



Human papillomavirus (HPV) vaccination



Addressing the myths Factsheet for health professionals, parents and young people

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 will change from Gardasil to Gardasil® 9 and this HPV vaccine is already given in several other countries.

Are many parents refusing the vaccine?

No. Nearly 90% of parents choose to accept the HPV vaccine for their children. Most women aged 15 to 24 years in Wales 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 the UK, 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) with the implementation of Gardasil® 9.

A recent English study has shown a reduction of 90% in cancer-causing HPV in young women in their 20's who were vaccinated aged 12-13. We have also seen large declines in the number of genital warts in young people.

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).

Do the American Academy of Pediatrics (AAP) advise against HPV vaccine?

No. The AAP is an organisation of around 50,000 US doctors who fully support the HPV programme.

The American College of Pediatrics is an organisation of around 500 religious doctors who broke away from AAP over the issue of gay adoption.

They believe that pre-marital abstinence is most effective. But, they still favour offering HPV vaccination because of potential risk beyond an individual's control (including sexual assault and the infection of one's future spouse).

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

Does the vaccine cause serious long-term illnesses?

No. When almost everyone is vaccinated, it's not surprising that some people go on to develop illnesses some time after vaccination – that does not mean that the vaccine caused the illness. It's easy to understand why the family might blame the vaccine, particularly if the onset of illness is poorly defined. In 2016, Danish researchers showed that girls who reported illnesses from the HPV vaccine were more likely to have seen the doctor in the period before vaccination. This suggests that some of these conditions may have already been developing before vaccination.

A number of authorities, including the Centers for Disease Control and Prevention in the US, the World Health Organization, and the European Medicines Agency have looked carefully at all the cases that have been reported and concluded that there is no credible evidence of a link between HPV vaccine and a range of chronic illnesses.

Do HPV vaccines cause premature ovarian failure?

Premature ovarian failure is rare but occurs naturally in adolescent girls. The number of cases reported does not exceed what might be expected in the absence of vaccination.

Do we need more research into the link between vaccine and chronic illness?

No. In 2013, the MHRA conducted a large study in the UK which showed no link between HPV vaccine and illnesses such as chronic fatigue syndrome and fibromyalgia.

Over the past few years several studies based in different countries have found no evidence of a link between the HPV vaccine and a range of serious and chronic illnesses (see below).

The product insert mentions a number of serious and chronic conditions – including death – does that mean that the vaccine causes these conditions?

No. Although the US package insert lists a range of reported illnesses, these are included regardless of any established link with the vaccine. Similarly, in the spirit of openness, the EU product insert also mentions conditions reported after vaccination across the world – even in isolated cases – but this does not mean that the vaccine was responsible.

Extensive reviews of vaccine safety have concluded that evidence does not support a link between HPV vaccine and the development of a range of chronic illnesses.

Further information

You can find more information on the HPV vaccines at: 111.wales.nhs.uk/livewell/vaccinations

Information on cervical cancer is available by visiting Jo's Cervical Cancer Trust website at: jostrust.org.uk/about-cervical-cancer

You can read the Summary of Product Characteristics (SPC) at: medicines.org.uk/emc/search?q=gardasil

References

- 1: Vichnin M et al. An Overview of Quadrivalent Human Papillomavirus Vaccine Safety: 2006 to 2015. *Pediatr Infect Dis J.* 2015 Sep;34(9):983-91.
- 2: Grimaldi-Bensouda L et al. Autoimmune disorders and quadrivalent human papillomavirus vaccination of young female subjects. *J Intern Med.* 2014 Apr;275(4):398-408.
- 3: Pellegrino P et al. On the relationship between human papilloma virus vaccine and autoimmune diseases. *Autoimmun Rev.* 2014 Jul;13(7):736-41
- 4: Klein NP et al. Safety of quadrivalent human papillomavirus vaccine administered routinely to females. *Arch Pediatr Adolesc Med.* 2012 Dec;166(12):1140-8.
- 5: Donegan K et al. Bivalent human papillomavirus vaccine and the risk of fatigue syndromes in girls in the UK. *Vaccine.* 2013 Oct 9;31(43):4961-7.
- 6: Gee J et al. Monitoring the safety of quadrivalent human papillomavirus vaccine: findings from the Vaccine Safety Datalink. *Vaccine.* 2011 Oct 26;29(46):8279-84.
- 7: Cameron RL et al. Adverse event monitoring of the human papillomavirus vaccines in Scotland. *Intern Med J.* 2016 Apr;46(4):452-7.
- 8: Arnheim-Dahlström L et al. Autoimmune, neurological, and venous thromboembolic adverse events after immunisation of adolescent girls with quadrivalent human papillomavirus vaccine in Denmark and Sweden: cohort study. *BMJ.* 2013 Oct 9;347:f5906.



