



Public Health
England

Protecting and improving the nation's health

Human papillomavirus (HPV) vaccination coverage in adolescent females in England: 2018/19

Report for England

About Public Health England

Public Health England exists to protect and improve the nation's health and wellbeing, and reduce health inequalities. We do this through world-leading science, research, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services. We are an executive agency of the Department of Health and Social Care, and a distinct delivery organisation with operational autonomy. We provide government, local government, the NHS, Parliament, industry and the public with evidence-based professional, scientific and delivery expertise and support.

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Executive summary

2018/19 is the fourth year HPV vaccine coverage for the 2-dose schedule has been calculated in school Year 9 females (aged 13-14 years) in England

HPV vaccine coverage in England for 2018/19 remains stable and consistent with levels reported in 2017/18.

83.9% of Year 9 females completed the 2-dose HPV vaccination course in 2018/19, compared to 83.8% in 2017/18, 83.1% in 2016/17 and 85.1% in 2015/16

In the 78/152 (51.3%) LAs that offered 2 doses of HPV vaccine to Year 8 females in all schools within the 2017/18 school year, completed course coverage was 79.8%, 0.3 percentage points higher than in 2017/18

HPV immunisation coverage for the priming dose in Year 8 in 2018/19 was 88.0%, up 1.1 percentage points compared with 86.9% in 2017/18 (87.2% in 2016/17, 87.0% in 2015/16 and 89.4% in 2014/15)

During the 2018/19 academic year, the continued commitment to deliver on the childhood flu vaccine programme, now extended to 6 school years from reception to year 5, may have continued to impact on the capacity of some school immunisation providers to deliver the HPV vaccination programme in some areas

In September 2019 the HPV immunisation programme was expanded to a universal programme with 12-13-year-old boys becoming eligible alongside girls. Dose 1 vaccine coverage for school year 8 males and females will be calculated separately and reported in the 2019/20 report. Completed course (2-dose) coverage for 2019/20 Year 9 females only will also be reported.

Methods and previous data collections

Full details of the cohort definitions and methodology can be found in the [user guide](#) for data providers on submitting HPV vaccine coverage data for the 2018/19 academic year. Data providers must use updated data sources (that is school rolls for all types of schools/units plus children schooled at home or Child Health Information Systems) to identify all eligible females in the locality at the end of August 2019. The 2018/19 HPV vaccine coverage was calculated based on the total number of eligible females in the target population who reported having received dose 1 and/or dose 2 of the HPV vaccine at any time up to the end of August 2019. Historical annual HPV vaccine coverage reports from 2008/09 to 2017/18 and associated data tables can be found on the [PHE website](#).

Accurately recording cohort denominators and numerators across multiple school years is challenging and requires local teams and providers to combine multiple data sources.

In July 2018, it was announced that the HPV immunisation programme will be extended to boys aged 12-13 years in England, based on advice from the Joint Committee on Vaccination and Immunisation (JCVI). From September 2019, 12 to 13-year old boys became eligible for HPV immunisation alongside girls. PHE have developed a new optional school level standardised data collection tool for local providers to use for 2019/20. This tool will allow for the collection of vaccination coverage data for males and females separately. The data collection tool and its associated user guide can be found online [here](#), in addition tutorial videos for the tool can be [viewed online here](#). School-level data allow PHE to better monitor inequalities in vaccine uptake at a more granular level.

Results

This report presents annual human papillomavirus (HPV) vaccine coverage data for the fifth year (2018/19) of the 2-dose schedule and the fourth year of completed course data up to Year 9.

2018/19 was the third year that all Local Authorities (LA) in England had schools-based HPV vaccination programmes. Full data tables are available by NHS England local team (LT) and by LA. UK HPV coverage data by country is also tabulated.

In England, the decision on how to deliver the HPV programme is decided locally. For operational purposes, the recommendation from September 2014 was to offer the first (priming) HPV vaccine dose to females in Year 8 (aged 12 to 13 years) and the second dose 12 months later in Year 9 (aged 13 to 14 years), as this would reduce the number of immunisation sessions required in schools. During the 2018/19 academic year about half of all LAs offered both doses in school Year 8 (with a minimum 6 month interval) and the rest offered it over 2 academic years.

