

Facts about HPV Vaccine and Cervical Cancer



Published by National Immunisation Office August 2017

Human papillomavirus (HPV) vaccine protects girls from developing cervical cancer in adulthood. Overwhelming scientific evidence has shown that HPV vaccine is safe and effective.

High vaccine uptake is essential to the success of the HPV school vaccination programme. However, uptake rates have fallen in recent years. This is of great concern to all those involved in cancer prevention.

Teachers can support this life-saving vaccination programme and provide accurate information about the vaccine to students.

Please read these facts about HPV vaccine and cervical cancer.

Human papillomavirus (HPV)

- Human papillomavirus (HPV) infection is spread by direct (usually sexual) contact with an infected person.
- About 80% of all women will have a HPV infection in their lifetime, usually in their late teens and early 20s.
- Most HPV infections clear naturally but some caused by high-risk HPV types can progress to cervical cancer.
- Two high-risk HPV types (16 and 18) cause over 70% of cervical cancers.

Cervical cancer

- Ireland has one of the highest rates of cervical cancer in Western Europe.
- Each year in Ireland
 - over 90 women die from cervical cancer
 - over 280 (many young) women need treatment (surgery, chemotherapy and/or radiotherapy) for invasive cervical cancer
 - over 6,500 women need hospital treatment for a precancerous form of cervical cancer.

HPV vaccine

- There are three licensed HPV vaccines HPV2, HPV4 and HPV9.
- HPV vaccine is recommended by international and national bodies including
 - the World Health Organization
 - the International Federation of Obstetricians and Gynaecologists
 - the US Centers for Disease Control
 - all 69 US designated National Cancer Centers
 - the American Society for Clinical Oncology
 - the Royal College of Physicians of Ireland
 - the Irish Cancer Society
- The HPV vaccine used in the HSE school HPV vaccination programme is HPV4 (Gardasil).

Gardasil

- provides protection against
 - two high-risk HPV types (HPV 16 and 18) that cause 70% of cervical cancers and precancers
 - two HPV types that cause 90% of genital warts.
- has been licensed worldwide since 2006.
- is used in over 25 European countries, the US, Canada, Australia and New Zealand.
- 227 million doses have been distributed worldwide.
- over 690,000 doses have been distributed in Ireland and more than 230,000 girls have received the full vaccine course.

Safety of HPV vaccines

- All vaccines must go through extensive safety testing before they are licensed.
- Once in use, vaccine safety is continually monitored to identify side effects caused by the vaccine.
- Any medical 'event' reported after vaccination is analysed to see if it is caused by the vaccine.
- The European Medicines Agency, the US Centers for Disease Control and Prevention and the World Health Organization continue to say HPV vaccines are safe with no known long-term side effects.

Ongoing analysis has shown there is no scientific evidence linking HPV vaccines to any long-term medical condition.

HPV vaccine side effects

The known side effects are:

- About 1 girl in 10 will get pain, swelling and redness at the injection site and/or headache.
- About 1 girl in 100 will get nausea, pain in the vaccinated arm and mild fever.
- About 1 girl in 1,000 to 1 girl in 10,000 will get an itchy rash or hives.
- Severe allergic reactions with difficulty breathing are very rare (about 1 in 1 million patients).
- Occasionally girls faint after getting an injection. The girls are advised to sit down for 15 minutes after the vaccination. This helps prevent fainting.

Facts about HPV Vaccine and Cervical Cancer



Published by National Immunisation Office August 2017

Chronic fatigue syndrome (CFS)

- Has been known for over 200 years.
- Is 3-4 times more common in females and younger teenagers.
- Is the commonest cause of prolonged school absence.
- It is estimated that there are about 10,000 cases in Ireland.
- The estimated rate in Ireland is 0.2-0.4% so at least 440-880 cases would have been expected in 230,000 vaccinated girls in Ireland.
- The reported numbers are, in fact, lower than expected.
- Scientific studies in the UK (2013) and Norway (2017), a worldwide review by the European Medicine Agency (2015) and WHO (2017) have shown CFS is not linked to HPV vaccine

Impact of HPV vaccine

- HPV vaccines are more than 99% protective against infection with cancer-causing HPV virus types.
- HPV vaccines are most effective when given at the age of 12 to 13 years and will provide protection throughout adulthood.
- Countries with high vaccine uptake rates have seen the best impact.
 - In Scotland 90% of girls have been vaccinated since 2008. There has been a 90% decrease in HPV infections in vaccinated girls which is even better than expected.
 - Precancerous growths of the cervix have been reduced by more than 50% in countries such as Australia, Sweden and Scotland.
 - In Australia, Gardasil vaccine has prevented 1 in every 2 new cervical cancers.

Worldwide, regulatory authorities report no increase in any long-term medical condition in vaccinated compared to non-vaccinated girls.

Why does the HSE request that only HSE information should be given to parents?

Parents should receive information that is

- scientifically accurate and endorsed by national and international expert and regulatory bodies.
- in line with HIQA guidance "Communicating in Plain English" (July 2015).

The information in the HSE leaflet

- includes all the known scientifically proven side effects from HPV vaccine.
- is prepared from the licensed documentation for the vaccine and provides links where parents can go to read further information.
- is presented in clear simple language and approved by the National Adult Literacy Agency so that it can be easily understood.
- provides links to further information on the vaccine including the Patient Information Leaflet.

Why are HPV (and other) vaccines given in schools?

- There is scientific evidence that vaccine uptakes are much higher when they are given in schools, especially among adolescents.
- Countries that have seen the best impact of HPV vaccine such as Scotland and Australia have school based programmes.

- The World Health Organization recommends that school age vaccines are given in schools (most recently in May 2017).
- Giving vaccines in schools promotes equality. All students have equal opportunity to be vaccinated.

Older girls in school can still get the vaccine – they should contact the HSE school vaccination teams.

The World Health Organization strongly recommends HPV vaccination to prevent cervical cancer.

Visit www.hpv.ie for more information