



UK Health
Security
Agency

HPV vaccination in England

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(With thanks to Louise Letley, UKHSA)

HPV vaccination

- **used in over 100 countries** worldwide including the USA, Australia, Canada and most of Western Europe.
- more than 500 million doses distributed worldwide
- **well over 15 million doses** of HPV vaccine have been given in England since the start of the programme
- most women aged 15 to 24 years in England have now been given the vaccine



HPV vaccination in England

September 2008

National HPV Immunisation Programme began throughout the UK

- 3-dose programme (Cervarix® 16,18) delivered mainly in schools (with some GP delivery)
- school Year 8 females (aged 12 to 13 years)
- catch up for all girls aged between 13 to 18 years

September 2012

Gardasil® (6,11,16,18) 3-doses

September 2014

move to a 2-dose programme min 6 months apart for girls starting before age 15 years

April 2018

after a successful pilot the vaccine was extended to GBMSM up to 45 years of age attending local specialist Sexual Health Services and/or HIV clinics

September 2019

the HPV adolescent programme was extended to boys as well as girls (universal offer)

April 2022

move to a 2-dose schedule extended to all those eligible for the adolescent programme and GBMSM programme except for those who are immunosuppressed or living with HIV at the time of vaccination

July 2022

move to Gardasil9® (6, 11, 16, 18, 31, 33, 45, 52, 58) for adolescent and GBMSM progs

September 2023

shift to a single dose of vaccination for (most) eligible under 25

Eligible girls and boys (eligible boys born on/after 01/09/2006) can continue to be caught up until their 25th birthday

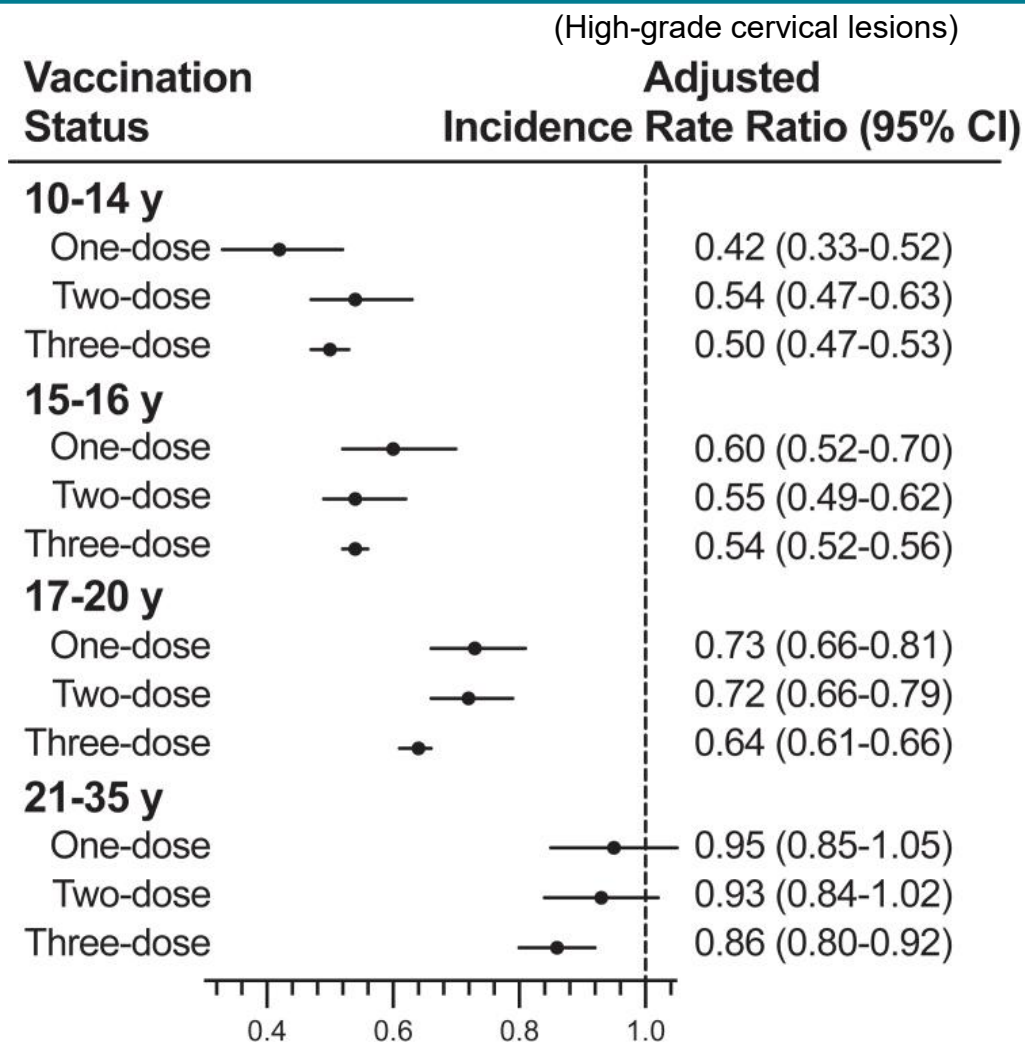
Shift to a single dose for eligible young people

