Facts about Vaccines for students starting secondary school in 2019

Published by the HSE National Immunisation Office, September 2019
Order Code: HNI01286

This factsheet gives you more information about the vaccines available to your child in their first year of secondary school. Please also read the leaflet “Vaccines to protect your child against: HPV, MenACWY and Tdap - Information for parents and students starting secondary school in 2019” that comes with this factsheet.

You will find more information on www.hpv.ie and www.immunisation.ie.

Common questions from parents

What could happen if I do not get my child vaccinated?

• Your child may be lucky and go through life without ever being exposed to these diseases; or
• Your child may be exposed to any of these diseases either as a child or as an adult. If so, there is a good chance they will become infected and may develop one of the diseases described below.
• If your child becomes infected, they could spread the disease to others who are not protected, such as children who are too young to be vaccinated. Many people could get very sick and some could die if not enough people in your community are protected.

Why are vaccines given in schools?

• Research shows that more people, especially teenagers, get vaccinated when the vaccines are given in schools.
• Countries such as Scotland and Australia which have seen a large reduction in HPV-related diseases have school-based programmes.
• The World Health Organization recommends that vaccines for school-age children are given in schools.
• Giving vaccines in schools promotes equality. All students have an equal opportunity to be vaccinated.

Can I get my child vaccinated through their GP?

The HSE school vaccination teams will give HPV, meningococcal and Tdap vaccines to students in their first year of second-level school as part of the HSE vaccination programme. This is free of charge.

If you choose to get your child vaccinated through your GP, you may have to pay an administration fee and pay for the vaccines yourself.

How safe are vaccines?

• All vaccines go through extensive safety testing before they are licensed.
• Once in use, vaccine safety is monitored continually to identify side effects caused by the vaccine.
What is the HPV vaccine?
This is a vaccine to help prevent infection caused by human papillomavirus (HPV), one of the leading causes of cervical cancer.

When was the HPV vaccine introduced?
The HPV vaccine was introduced in Australia in 2007 and the UK in 2008. In 2010, the HPV vaccine was introduced in Ireland for girls in first year in secondary schools. The HPV vaccine will also be offered to boys from 2019, as research shows that the HPV virus can cause cancers and conditions that affects boys as well.

Does the HPV vaccine work?
International research studies have shown that the vaccine is very effective.
In Australia, studies have shown:
• a 77% reduction in the types of HPV responsible for most cervical cancers;
• an almost 50% reduction in the incidence of high-grade (significant) cervical abnormalities in girls under 18 years of age;
• a 90% reduction in genital warts in heterosexual men and women under 21 years of age.

In Scotland, nine out of every 10 girls aged 12 to 13 have received the HPV vaccination since 2008. Since then, there has been an 89% reduction in cervical pre-cancers in girls vaccinated. Cervical pre-cancers are changes in cells of the cervix (abnormalities) that, with time, have an increased risk of developing into cervical cancer.

How many doses of the HPV vaccine have been given?
Worldwide, more than 280 million doses of HPV vaccine have been given.
**HPV stands for human papillomavirus, which is a group of more than 200 viruses. Most people will get a HPV infection during their lifetime. It is spread by skin to skin contact, usually from sexual activity.**

HPV infection causes changes in the cervix (neck of the womb) that can develop into cervical cancer. HPV infection is most common in people in their late teens and early 20s. HPV infection rates are rising rapidly among women and men in high-income countries, including Ireland.

The HPV virus causes:
- almost all cervical cancers
- 9 out of 10 vulval cancers (the vulva is the area surrounding the opening of the vagina)
- 8 out of 10 vaginal cancers
- 9 out of 10 HPV-related anal cancers
- 9 out of 10 cases of genital warts

The HPV virus can also cause some cancers of the head, neck and penis.

How many countries give the HPV vaccine to girls?
More than 80 countries offer the HPV vaccine to girls including 32 countries in Europe.

Do any countries give the HPV vaccine to boys?
More than 20 countries including Australia and Canada offer the HPV vaccine to boys as well as girls. The UK and Ireland will also start offering HPV vaccine to boys in September 2019.

What are the benefits of getting HPV vaccine?
The table above compares the effects of HPV with the side effects of the vaccine.