Brechu feirws papiloma dynol (HPV)

Taflen ffeithiau mynd i'r afael â'r mythau i weithwyr proffesiynol, rhieni a phobl ifanc



A yw'r brechlyn HPV yn newydd?

Nac ydy, nid yw'r brechlyn HPV yn newydd, mae wedi cael ei ddefnyddio yn y DU ers 2008 ac mae mwy na 10 miliwn dos wedi'u rhoi. Fe'i defnyddir mewn dros 80 o wledydd gan gynnwys yr Unol Daleithiau, Awstralia, Canada, a'r rhan fwyaf o Orllewin Ewrop, ac mae mwy nag 80 miliwn o bobl wedi cael eu brechu ledled y byd. Yn 2022 bydd y brechlyn HPV yn newid o Gardasil i Gardasil® 9 ac mae'r brechlyn HPV hwn eisoes yn cael ei roi mewn sawl gwlad arall.

A oes llawer o rieni'n gwrthod y brechlyn?

Nac oes. Mae bron 90% o rieni yn dewis derbyn y brechlyn HPV ar gyfer eu plant. Mae'r rhan fwyaf o fenywod 15 i 24 oed yng Nghymru bellach wedi cael y brechlyn.

A ddylai'r brechlyn gael ei roi i bobl ifanc ar oedran hŷn?

Na ddylai. Mae brechu ar oedran iau yn fwy effeithiol o ran atal haint HPV. Felly'r amser gorau i gael eich brechu yw rhwng 12 a 14 oed.

A fydd rhyw diogel yn amddiffyn pobl ifanc rhag HPV?

Na fydd. Gall HPV ledaenu drwy gysylltiad croen â chroen. Nid yw condomau'n atal y risg o haint yn llwyr.

Sut rydym yn gwybod bod y brechlyn HPV yn gweithio?

Yn y DU, rydym eisoes wedi gweld gostyngiad sylweddol mewn heintiau o ran y 2 brif fath o HPV a all achosi cancer (mathau 16 ac 18).

Rydym hefyd wedi gweld gostyngiad – oherwydd croesddiogelu yn ôl pob tebyg – mewn 3 math arall o HPV sy'n gysylltiedig â chanser (mathau 31, 33 a 45). Rydym yn disgwyl gweld hyd yn oed mwy o ostyngiad yn y mathau hyn (a mathau 52 a 58) wrth weithredu Gardasil® 9.

Mae astudiaeth ddiweddar yn Lloegr wedi dangos gostyngiad o 90% mewn HPV sy'n achosi cancer mewn menywod ifanc yn eu 20au a gafodd eu brechu pan oeddent yn 12-13 oed. Rydym hefyd wedi gweld gostyngiad mawr o ran nifer y defaid gwenerol ymhlith pobl ifanc.

A yw sgil-ffeithiau'n cael eu nodi'n amlach ar ôl HPV nag ar gyfer brechlynnau eraill?

Nac ydynt. Hyd yma, nid yw nifer yr adroddiadau i'r Asiantaeth Rheoleiddio Meddyginiaethau a Chynhyrchion Gofal Iechyd (MHRA) am sgil-ffeithiau tybiedig ar gyfer brechlynnau HPV yn anarferol. Mae'r mwyafrif llethol yn ymwneud â chyflyrau ysgafn a welir yn gyffredin pan fyddwch yn brechu pobl ifanc yn eu harddegau (er enghraifft, adweithiau ar safle'r pigiad fel cochni, poen, chwyddo; pen tost/cur pen, cyfog, blinder; llewygu ar unwaith oherwydd ffobia nodwyddau).

A yw Academi Bediatreg America (AAP) yn cynghori yn erbyn brechlyn HPV?

Nac ydy. Mae'r AAP yn sefydliad o tua 50,000 o feddygon yn yr Unol Daleithiau sy'n cefnogi'r rhaglen HPV yn llawn. Mae Coleg Pediatreg America yn sefydliad o tua 500 o feddygon crefyddol a dorrodd i ffwrdd o AAP dros fater mabwysiadu gan bobl hoyw. Credant mai ymatal cyn priodi sydd fwyaf effeithiol. Ond, maent yn dal i ffafrio cynnig brechu HPV oherwydd risg bosibl y tu hwnt i reolaeth unigolyn (gan gynnwys ymosodiadau rhywiol a haint priod yn y dyfodol).

