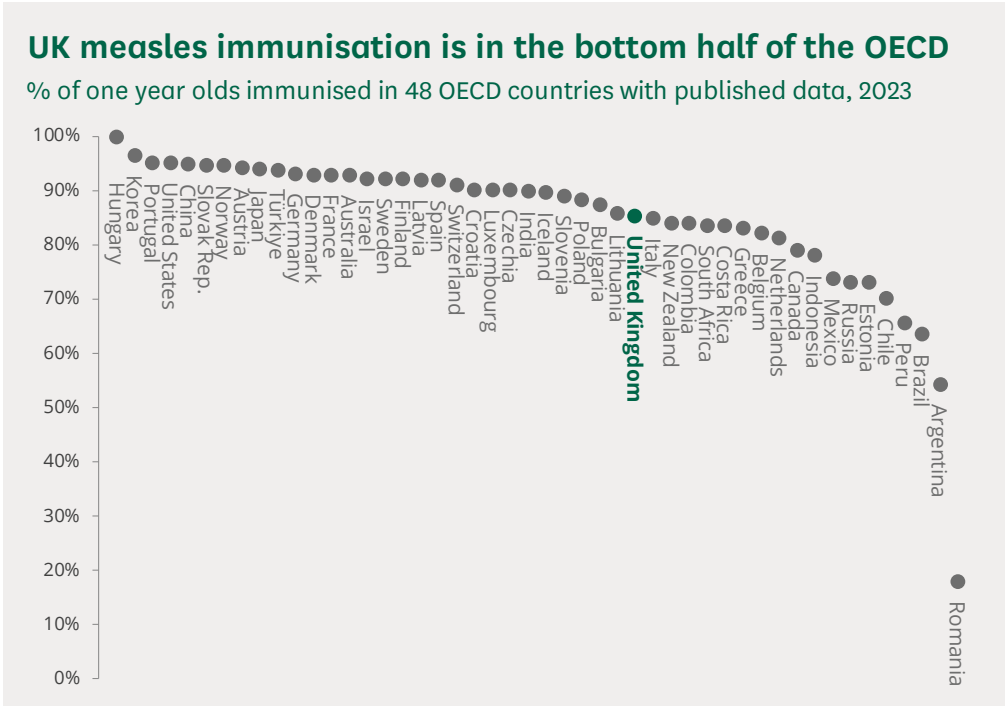
International comparisons

The Organisation for Economic Cooperation and Development (OECD) publish an indicator for each OECD nation on the proportion of children aged around one year who are immunised against measles.

The latest data available is for 2023, when the UK's immunisation rate was reported as around 85%, this equates to a rank of 30 out of the 48 OECD member countries which provided data for this measure (where a rank of one is the highest immunisation rate and a rank of 48 is the lowest). The UK was among 44 other countries whose measles immunisation was below the 95% WHO target.⁶

The highest rate (99.7%) was observed in Hungary, while Romania had the lowest rate of around 18%.

⁶ OECD, [Child vaccination rates: 2023](#), [accessed March 2025]



Source: OECD, [Child vaccination rates: 2023](#), [accessed March 2025]

3 The 6-in-1 Vaccine (DTaP/IPV/Hib/HepB)

Children are scheduled to receive a primary course of three doses of: diphtheria, tetanus, pertussis, polio, haemophilus influenzae type b, and hepatitis B vaccine (DTaP/IPV/Hib/HepB) at eight, twelve, and sixteen weeks. This vaccine is more commonly known as the 6-in-1 vaccine. Prior to 2019/20 HepB was not included and so it was known as the 5-in-1 vaccine.

The 6-in-1 vaccine is followed by a pre-school booster dose of diphtheria, polio, tetanus, and pertussis vaccine (commonly known as the 4-in-1 vaccine) at between three years four months old and five years old.

3.1 National data

The 6-in-1 immunisation rate is higher than for the MMR vaccine outlined in the previous section. However, over the last four years (when the data series began) the immunisation rate in each constituent country in the UK has declined. In 2023/24 no country achieved the recommended 95% threshold.