Is the HPV vaccine safe?
All vaccines given by the HSE are licensed by the Health Products Regulatory Authority (HPRA) and the European Medicines Agency (EMA). This includes Gardasil 9 (the HPV vaccine used in Ireland). These agencies have strict procedures for licensing and monitoring vaccines to make sure they are safe and effective.


Are there any long-term side effects from the HPV vaccine?
Australia has been giving the HPV vaccine since 2007 and has not reported any long-term side effects. The USA has been giving the HPV9 vaccine since 2014 and has not reported any long-term side effects.

<table>
<thead>
<tr>
<th>Disease</th>
<th>Effects of disease</th>
<th>Side effects of the vaccine</th>
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<tbody>
<tr>
<td>HPV</td>
<td>HPV infection causes changes in the cervix (neck of the womb) that can develop into cervical cancer. HPV infection is most common in people in their late teens and early 20s. HPV infection rates are rising rapidly among women and men in high-income countries, including Ireland. The HPV virus causes: • almost all cervical cancers • 9 out of 10 vulval cancers (the vulva is the area surrounding the opening of the vagina) • 8 out of 10 vaginal cancers • 9 out of 10 HPV-related anal cancers • 9 out of 10 cases of genital warts</td>
<td>For every 1,000 people vaccinated, more than 1 in 10 will have: • pain, redness or swelling in the arm where the vaccine was given • headache More than 1 in 100 will have: • dizziness • nausea • mild fever • tiredness Allergic reactions can also occur</td>
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We are aware of stories circulating on social media claiming that the HPV vaccine causes an increase in cases of:

- postural orthostatic tachycardia syndrome (POTS) – an increase in heart rate that can make you feel faint and dizzy and
- complex regional pain syndrome (CRPS) – is a form of chronic pain that usually affects an arm or a leg.

The EMA conducted research in 2015 and concluded there was no evidence that the HPV vaccine leads to an increase in these conditions.

**Why is it important to get the HPV vaccine in the first year of secondary school?**

Research shows that younger people have a better immune response to the HPV vaccine than those in their late teens and early 20s.

Also, the vaccine doesn’t work as well in preventing HPV-related disease in young people who are sexually active and likely to have already been exposed to the virus.

**Will condoms prevent my child catching HPV?**

HPV is spread by intimate sexual skin-to-skin contact. Using condoms can reduce the risk of catching HPV, but they don’t offer complete protection. This is why it is important that your child gets the HPV vaccine and they should be encouraged to practise safe sex when they are older.

**How can I discuss the HPV vaccine with my child?**

You know best how much information your child needs about these vaccines. The leaflet that comes with this factsheet has been written in plain, easy-to-understand language so you could share this leaflet with your child or show them some of the videos on [www.hpv.ie](http://www.hpv.ie).

**Does the HSE share vaccination records with any screening service?**

Yes. We will share your daughter’s vaccination record with CervicalCheck – The National Cervical Screening Programme so that it can be linked to her future cervical cancer screening record. At present, screening is not available for any other HPV-related cancers. We will keep your daughter’s details absolutely confidential.

**Does my daughter still need to attend cervical screening when she is older?**

Yes. Even though the vaccine protects against 9 out of 10 cervical cancers, it is still important for girls to have regular screening when they are adults. This is why we will share your daughter’s vaccination details with CervicalCheck – The National Cervical Screening Programme.

You can read more about free cervical cancer screening for women on [www.cervicalcheck.ie](http://www.cervicalcheck.ie).

**Meningococcal ACWY**

**What is MenACWY?**

This is a vaccine that protects against some forms of meningococcal disease (a bacteria that causes meningitis and septicaemia), which can be a life-threatening illness. The MenACWY vaccine does not protect against other types of meningitis including that due to meningococcal B disease, Haemophilus influenzae b disease or viral meningitis.

This is why it is important to watch out for signs of:

- meningitis (inflammation of the lining around the brain), and
- septicaemia (blood poisoning)
- and get urgent medical attention if you are concerned.

Common signs include fever, stiff neck, headache, joint pains and a rash.
Meningococcal disease is a serious illness caused by the bacteria called Neisseria meningitidis. This bacterial infection can cause meningitis (inflammation of the lining around the brain) and septicaemia (blood poisoning). In older children and adolescents, the main symptoms of meningitis and septicaemia may include:

- a stiff neck
- a very bad headache (this alone is not a reason to get medical help)
- severe pains and aches in the arms, legs and joints
- being sleepy, less responsive, vacant, or confused
- a dislike of bright lights
- very cold hands and feet
- shivering
- rapid breathing
- red or purple spots that do not fade under pressure
- vomiting
- fever
- diarrhoea and stomach cramps
- a rash
- convulsions or seizures

Not everyone will develop all the symptoms listed. But, if your child develops some of these symptoms, especially red or purple spots, get medical help urgently.