- **August 2022:** Joint Committee on Vaccination and immunisation (JCVI) statement: [JCVI statement on a one-dose schedule for the routine HPV immunisation programme - GOV.UK \(www.gov.uk\)](#)
- **December 2022:** WHO SAGE one-dose advice : [Human papillomavirus vaccines: WHO position paper, December 2022](#)

From **1 September 2023** the HPV vaccination schedule changed to:

- a 1-dose schedule for the routine adolescent programme and GBMSM programme for eligible individuals less than 25 years of age
- a 2-dose schedule from the age of 25 years up to the age of 45 years for the GBMSM programme
- a 3-dose schedule for eligible individuals who are immunosuppressed and those known to be living with HIV, including those on antiretroviral therapy (0, 1, 4 to 6 month schedule)

Why early vaccination matters



Approximately **80% reduction** in cervical cancer incidence in those vaccinated aged ≤16 years

Sources:

Wu S, Ploner A, Astorga Alsina AM, Deng Y, Ask Schollin L, Lei J. Effectiveness of quadrivalent human papillomavirus vaccination against high-grade cervical lesions by age and doses: a population-based cohort study. *Lancet Reg Health Eur*. 2025 Jan 5;49:101178. doi: 10.1016/j.lanepe.2024.101178. PMID: 39989876; PMCID: PMC11846428.

Henschke N, Bergman H, Buckley BS, Crosbie EJ, Dwan K, Golder SP, Kyrgiou M, Loke YK, McIntosh HM, Probyn K, Villanueva G, Morrison J. Effects of human papillomavirus (HPV) vaccination programmes on community rates of HPV-related disease and harms from vaccination. *Cochrane Database of Systematic Reviews* 2025, Issue 11. Art. No.: CD015363. DOI: 10.1002/14651858.CD015363.pub2. Accessed 30 September 2026.

HPV vaccination uptake has declined since 2019

Figure 1. HPV vaccine coverage for female students by cohort and school year of vaccination between the 2015 to 2016 and the 2024 to 2025 academic years