The table below shows 6-in-1 immunisation rates for the constituent countries of the UK from 2012/13 to 2023/24. The break in the series indicates when Hepatitis B was added to the vaccine from 2019/20.

Over this period coverage rates in England were the lowest of the four countries and did not reach the recommended 95% threshold rate in any year. The 6-in-1 immunisation rate was highest in Scotland which narrowly missed the threshold (94.8%).⁷

⁷ NHS Digital, [Childhood Vaccination Coverage Statistics: 2023/24 \(Table 5a\)](#)

6-in-1 immunisation rates have fallen

Proportion of one year olds immunised, %

	England	Wales	Scotland	Northern Ireland
5-in-1				
2012/13	94.7%	96.5%	97.4%	97.6%
2013/14	94.3%	96.7%	97.5%	97.5%
2014/15	94.2%	96.6%	97.4%	96.8%
2015/16	93.6%	96.6%	97.2%	97.2%
2016/17	93.4%	96.3%	96.8%	97.0%
2017/18	93.1%	95.9%	96.5%	96.2%
2018/19	92.1%	95.4%	95.8%	94.5%
6-in-1 (includes HepB)				
2019/20	92.6%	95.8%	96.2%	94.4%
2020/21	92.0%	95.6%	96.5%	94.5%
2021/22	91.8%	95.2%	96.3%	93.5%
2022/23	91.8%	94.5%	95.9%	93.1%
2023/24	91.2%	94.2%	94.8%	91.8%

Source: [NHS Digital Childhood Vaccination Coverage Statistics: Various years, \(Table 5a\)](#)

Coverage for the 6-in-1 vaccine is reported again at 24 months to monitor any improvement in the proportion of children completing their primary course after their first birthday.

In 2023/24, as in previous years, the rate was lowest in England, where 92.4% of children had received the 6-in-1 vaccine at 24 months. This was an improvement compared with the 12 month rate, but still below the 95% threshold. At 24 months the threshold was met in Wales and Scotland, but it was also missed in Northern Ireland (93.6%).

The 6-in-1 vaccine is followed by a pre-school booster dose of diptheria, polio, tetanus, and pertussis vaccine (commonly known as the 4-in-1 vaccine) at between three years four months old and five years old. Pre-school booster coverage was the lowest in England, and at 82.7% it was more than twelve percentage points below the 95% target. The table below provides further details.

6-in-1 immunisation rate is lowest in England

Proportion of children immunised, 2023/24

	12 months	24 months	Pre-school booster
England	91.2%	92.4%	82.7%
Wales	94.2%	95.4%	89.1%
Scotland	94.8%	96.2%	89.6%
Northern Ireland	91.8%	93.6%	86.0%
United Kingdom	91.6%	92.9%	83.6%

Source: [NHS Digital Childhood Vaccination Coverage Statistics: 2023/24 \(Tables 5a, 5b, 5c\)](#)

3.2

Regional and local authority data in England

In 2023/24 all regions were below the recommended 95% immunisation rate apart from the North East (95.2%). As in previous years, London had the lowest immunisation rate (86.2%).⁸

This regional variation was reflected at local authority level with again London areas being among those with lowest levels of coverage and North Eastern areas among the highest.

By two years old 6-in-1 immunisation rates in all areas improved however the North East was still the only region above the recommended 95% rate and London continued to have the lowest immunisation rate (87.7%).⁹ The figures below provide further detail.

