Human Papillomavirus (HPV) vaccination coverage in adolescent females in England: 2016/17
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Main findings

- 2016/17 is the second year HPV vaccine coverage for the two-dose schedule has been calculated in school Year 9 females (aged 13-14 years) in England.

- 83.1% of Year 9 females completed the two-dose HPV vaccination course in 2016/17, compared to 85.1% in 2015/16, and 86.7% completing a three-dose course in 2013/14. This coverage reflects delivery of the second dose in Year 8 (12-13 year olds) in 2015/16 in some local authorities (LAs), and Year 9 in 2016/17 in others.

- HPV vaccine coverage for the priming dose remained stable at 87.2% in Year 8 females in 2015/16, compared to 87.0% in 2015/16 and 89.4% in 2014/15.

- In the 95/152 (62.5%) LAs that offered two doses of HPV vaccine to Year 8 in all schools within the 2016/17 school year, completed course coverage was 80.8%.

- Only 51/152 (34%) LAs provided an update to Year 10 (14-15 year olds) coverage data bringing the latest recorded two-dose coverage for this age group to 85.5%.

- During the 2016/17 academic year, the commitment to deliver on the childhood flu vaccine programme (extended to school years 1, 2 and 3), school leaver booster programme (tetanus/diphtheria/polio vaccine), and the MenACWY programme (across two or three school years) may have continued to impact on the capacity of school immunisation providers to deliver the HPV vaccination programme in some areas.
Summary

Annual HPV vaccine coverage data for the second year (2015/16) of the two-dose schedule (the first year of completed Year 9 second dose coverage) was published in December 2016.

This report presents annual HPV vaccine coverage data for the third year (2016/17) of the two-dose schedule. Full data tables are available by NHS England local team (LT), former area team (AT) for trend analysis, and by local authority (LA). UK HPV coverage data by country is also tabulated.

In England, for operational purposes, the recommendation from September 2014 was to offer the first (priming) HPV vaccine dose to females in Year 8 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. However some local areas have scheduled the second dose from six months after the first and offered both doses in the same school year.

HPV immunisation coverage for the priming dose in Year 8 in 2016/17 was 87.2%, compared with 87.0% in 2015/16 and 89.4% in 2014/15. Coverage by LT ranged from 81.0% (South East) to 92.2% (Yorkshire and Humber) (Figure 1). Fifty-three of 152 LAs achieved over 90% coverage for the priming dose in Year 8 females. Year 8 LA coverage for at least one dose ranged from 73.6% to 97.9%.

A total of 95 local authorities offered two doses of HPV vaccine to all girls in the routine cohort, school Year 8, in 2016/17 (compared to 85 in 2015/16 and 86 in 2014/15), and coverage for the completed course in these local authorities was 80.8% (range 44.0% to 93.4%).

HPV vaccine coverage in England for females completing a two-dose HPV schedule by Year 9 was 83.1% compared to 85.1% in 2015/16, and compared to 86.7% of Year 8 females completing a three-dose course in 2013/14 (the recommended schedule at that time). This coverage reflects local variation in delivery of the second dose of HPV which was offered in Year 8 in 2015/16 in some LAs, and Year 9 during 2016/17 in others. Coverage of dose two in Year 9 in 2016/17 decreased relative to 2015/16 for 10 of 13 LTs. Coverage by LT ranged from 76.4% (South West) to 89.9% (South Central and Wessex) (Figure 2). Thirty-three LAs across England achieved over 90% two-dose coverage in Year 9 females. Year 9 LA two-dose coverage across England ranged from 48.3% to 95.3%.

HPV vaccine coverage in England for females completing a two-dose HPV schedule by Year 10 (incorporating updated figures from 51 LAs) was 85.5%.
Figure 1. Dose one (priming) HPV vaccine coverage by NHS England Local Team for the routine cohort (Year 8 females aged 12-13 years) in academic years 2013/14, 2014/15, 2015/16 and 2016/17: England
Figure 2. HPV vaccine coverage in females: completed courses by NHS England Local Team in 2013/14 (three doses in Year 8), 2015/16 (two doses by Year 9, administered in 2014/15 and 2015/16), and 2016/17 (two doses by Year 9, administered in 2015/16 and 2016/17): England

Note for Figure 2: Completed course coverage data are not available for 2014/15 due to the change in the delivery model as described above. Therefore, completed course coverage for school girls who started their course in Year 8 in 2014/15 is reported at 2015/16

Background

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 2016/17 academic year. Historical annual HPV vaccine coverage reports from 2008/09 to 2015/16 and associated data tables can be found on the PHE website.
Factors affecting HPV vaccine coverage estimates in 2016/17

Some of these factors were previously reported in relation to 2015/16 data and also apply to the 2016/17 data:

- Coverage of the completed course may be under-estimated as ‘mop-up’ vaccinations given in:
  a) GP practices.
  b) Year 9 and Year 10 in schools (see details below) are not included in the returns for a significant number of LAs.
- Coverage (of one and/or two 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 two academic years (2015/16 and 2016/17) which are covered by this survey and this may have temporarily impacted on the delivery of the HPV programme.
- Some LAs planning to offer two doses within Year 8 did not complete delivery in time for this data collection and so will instead offer the completing dose in Year 9.
- LAs that changed delivery model (n=13) in 2016/17 to two doses within Year 8 would have also offered dose two to Year 9. This may have put pressure on Year 9 delivery for these LAs; two LAs did not complete Year 9 dose two delivery within 2016/17 resulting in decreases in coverage of around 40%.
- 2016/17 was the first year that all LAs in England ran schools-based HPV vaccination programmes (as opposed to GP-delivered).
- Low coverage of Year 9 dose two in 2016/17 may reflect poor coverage in 2015/16 (the first year of the MenACWY programme) rather than current performance for LAs delivering two doses in Year 8; not all of these LAs updated their coverage data to incorporate mop-up doses given in Year 9.
- Some LAs had reported offering catch-up sessions for Year 10 in 2016/17 but were unable to provide updated data for this cohort. It is therefore likely that this figure under-estimates coverage, reflecting the difficulty in combining data from multiple sources (routine sessions, catch-up clinics, GP practices) for cohorts year on year.
- Improvements in coverage reflected particular efforts locally to: a) establish good relationships between nursing teams and schools, b) a focus on follow-up and reminders for girls who missed immunisation sessions, c) provision of additional opportunities for HPV vaccination, and d) auditing and updating of coverage data.
- Decreases in coverage in some LAs related to specific programme issues: a) reductions in school nursing service capacity; b) fewer catch-up opportunities, and/or difficulties finding space within schools to conduct sessions; c) reported concerns about vaccination.

The commitment to deliver on the childhood flu immunisation programme (extended to school years 1 and 2 from 2015/16 and school years 1, 2 and 3 in 2016/17), school
leaver booster programme (Td/IPV vaccine), and the MenACWY programme (introduced in 2015/16, offered in two or three school year groups 2015/16 and 2016/17) may have continued to impact on the capacity of school immunisation providers to deliver the HPV programme