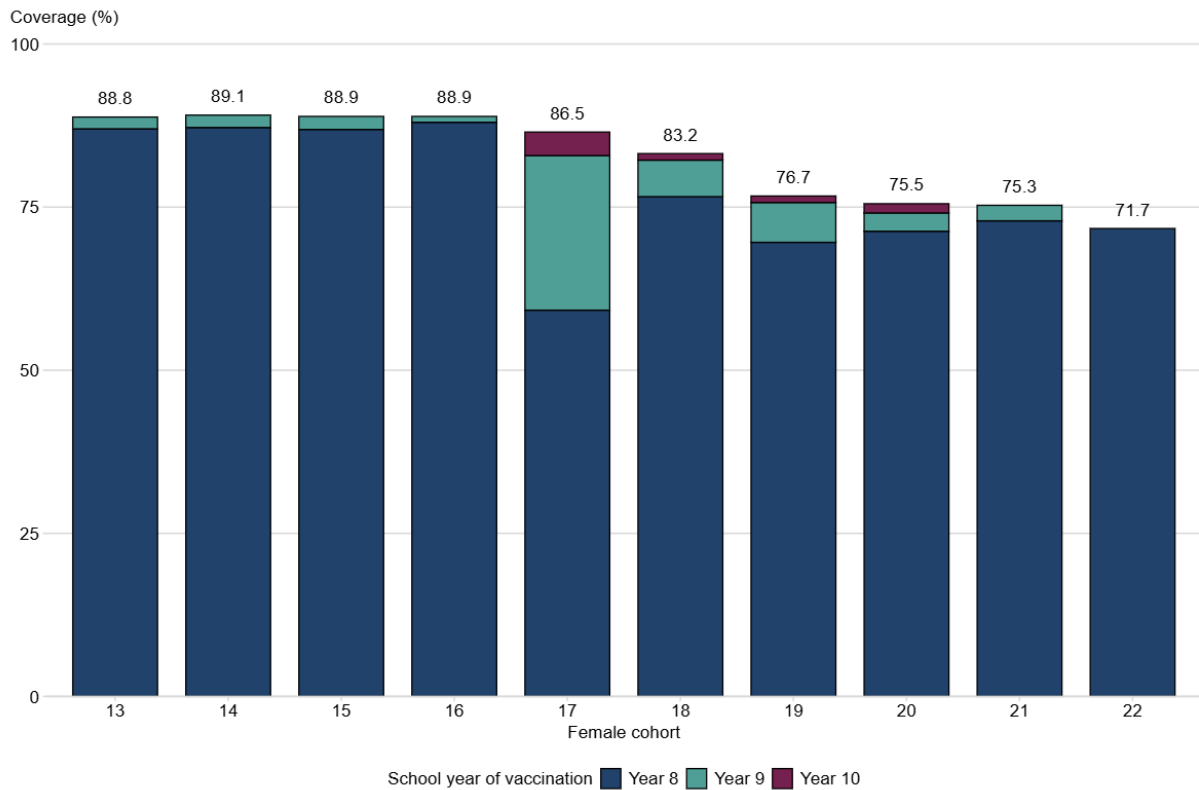
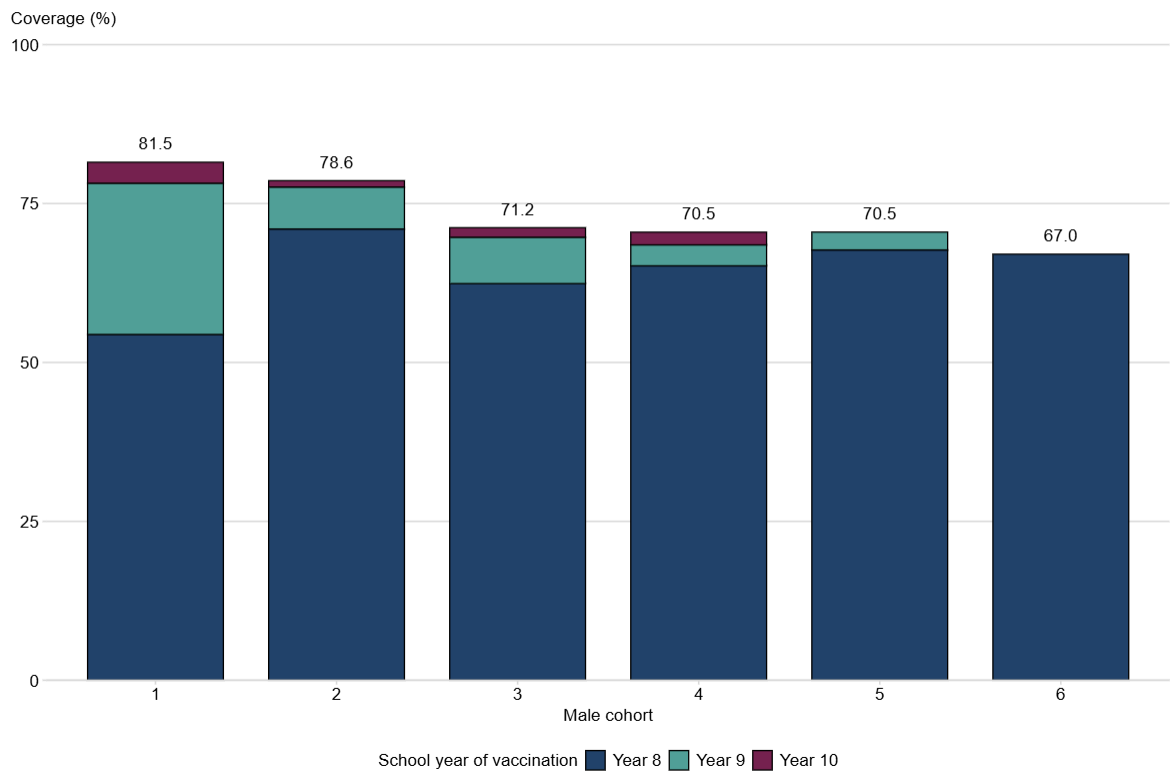


