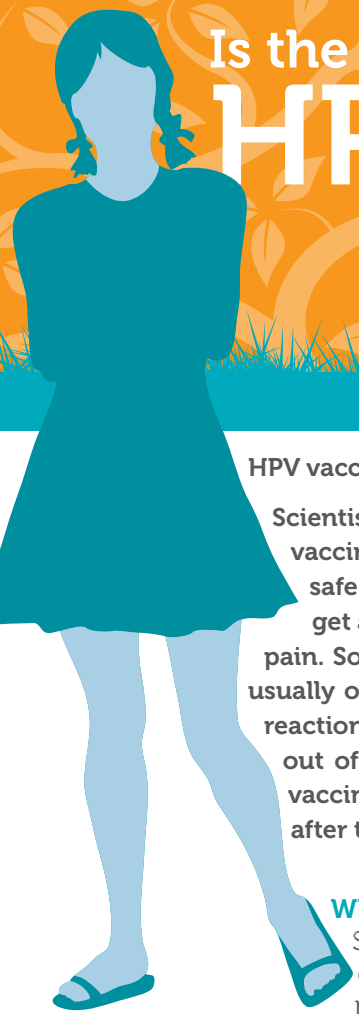
Is the HPV vaccine really safe?

For Families

SKAI : Sharing Knowledge About Immunisation



HPV vaccines (sometimes called cervical cancer vaccines) **used in Australia are very safe.**

Scientists and medical researchers from around the world, including Australia, tested all of the HPV vaccines (Gardasil®, Gardasil9®, and Cervarix®) that are available in Australia to make sure they are safe for girls and boys[1]. Their research found that most people who get one of the vaccines will get a sore, red spot on their arms where the needle is given. You can use a cool pack to relieve this pain. Some will get a fever or headache[2], which you can relieve with paracetamol. These symptoms usually only last a few days. Occasionally, a person who has any vaccine can have a serious allergic reaction, called anaphylaxis, to one of the ingredients in that vaccine[1]. This happens to about three out of every one million people who get the HPV vaccine[1,2] and the nurses or doctors who give vaccines are trained to treat it. These reactions can be frightening but most people recover quickly after they are treated and don't have any long-term problems.

Why are there rumours that this vaccine can have serious side effects?

Some groups are claiming on social media that vaccination could cause autoimmune disorders, chronic fatigue syndrome, fibromyalgia, or chronic regional pain syndrome. There was also a rumour that it could cause early menopause or infertility. These health problems are very rare and usually start around the same age that HPV is given[1,3] so it isn't surprising that people wonder if the vaccine caused the problem. However, independent scientists from all over the world have investigated and found that the rumours aren't true[4].

Could there be rare side effects we don't know about yet?

Occasionally, vaccines can have side effects that are so rare they don't show up until the vaccine has been given to very large numbers of people. In Australia, doctors and scientists review any reports of possible side effects, received from parents or health professionals. If the reviewers suspect a vaccine is causing any health problems, they will investigate it thoroughly. Scientists can temporarily stop doctors and nurses from using the vaccine while they investigate if they suspect it is causing serious health problems[3]. You can get more information about how vaccines are tested and monitored in the SKAI fact sheet called How are vaccines shown to be safe?[5] or from the National Centre for Immunisation Research and Surveillance (NCIRS)[1].

Researchers in Australia, the US, Scandinavia, the UK and several other countries have checked millions of medical records to see if people who get the HPV vaccine are more likely to suffer from rare health problems. They found that just as many unvaccinated people suffer from rare health problems as vaccinated people do[1-4,6]. That means the vaccine can't be the cause of their health problems — even if they started very soon after vaccination. People who have been vaccinated don't have any more problems having their own children than people who have not[1]. Over 9 million doses of HPV vaccine have been given to girls and boys in Australia since 2007 and there haven't been any long-term side effects[3].