⁸ NHS Digital, [Childhood Vaccination Coverage Statistics: 2023/24 \(Table 8a\)](#)

⁹ NHS Digital, [Childhood Vaccination Coverage Statistics: 2023/24 \(Table 9a\)](#)

6-in-1 immunisation by age one

Five highest

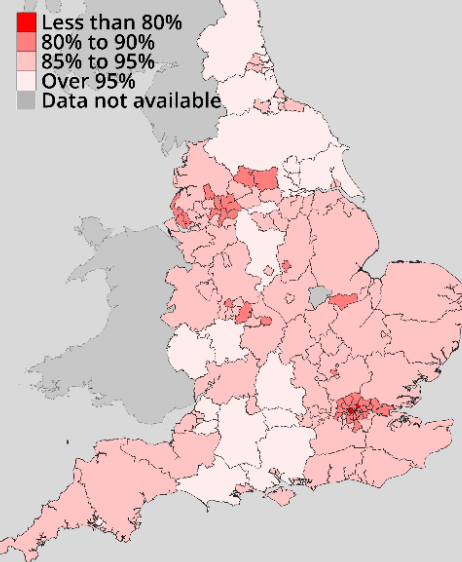
South Tyneside	97.0%
Sunderland	96.9%
Northumberland	96.8%
North Tyneside	96.7%
Derbyshire	96.6%

Five lowest

Hackney	63.6%
Kensington and Chelsea	71.9%
Westminster	78.6%
Enfield	82.1%
Hammersmith and Fulham	82.1%

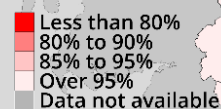
6-in-1 immunisation by age one

Local authorities in England 2023/24



6-in-1 immunisation by age two

Local authorities in England 2023/24



6-in-1 immunisation by age two

Five highest

East Riding of Yorkshire	97.8%
County Durham	97.5%
Northumberland	97.4%
Derbyshire	97.1%
Hampshire	97.1%

Five lowest

Hackney	72.4%
Kensington and Chelsea	83.0%
Enfield	84.7%
Brent	85.4%
Croydon	85.6%

3.3 International comparisons

The most recent OECD data for the UK on the percentage of children immunised against diphtheria, tetanus, and pertussis (DTP) at age one is for 2022.

In 2022 the UK DTP immunisation rate was 92%. The UK ranked 25th out of the 36 OECD nations that provided data and was among 18 other countries with rates below 95%.¹⁰

The highest rate (100%) was observed in both Hungary and Türkiye, while Mexico had the lowest rate of 83%.

¹⁰ OECD, [Child vaccination rates](#)

4 Pneumococcal Conjugate Vaccine (PCV)

Pneumococcal Conjugate Vaccine (PCV) was introduced into the routine immunisation programme in September 2006 and is offered at eight and sixteen weeks of age with a booster dose after the first birthday.

4.1 National data

The PCV immunisation rate is higher than for the 6-in-1 or MMR vaccine outlined in the previous sections. However, over the last decade the PCV immunisation rate in each constituent country in the UK has declined, apart from in Wales where the rate is slightly higher than it was in 2012/13.

In 2023/24 as in previous years, the PCV immunisation rate in England was below 95%. It was below 95% in Northern Ireland for the first time since 2018/19. The rate was the highest in Wales (96.0%) and also met the recommended 95% threshold in Scotland.¹¹

PCV immunisation rates have tended to fall

Proportion of one year olds immunised, %

	England	Wales	Scotland	Northern Ireland
2012/13	94.4%	95.9%	97.4%	97.5%
2013/14	94.1%	96.2%	97.5%	97.4%
2014/15	93.9%	96.3%	97.4%	96.6%
2015/16	93.5%	96.4%	97.1%	97.1%
2016/17	93.5%	96.2%	96.8%	97.0%
2017/18	93.3%	95.9%	96.8%	96.4%
2018/19	92.8%	95.5%	96.3%	94.8%
2019/20	93.2%	95.9%	96.9%	95.0%
2020/21	n/a	n/a	n/a	n/a
2021/22	93.8%	96.6%	96.4%	95.2%
2022/23	93.7%	95.9%	95.5%	95.3%
2023/24	93.2%	96.0%	95.0%	94.3%

Source: [NHS Digital Childhood Vaccination Coverage Statistics \(Table 5a\)](#)

¹¹ NHS Digital, [Childhood Vaccination Coverage Statistics: 2023/24 \(Table 5a\)](#)

4.2

Regional and local authority data in England

In 2023/24, the PCV immunisation rate was over the recommended 95% threshold in the North East, East Midlands and the South West. The South East was only just below the 95% rate. The immunisation rate was lowest in London (88.8%).