Figure 2. HPV vaccine coverage for male students by cohort and school year of vaccination between the 2019 to 2020 and the 2024 to 2025 academic years



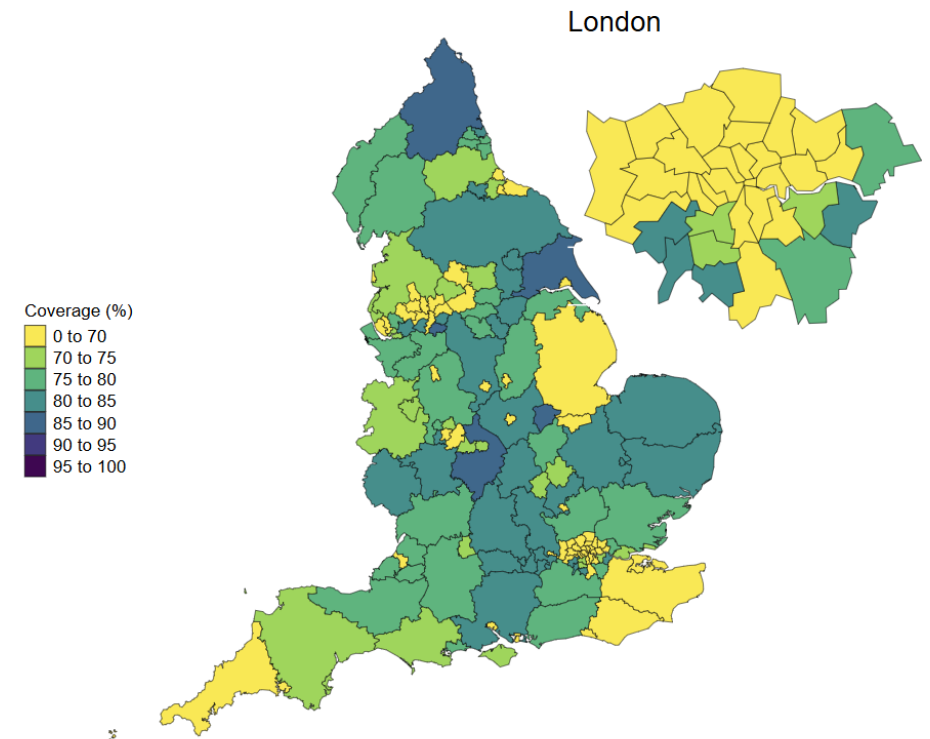
Source: [Vaccine uptake guidance and the latest coverage data - GOV.UK \(www.gov.uk\)](https://www.gov.uk)

...and there are stark local variations...

Figure 4. HPV vaccine coverage for female students in year 8 between the 2014 to 2015 and the 2024 to 2025 academic years