Mae rhaglen y DU eisoes wedi cyfrannu at atal marwolaethau yn y dyfodol o ganser ceg y groth. Rydym yn disgwyl iddo atal cannoedd o farwolaethau cancer bob blwyddyn yn y pen draw.

A yw'r brechlyn yn achosi salwch hirdymor difrifol?

Nac ydy. Pan mae bron pawb wedi'u brechu, nid yw'n syndod bod rhai pobl yn mynd ymlaen i ddatblygu salwch beth amser ar ôl cael eu brechu – nid yw hynny'n golygu bod y brechlyn wedi achosi'r salwch. Mae'n hawdd deall pam y gallai'r teulu feio'r brechlyn, yn enwedig os yw dechrau salwch wedi'i ddiffinio'n wael. Yn 2016, dangosodd ymchwilyr o Ddenmarc fod merched a nododd salwch o'r brechlyn HPV yn fwy tebygol o fod wedi gweld y meddyg yn y cyfnod cyn brechu. Mae hyn yn awgrymu y gallai rhai o'r cyflyrau hyn fod eisoes yn datblygu cyn brechu.

Mae nifer o awdurdodau, gan gynnwys y Canolfannau Atal a Rheoli Clefydau yn yr Unol Daleithiau, Sefydliad Iechyd y Byd, a'r Asiantaeth Feddyginiaethau Ewropeaidd wedi edrych yn ofalus ar yr holl achosion sydd wedi'u nodi a daeth i'r casgliad nad oes tystiolaeth gredadwy o gysylltiad rhwng brechlyn HPV ac amrywiaeth o salwch cronig.

A yw brechlynnau HPV yn achosi methiant yr ofari cynamserol?

Mae methiant yr ofari cynamserol yn brin ond mae'n digwydd yn naturiol mewn merched yn eu harddegau. Nid yw nifer yr achosion a nodwyd yn fwy na'r hyn y gellid ei ddisgwyl yn absenoldeb brechu.

A oes angen mwy o ymchwil arnom i'r cysylltiad rhwng brechu a salwch cronig?

Nac oes. Yn 2013, cynhaliodd yr MHRA astudiaeth fawr yn y DU nad oedd yn dangos unrhyw gysylltiad rhwng brechlyn HPV a salwch fel syndrom blinder cronig a ffibromyalgia. Dros y blynyddoedd diwethaf, nid yw sawl astudiaeth mewn gwahanol wledydd wedi canfod unrhyw dystiolaeth o gysylltiad rhwng y brechlyn HPV ac amrywiaeth o salwch difrifol a chronig (gweler isod).

Mae mewnosodiad y cynnyrch yn sôn am nifer o gyflyrau difrifol a chronig - gan gynnwys marwolaeth - a yw hynny'n golygu bod y brechlyn yn achosi'r cyflyrau hyn?

Nac ydy. Er bod mewnosodiad y pecyn yn yr Unol Daleithiau yn rhestru amrywiaeth o salwch a nodwyd, mae'r rhain wedi'u cynnwys waeth beth fo unrhyw gysylltiad sefydledig â'r brechlyn. Yn yr un modd, yn yr ysbryd o fod yn agored, mae mewnosodiad cynnyrch yr UE hefyd yn sôn am gyflyrau a nodwyd ar ôl y brechu ledled y byd – hyd yn oed mewn achosion ynysig – ond nid yw hyn yn golygu mai'r brechlyn oedd yn gyfrifol.

Mae adolygiadau helaeth o ddiogelwch y brechlyn wedi dod i'r casgliad nad yw tystiolaeth yn cefnogi cysylltiad rhwng y brechlyn HPV a datblygu amrywiaeth o salwch cronig.

Rhagor o wybodaeth

Gallwch ddod o hyd i ragor o wybodaeth am y brechlynnau HPV yn: 111.wales.nhs.uk/livewell/vaccinations/default.aspx?locale=cy

Mae gwybodaeth am ganser ceg y groth ar gael drwy fynd i wefan Ymddiriedolaeth Canser Ceg y Groth Jo yn: jostrust.org.uk/about-cervical-cancer

Gallwch ddarllen y Crynodeb o Nodweddion Cynnyrch yn: medicines.org.uk/emc/search?q=gardasil

Cyfeiriadau

1: Vichnin M et al. An Overview of Quadrivalent Human Papillomavirus Vaccine Safety: 2006 to 2015. *Pediatr Infect Dis J.* 2015 Medi;34(9):983-91.

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