HPV immunisation coverage for the priming dose in Year 8 in 2017/18 (born 1 September 2005 to 31 August 2006) was 88.0%, compared with 86.9% in 2017/18, 87.2% in 2016/17, 87.0% in 2015/16 and 89.4% in 2014/15. Coverage by LT ranged from 83.0% (South West South) to 92.0% (Hampshire, Isle of Wight and Thames Valley) (Figure 1). Sixty-four of 152 LAs achieved over 90% coverage for the priming dose in Year 8 females with LA coverage nationally, ranging from 70.2% to 95.8%.

A total of 78/152 (51.3%) LAs offered 2-doses of HPV vaccine to all females in the routine cohort, school Year 8, in 2018/19 (compared to 81 in 2017/18, 95 in 2016/17, 85 in 2015/16 and 86 in 2014/15), and average coverage for the completed course in these LAs was 79.8% (range 46.4% to 92.3%). It should be noted that these females will continue to have the opportunity to be caught up with dose 1-2 of HPV through the school programme as they move into Year 9, or via their GP. For the 81 LAs where updated coverage data was available, completed course coverage for the 2017/18 Year 8 cohort (born 1 September 2004 – 31 August 2005) was estimated to have improved from 79.5% to 83.5% by the end of Year 9.

HPV vaccine coverage in England for females completing a 2-dose HPV schedule by Year 9 was 83.9% compared to 83.8% in 2017/18, 83.1% in 2016/17, 85.1% in 2015/16. Local team completed course coverage by Year 9 ranged from 76.6% (London) to 89.3% (Lancashire) (Figure 2). 22 LAs across England achieved over 90% 2-dose coverage in Year 9 females. Year 9 LA 2-dose coverage across England ranged from 56.7% to 96.7%.

Figure 1. Dose 1 (priming) HPV vaccine coverage by NHS England Area Team for the routine cohort (Year 8) in academic years 2014/15 to 2018/19: England