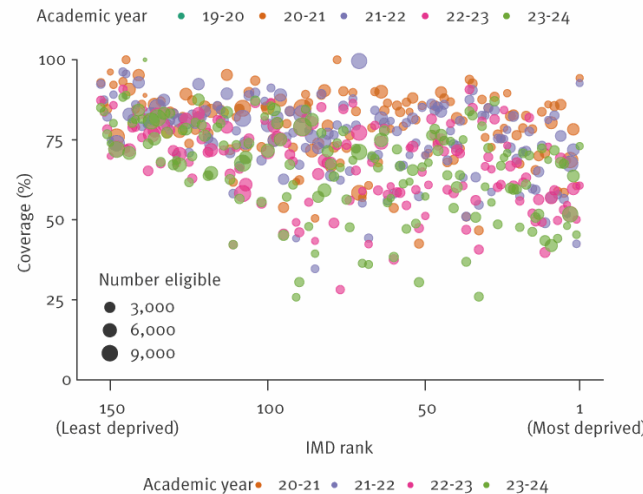
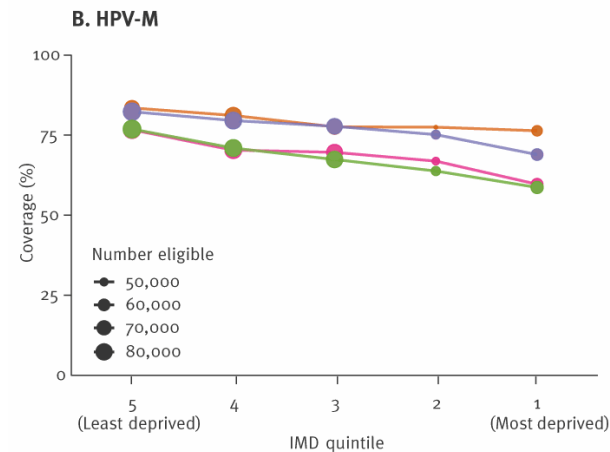
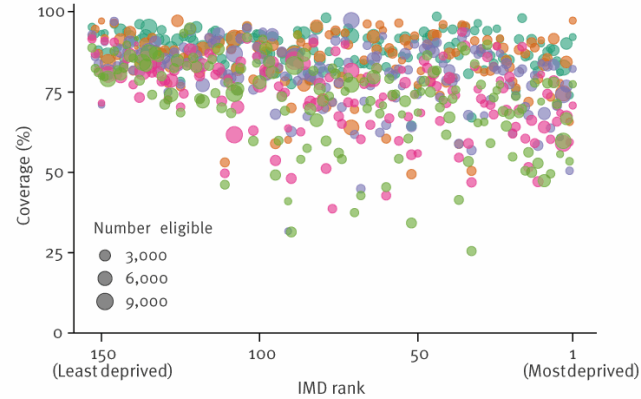
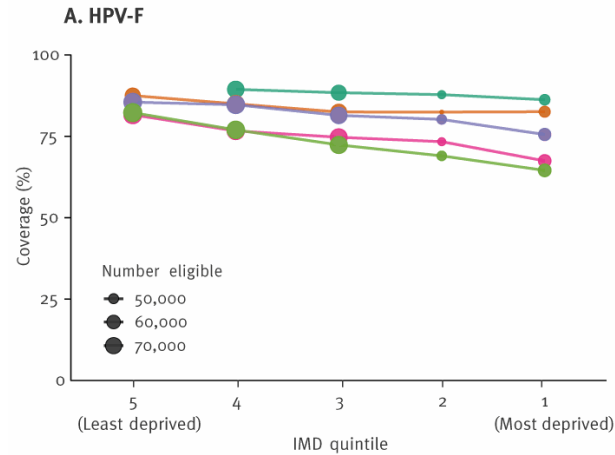


Figure 7. HPV vaccine coverage by local authority for year 8 female students in the 2024 to 2025 academic year



Source: [Vaccine uptake guidance and the latest coverage data - GOV.UK \(www.gov.uk\)](https://www.gov.uk)

...with significant inequalities by deprivation...



- Progressive widening in the gap between most and least deprived over time
- This pattern holds even when London is taken out of the equation
- Observed alongside decline in overall coverage since 2020

Source: [Alvi Muhammad Ibaad](#), [Viviani Laura](#), [Hopkins Susan](#), [Soldan Kate](#), [Ismail Sharif](#). Inequalities in adolescent HPV, Td/IPV and MenACWY vaccination coverage by socio-economic status: an ecological study, England, 2017 to 2024. *Euro Surveill.* 2026;31(13):pii=2500586. <https://doi.org/10.2807/1560-7917.ES.2026.31.13.2500586>

Access: HPV delivery arrangements

Adolescent programme:

- Delivery primarily via SAIS in schools and in community (e.g. home-schooled)
- Catch-up for those aged 16-24 via GP services
- Option to use national stock for opportunistic catch-up in Sexual Health Services

GBMSM programme:

