Public Health England

Arm against cervical cancer

FACTSHEET FOR HEALTH PROFESSIONALS

Human papillomavirus (HPV) vaccination and Cervical Cancer

Addressing the myths

Is the HPV vaccine new?

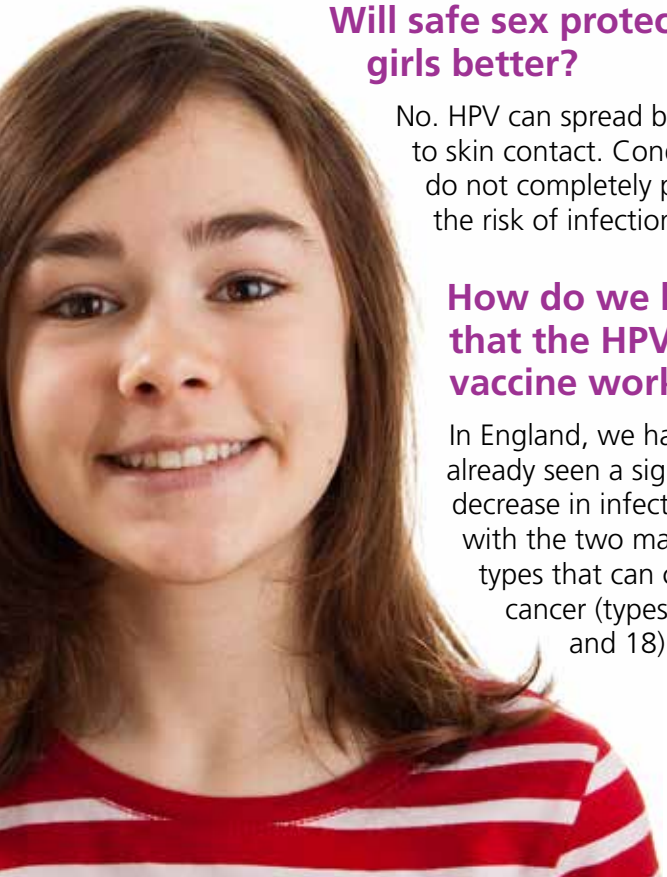
No, the HPV vaccine is not new, it's been used in the UK since 2008 and more than 8.5 million doses have been given. It's used in 84 countries including the USA, Australia, Canada, and most of Western Europe, and more than 80 million people have been vaccinated worldwide.

Are many parents refusing the vaccine?

No. Nearly 90% of parents choose to accept the HPV vaccine for their daughters. Most women aged 15 to 24 years in England have now been given the vaccine.

Should girls wait and get the vaccine when they are older?

No. Before the vaccination programme, over 70% of women caught HPV infection, and rates increased rapidly after 15 years of age. Vaccination of younger girls is more effective. So the best time to be vaccinated is between 12 and 14 years.



Will safe sex protect girls better?

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 two main HPV types that can cause cancer (types 16 and 18).

Scottish researchers have also shown a decline – probably due to cross-protection – in three other HPV types linked to cancer (types 31, 33 and 45).

The number of precancerous lesions in the cervix has already fallen by over 50% since the programme began in Australia, Denmark and Scotland.

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 (e.g. injection site reactions, rashes, mild allergic events, nausea, dizziness, fatigue, immediate faints due to needle phobia, etc.)

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

No. The AAP is an organization 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 onto 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 USA, 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.

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Further information

http://www.gov.uk/government/collections/immunisation#human-papillomavirus-hpv

NHS choices
http://www.nhs.uk/conditions/vaccinations/pages/hpv-human-papillomavirus-vaccine.aspx

The human papillomavirus vaccine: beating cervical cancer – the facts
https://www.gov.uk/government/publications/the-human-papillomavirus-vaccine-beating-cervical-cancer-the-facts

The HPV vaccine: beating cervical cancer – questions and answers
https://www.gov.uk/government/publications/the-hpv-vaccine-beating-cervical-cancer-questions-and-answers

Jo's Trust
https://www.jostrust.org.uk/about-cervical-cancer

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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.

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