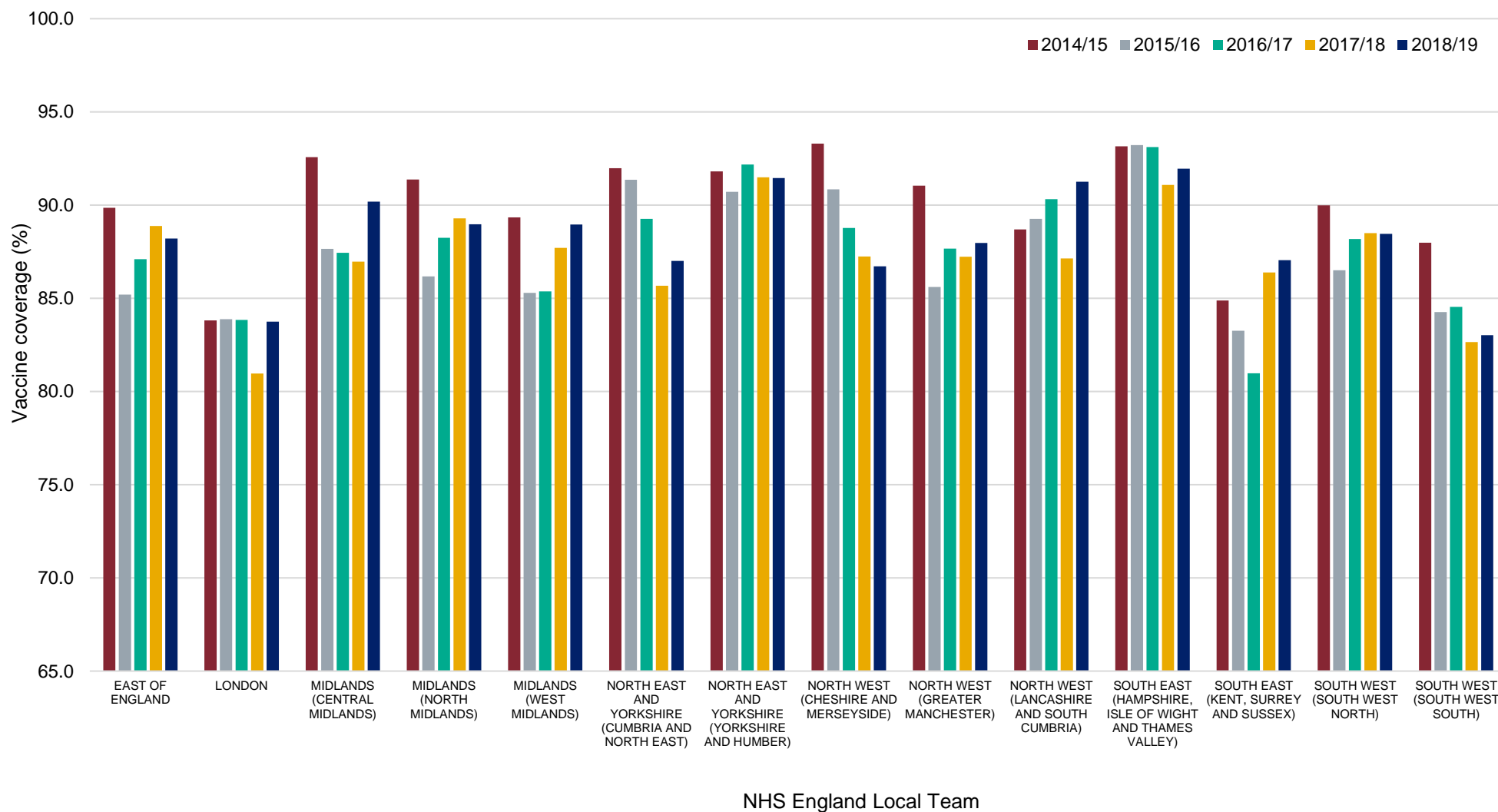
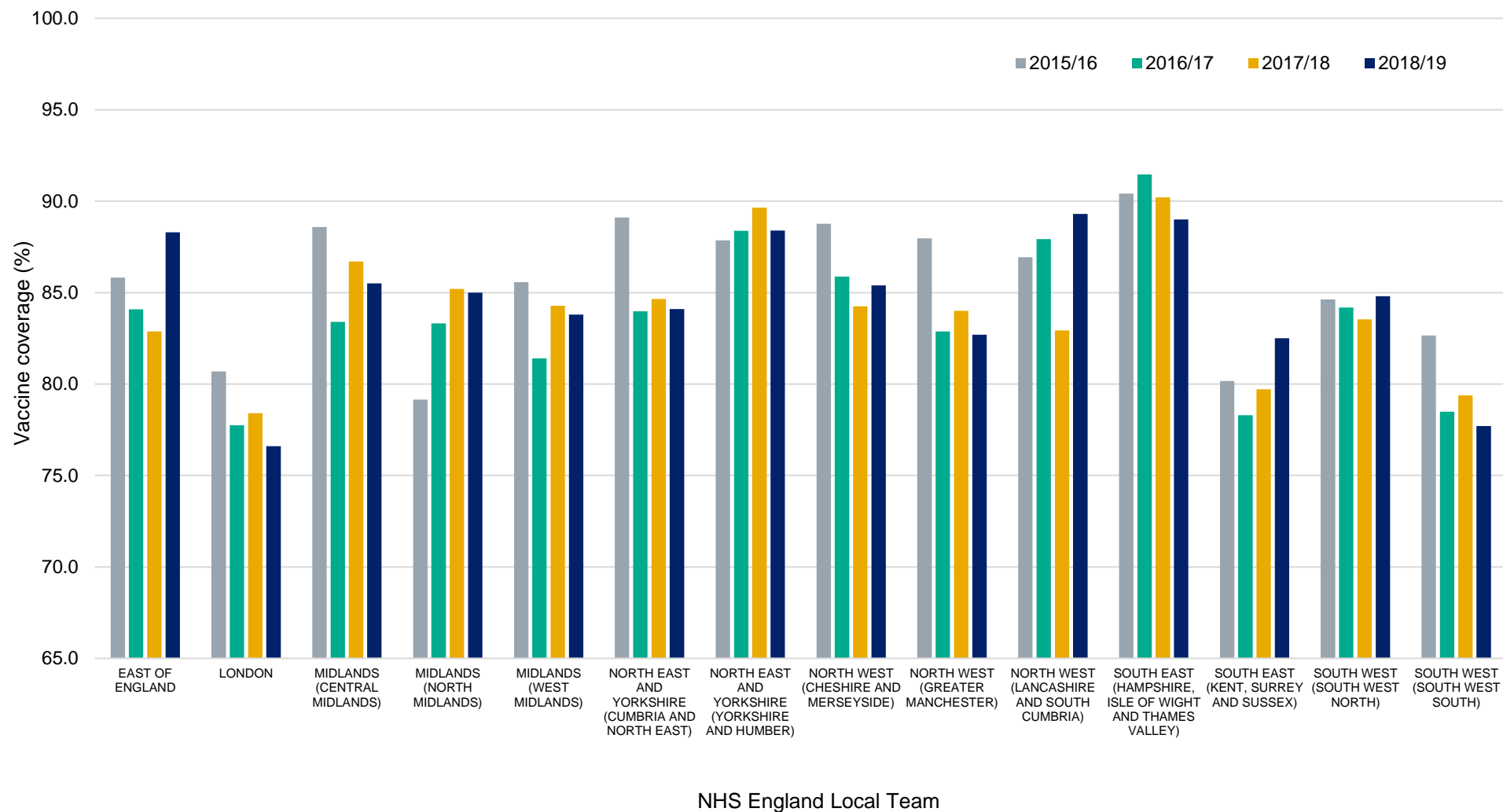