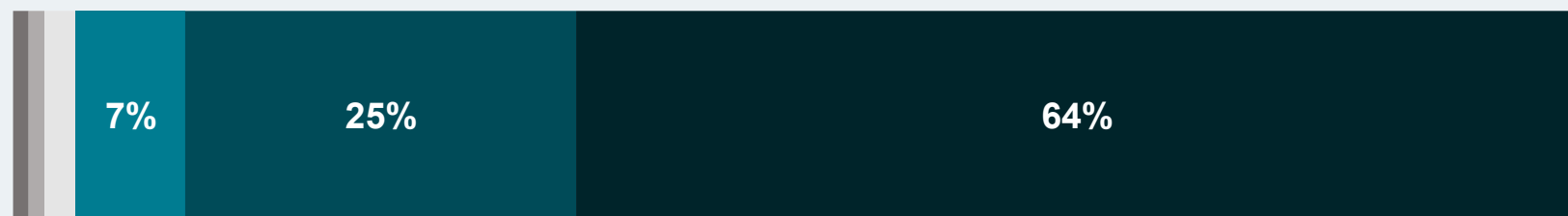
- Delivery via specialist Sexual Health Services

Parents are supportive of school-based delivery

To what extent do you personally agree or disagree with each of the following statements concerning teenage vaccines?

■ Don't know ■ Strongly disagree ■ Tend to disagree ■ Neither agree nor disagree ■ Tend to agree ■ Strongly agree

I am happy that the teenage vaccines are delivered at school



89% agree

I have/had enough information to make my decision about teenage vaccines



86% agree

*Figures under 4% not shown

Source: Basis Research, Parents and Teenage Vaccinations. Q19. Now considering your child(ren) aged 13 to 15 who have been offered any teenage vaccines. To what extent do you personally agree or disagree with each of the following statements concerning teenage vaccines?

Base: All parents of eligible teenagers whose child(ren) have been offered teenage vaccines (n=981)

Vaccinations for school-aged children and young people: invitations, reminders and escalation of contact

Invitations

- Involve schools in sending invitations on behalf of providers.
- Make the format of the invitation accessible to parents and secondary school-aged children and young people.
- Ensure that the information, invitation and any subsequent reminders meet the person's communication needs (see [NHS England's Accessible Information Standard](#)). For more guidance on providing information to people and discussing their preferences with them, see [NICE's guidelines on patient experience in adult NHS services](#) and [shared decision making](#).
- Providers should ensure that young people and their parents or carers have reliable information about vaccines that covers risks and benefits to help them to make informed decisions. The information should include who can consent to vaccination (Gillick competence) as well as the information listed in recommendations 1.3.11 and 1.3.12 (as appropriate).
- Trusted sources include [Oxford University's Vaccine Knowledge Project](#), [NHS England](#) and the [World Health Organization](#).
- Offer incentives, such as a ticket for a prize draw, to encourage the return of consent forms.

Reminders

If a completed consent form is not returned, send a reminder.

Escalation of contact

- Phone the child or young person's parents or carers (as appropriate) to ask for verbal consent if they have not responded by the time preparations are being made for vaccination day.
- If contact cannot be made, involve other health and social care providers who may be involved with the family to help gain consent.

Catch-up sessions

- Commissioners should ensure that school-aged immunisation services offer catch-up vaccination sessions to children and young people who are not up to date with their school-aged vaccination schedule.
- If children and young people who are not up to date with their school-aged vaccinations miss the catch-up sessions, alternative provision should be made for them to be offered the vaccinations.
- Where children and young people are not up to date with any vaccinations that are not part of the school-aged programme, signpost parents and carers (as appropriate) to their GP.