The table below compares the effects of meningococcal disease with the side effects of the vaccine.

<table>
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<td>Meningococcal disease is a serious illness caused by the bacteria called Neisseria meningitidis. This bacterial infection can cause meningitis (inflammation of the lining around the brain) and septicaemia (blood poisoning). In older children and adolescents, the main symptoms of meningitis and septicaemia may include:</td>
<td>Meningococcal disease can cause meningitis which can leave people with after-effects, including:</td>
<td>The most common side effects in teenagers and young people are:</td>
</tr>
<tr>
<td>• a stiff neck</td>
<td>• memory loss</td>
<td>• pain, redness or swelling in the arm where the vaccine was given</td>
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<tr>
<td>• a very bad headache (this alone is not a reason to get medical help)</td>
<td>• behavioural and emotional problems</td>
<td>• headache</td>
</tr>
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<td>• severe pains and aches in the arms, legs and joints</td>
<td>• loss of hearing</td>
<td>• fever</td>
</tr>
<tr>
<td>• being sleepy, less responsive, vacant, or confused</td>
<td>• loss of sight</td>
<td>• nausea</td>
</tr>
<tr>
<td>• a dislike of bright lights</td>
<td>• acquired brain injury</td>
<td>• fatigue (feeling tired)</td>
</tr>
<tr>
<td>• very cold hands and feet</td>
<td>It can also cause septicaemia which can damage the blood vessels and reduce the flow of oxygen to the skin, underlying flesh and major organs such as the kidneys, liver and lungs. This can lead to:</td>
<td>These symptoms should last no more than 24 hours. Sometimes, a small, painless lump develops, but this usually disappears in a few weeks.</td>
</tr>
<tr>
<td>• shivering</td>
<td>• skin and tissue damage</td>
<td></td>
</tr>
<tr>
<td>• rapid breathing</td>
<td>• bone growth problems</td>
<td></td>
</tr>
<tr>
<td>• red or purple spots that do not fade under pressure</td>
<td>• organ failure such as kidneys, liver, lungs and nervous system</td>
<td></td>
</tr>
<tr>
<td>• vomiting</td>
<td>• loss or partial loss of limbs (arms and legs)</td>
<td></td>
</tr>
<tr>
<td>• fever</td>
<td>• death</td>
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Tdap

What is the Tdap vaccine?
The Tdap vaccine protects against diphtheria, tetanus and pertussis. We explain each of these in the table.

The table below compares the effects of each disease with the side effects of the vaccine.

<table>
<thead>
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<tr>
<td>Tetanus – caused by bacteria in the soil which release a toxin that causes painful muscle spasms, convulsions and lockjaw.</td>
<td>If 1,000 people get tetanus: • 100 will die The very young or old are at greatest risk.</td>
<td>For every 1,000 people vaccinated, one in 10 will have: • pain, redness or swelling in the arm where the vaccine was given • fever</td>
</tr>
<tr>
<td>Diphtheria – this is a contagious bacterial disease spread by close contact with someone who has the disease or is a carrier. It causes a sore throat and severe breathing difficulties.</td>
<td>If 1,000 people get diphtheria: • 50 will die The bacteria release a toxin – a poison – which can cause paralysis (loss of use of one or more muscles in your body) and heart failure.</td>
<td>For every 1,000 people vaccinated, one in 10 will have: • pain, redness or swelling in the arm where the vaccine was given • fever</td>
</tr>
<tr>
<td>Pertussis – (Whooping cough) – this is spread by close contact with someone who is infected. It causes a ‘whooping’ cough and vomiting. The disease can last up to three months.</td>
<td>If 1,000 people get pertussis: • 2 will die from pneumonia or brain damage • 10 will have fits • 1 will get encephalitis (inflammation of the brain) • 50 will get pneumonia • 200 will need to go into hospital</td>
<td>For every 1,000 people vaccinated, one in 10 will have: • pain, redness or swelling in the arm where the vaccine was given • fever</td>
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</tbody>
</table>