This regional variation was reflected at local authority level with again London areas being among those with lowest levels of coverage and North Eastern areas among the highest.

PCV immunisation by age one

Five highest

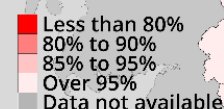
Sunderland	97.9%
North Tyneside	97.9%
South Tyneside	97.7%
Northumberland	97.6%
Derbyshire	97.5%

Five lowest

Hackney	70.4%
Kensington and Chelsea	79.5%
Richmond upon Thames	80.5%
Enfield	85.0%
Westminster	85.1%

PCV immunisation by age one

Local authorities in England 2023/24



5

Hib/MenC vaccine

In September 2006, a combined *Haemophilus influenzae* type b (Hib) and Meningitis C vaccine (more commonly known as Hib/MenC vaccine) was introduced into the immunisation programme and children are currently offered this vaccine after their first birthday.

5.1

National data

Since 2012/13, the Hib/MenC immunisation rate in each constituent country in the UK has declined.

In 2023/24, 88.6% of children in England were reported to have received the combined Hib/MenC vaccine by age two. Rates were higher for other countries of the UK but were below the recommended 95% rate in all cases.¹²

Rates in England did not exceed 95% in any year since 2012/13, while other nations of the UK did exceed the target in previous years.

Hib/MenC immunisation rates have fallen

Proportion of two year olds immunised, %

	England	Wales	Scotland	Northern Ireland
2012/13	92.7%	94.4%	95.7%	95.9%
2013/14	92.5%	95.3%	95.7%	96.2%
2014/15	92.1%	95.0%	95.4%	95.0%
2015/16	91.6%	94.7%	95.4%	95.7%
2016/17	91.5%	94.5%	95.0%	95.0%
2017/18	91.2%	94.5%	94.9%	94.6%
2018/19	90.4%	94.2%	94.4%	92.8%
2019/20	90.5%	94.1%	94.3%	92.2%
2020/21	90.2%	94.4%	95.0%	91.9%
2021/22	89.0%	93.7%	94.3%	91.8%
2022/23	88.7%	92.2%	93.2%	90.8%
2023/24	88.6%	92.3%	92.8%	89.3%

Source: [NHS Digital Childhood Vaccination Coverage Statistics \(Table 5b\)](#)

¹² NHS Digital, [Childhood Vaccination Coverage Statistics: 2023/24 \(Table 5b\)](#)

5.2

Regional and local authority data in England

In 2023/24 as in previous years London had the lowest Hib/MenC immunisation rate of 81.2%. The North East had the highest rate at 93.6%.

This regional variation was reflected at local authority level with again London areas being among those with lowest levels of coverage and North Eastern areas among the highest.

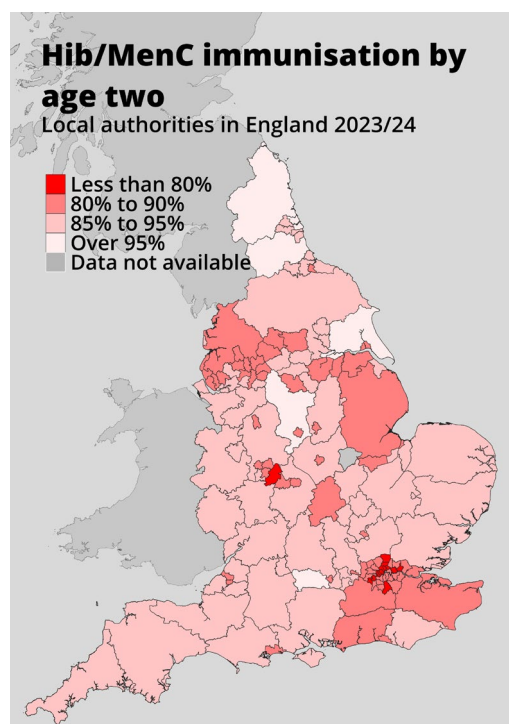
Hib/MenC immunisation by age two

Five highest

South Tyneside	96.2%
Cumbria	96.0%
North Tyneside	95.9%
County Durham	95.9%
Northumberland	95.8%