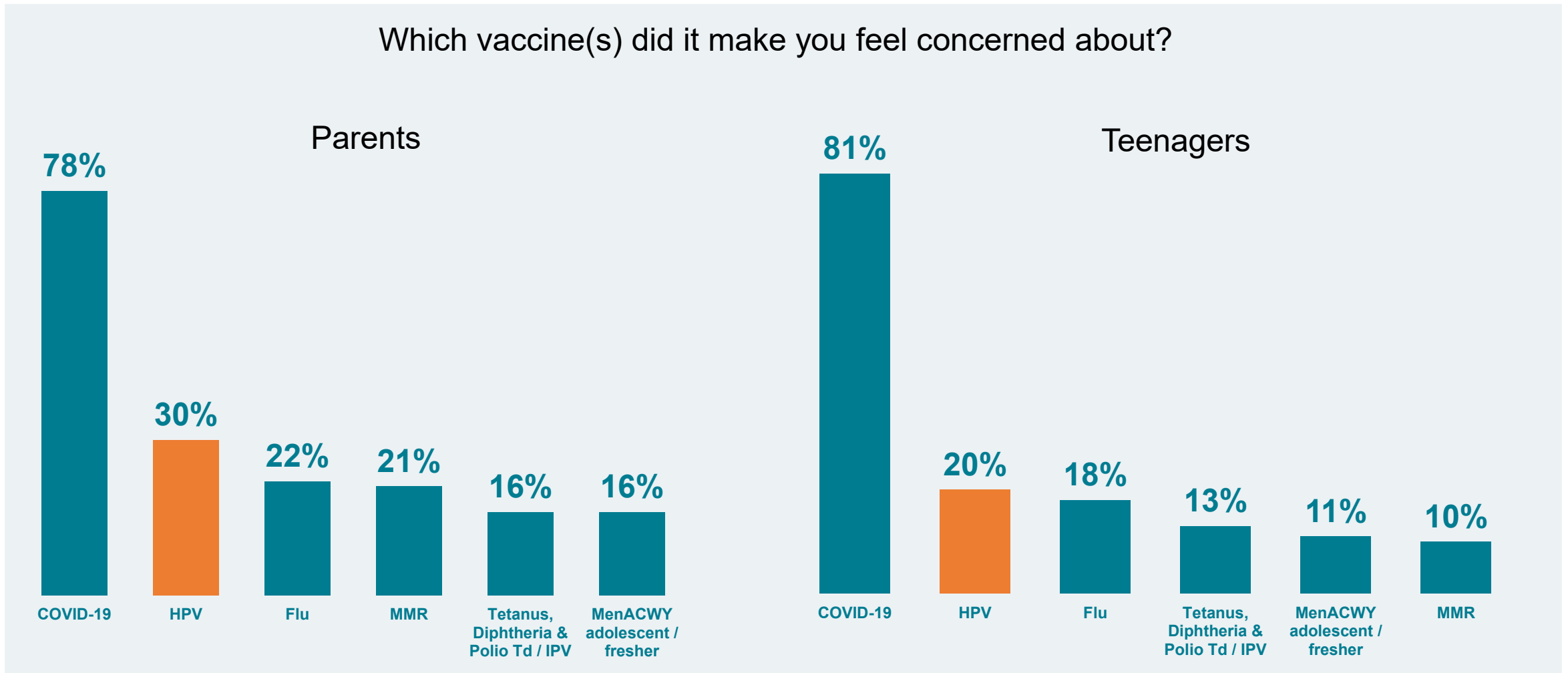
Assessing Gillick competence

- Be aware that young people under 16 can give their own consent to vaccination if they are assessed to be Gillick competent.
- Include an assessment for capacity to consent in the absence of parental consent or if there has been parental refusal, in line with guidance on consent in the [Green book chapter 2](#) and from professional bodies such as the [General Medical Council's advice on making decisions](#).
- School-aged immunisation services should ensure that they have a policy in place to support school-aged immunisation teams in assessing Gillick competence. Include guidance on what action to take when a young person's vaccination preference is different from that of their parents or carers.

Understanding vaccine attitudes

Of the small number of parents (15%) who had seen information about vaccines that concerned them, HPV vaccination was cited second most often

Which vaccine(s) did it make you feel concerned about?



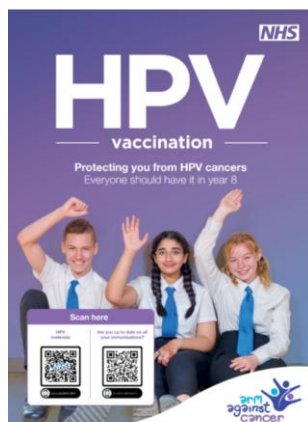
Information materials

Health professionals

- Green Book HPV chapter 18a
- Patient Group Direction (PGD)
- factsheet
- consent form

Parents and young people

- posters
- leaflet
- record card
- digital resources



Addressing the myths – factsheet for health professionals

Is the HPV vaccine new?