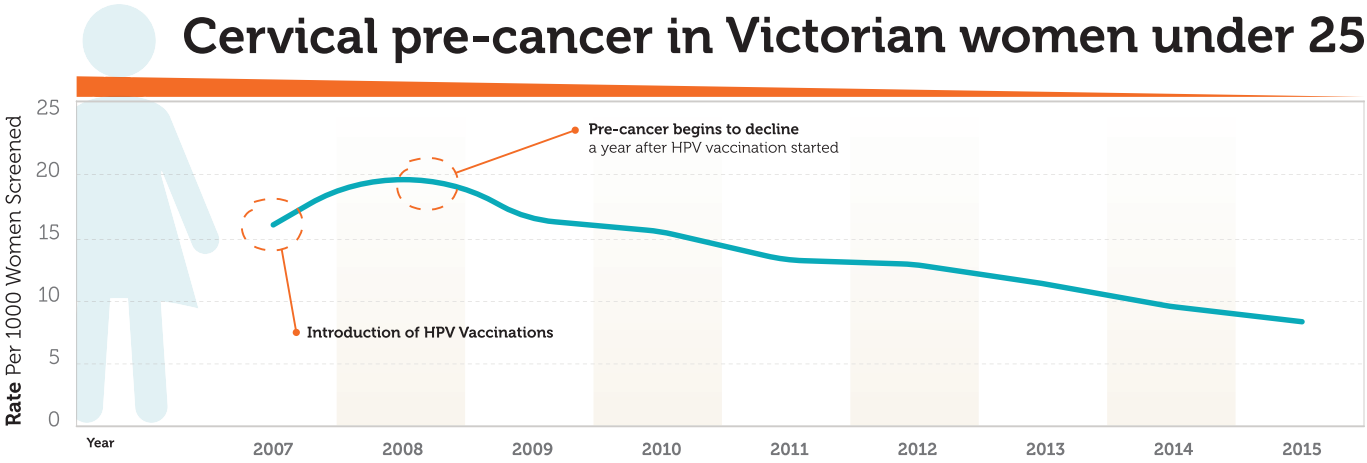
Why does my child need to have the vaccine?

Your child needs this vaccine to protect them from being infected with a virus, called human papillomavirus (HPV), that can cause cancer. The vaccine gives people the best protection from HPV infection, and lasts longest, if they get it when they are between 9 and 12 years old[1].

Everyone needs to get this vaccine because HPV infection is so common and some types of HPV cause cancer. Almost 90% of people get HPV infection if they are not vaccinated[1,7] and there is no treatment for HPV infection. Most people's immune systems are able to clear HPV viruses in about 12 months and most people who catch HPV don't even know they have it. However, there are some types of HPV that tend to stick around[1] for decades and these are the types that can cause cancers in both women and men. Almost everyone who is diagnosed with cervical cancer also has HPV[8]. So, vaccinating people against HPV protects them from cancers caused by some types of HPV that don't clear up on their own. Some other types of HPV cause genital warts (sores that appear on or near a person's vagina or penis).

Does the vaccine work?

Women who were vaccinated against HPV when they were younger are much less likely to need treatment for pre-cancer (or cancer) during their lifetimes. The vaccine also protects both men and women from getting genital warts[9]. This graph[10] shows that the vaccine is protecting women from developing pre-cancerous growths during their late teens and early twenties.



What do other parents decide to do?

Almost all Australian parents decide to protect their children from HPV infection. In 2015, nearly 90% of parents decided to give their children an HPV vaccine[11]. Most scientists and medical professionals agree that the vaccine is the safest and most reliable way to protect children from getting cancer caused by HPV infections when they get older[4].

Where can I get more information?

If you or your child need more information (including videos) you can find it at **health.gov.au/immunisation** or the Cancer Council's website **hpvvaccine.org.au**

This fact sheet was written by Nina Berry PhD and Julie Leask PhD from the University of Sydney. We are a part of a group of independent researchers called the SKAI Collaboration. Julia Brotherton PhD, from the Victorian Cytology Service, Margie Danchin PhD from the University of Melbourne, Kristine Macartney MD from NCIRS, Rachel Skinner PhD from USYD, and Melina Georgousakis PhD helped us get the details right. The Australian Government Department of Health funded the project. We wrote this sheet to answer some questions parents have about HPV vaccination. You can find out more about us at skaiproject.org.

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