Five lowest

Hackney	64.2%
Kensington and Chelsea	69.2%
Enfield	75.3%
Richmond upon Thames	75.8%
Hammersmith and Fulham	76.6%



6

Meningitis B (MenB) vaccine

The Meningitis B (MenB) vaccine was introduced in September 2015 and is offered at eight and sixteen weeks of age, with a booster on or after the first birthday.

6.1

National data

Since 2017/18 (the first year of data available), the MenB immunisation rate in each constituent country in the UK has declined.

In 2023/24, 90.6% of children in England were reported to have received the MenB vaccine by age one. Rates were higher for other countries of the UK but were below the recommended 95% rate in all cases.¹³

Rates in England did not exceed 95% in any year since 2017/18, while other nations of the UK did exceed the target in previous years.

MenB immunisation rates have fallen

Proportion of one year olds immunised, %

	England	Wales	Scotland	Northern Ireland
2017/18	92.5%	95.3%	95.9%	95.8%
2018/19	92.0%	95.1%	95.4%	94.3%
2019/20	92.5%	95.5%	95.8%	94.5%
2020/21	92.1%	95.4%	96.3%	94.6%
2021/22	91.5%	94.8%	95.6%	93.6%
2022/23	91.0%	93.8%	94.2%	93.0%
2023/24	90.6%	93.5%	93.7%	91.6%

Source: [NHS Digital Childhood Vaccination Coverage Statistics \(Table 5a\)](#)

6.2

Regional and local authority data in England

In 2023/24 as in previous years London had the lowest MenB immunisation rate of 85.5%. The North East had the highest rate at 94.6%.

¹³ NHS Digital, [Childhood Vaccination Coverage Statistics: 2023/24 \(Table 5a\)](#)

This regional variation was reflected at local authority level with again London areas being among those with lowest levels of coverage and North Eastern areas among the highest.

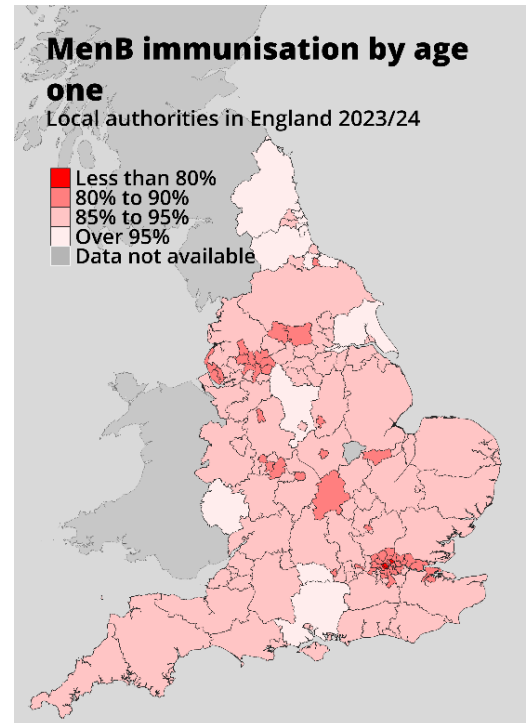
MenB immunisation by age one

Five highest

South Tyneside	96.2%
Cumbria	96.0%
North Tyneside	95.9%
County Durham	95.9%
Northumberland	95.8%

Five lowest

Hackney	64.2%
Kensington and Chelsea	69.2%
Enfield	75.3%
Richmond upon Thames	75.8%
Hammersmith and Fulham	76.6%



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