No, the HPV vaccine is not new, it's been used in the UK since 2008 and more than 10 million doses have been given. It's used in over 80 countries including the US, Australia, Canada, and most of Western Europe, and more than 80 million people have been vaccinated worldwide. In 2022 the HPV vaccine changed from Gardasil® 9 and this HPV vaccine is also given in several other countries.

Are many parents refusing the vaccine?

No. The vast majority of parents choose to accept the HPV vaccine for their children. Most women aged 15 to 27 years in England have now been given the vaccine.

Should the vaccine be given to young people at an older age?

No. Vaccination at a younger age is more effective at preventing HPV infection. So the best time to be vaccinated is between 12 and 14 years.

Will safe sex protect young people from HPV?

No. HPV can spread by skin to skin contact. Condoms do not completely prevent the risk of infection.

How do we know that the HPV vaccine works?

In England, we have already seen a significant decrease in infections with the 2 main HPV types that can cause cancer (types 16 and 18).

We have also shown declines – probably due to cross-protection – in 3 other HPV types linked to cancer (types 31, 33 and 45).

We expect to see even greater declines in these types (and types 52 and 58) following the implementation of Gardasil® 9.

The number of precancerous lesions in the cervix has already fallen by over 70% since the programme began in Scotland. We have also seen large declines in the number of genital warts in young people.

A study published in The Lancet in 2021 found that cervical cancer rates in England were 87% lower in young women who had been eligible for HPV vaccination when they were aged 12 to 13 years, compared to similar young women born a few years earlier who had not been offered vaccination, clearly showing the programme is preventing cervical cancers.

Are side effects more frequently reported after HPV than for other vaccines?

No. To date, the number of reports to the Medicines and Healthcare Products Regulatory Agency (MHRA) of suspected side effects for HPV vaccines is not unusual. The overwhelming majority relate to mild conditions commonly seen when you vaccinate teenagers (for example injection site reactions such as redness, pain, swelling; headache, nausea, fatigue; immediate faints due to needle phobia).

The UK programme has already contributed to preventing deaths from cervical cancer. We expect it to eventually prevent hundreds of cancer deaths every year.



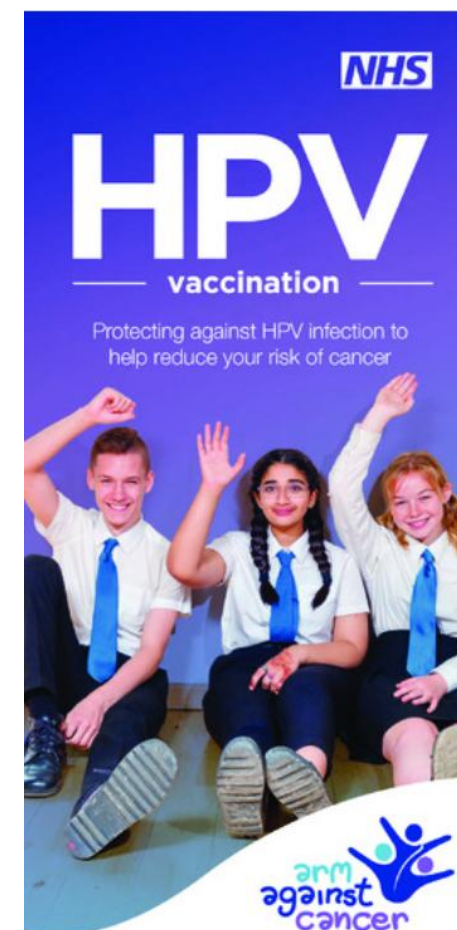
Protecting you from HPV cancers

Name

Date HPV vaccination given

If you missed your dose of HPV vaccine, speak to your school nurse or GP practice. If you were eligible to have it at school, you can still have it up to your 25th birthday. Get protected.

www.nhs.uk/hpv
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Leaflets available to order at: [Healthpublications.gov.uk](https://www.healthpublications.gov.uk)