Figure 2. Dose 2 (completed course) HPV vaccine coverage in females by NHS England Local Team in 2015/16, to 2018/19 (2 -doses administered across 2 years): England



Factors affecting HPV vaccine coverage estimates in 2018/19

Some of these factors were **previously reported in relation to data collected for 2015/16, 2016/17 and 2017/18 reports**. All apply to the 2018/19 data.

'Catch-up' vaccinations (that is, missed vaccinations given either in schools or in GP surgeries) may not be included in the returns for a significant number of LAs. This may lead to coverage of the completed course being under-estimated.

Coverage (of 1 and/or 2 -doses) may be over- or under-estimated in some LAs due to movements of students in and out of schools during the academic year not being accurately reflected in the denominators and/or numerators for some LA returns.

Some areas have changed providers during the academic years 2017/18 and 2018/19 covered by this survey. This may have temporarily impacted on the delivery of the HPV programme.

Five LAs changed their delivery model to offer 2 doses within Year 8 and 9. LAs changed their delivery model to offer 2 doses over 2 academic years. Changes to the delivery model may have temporarily increased or decreased coverage in these areas.

2018/19 was the third year that all LAs in England had schools-based HPV vaccination programmes (as opposed to GP-delivered).

Improvements in coverage reflected particular efforts locally to:

- focus on follow-up with parents when consent forms were not returned (1 LA reporting)
- targeted follow-up during the summer months to increase uptake (1 LA reporting)
- improved catch up capacity in schools (four LAs reporting)
- offer vaccination at home for home educated pupils (1 LA reporting)
- improved data collection (3 LAs reporting)

An increased denominator (>10%) was observed in 10 LAs for Year 8 estimates and 2 LAs for Year 9 estimates compared to 2017/18. Consequently, local coverage in some of these areas appears lower than previous years and the overall denominator for England has increased since 2017/18.

Reasons for large increases in the denominator include

- including more girls that are not educated within the LA but reside in the LA
- change in local providers that may use different data collection methods
- more robust methods for data collection
- inclusion of private schools that were not included in last year's denominator

Decreases in coverage in some LAs related to specific programme issues reported to PHE:

- missed or cancelled dose 2 vaccination sessions in some schools (5 LAs reporting)
- introduction of electronic consent (3 LAs reporting)
- transient movement of children moving in and out of the LA area (4 LAs reporting)

The commitment to deliver other school-based immunisation programmes, such as the childhood flu immunisation programme (extended to school years' reception to year 5 in 2018/19), may have continued to impact on the capacity of providers to deliver the HPV programme.