Human papillomavirus (HPV) infections occur in both men and women. It is very common to be infected with one or more types of genital HPV shortly after sexual activity starts. Most HPV infections cause no symptoms and are cleared naturally from the body in one to two years without the person knowing they were infected.

Some types of HPV can cause genital warts and other types can cause some cancers. These cancers include cervical cancer in women, and cancers of the genital area, mouth and throat in men and women.

The HPV vaccine GARDASIL®9 protects against seven HPV types which cause over 90 per cent of cervical cancers in women and over 90 per cent of HPV-related cancers in men. It also protects against an additional two HPV types which cause 90 per cent of genital warts.

**HPV and cancer**

Depending on their ability to cause cancer, some types of HPV are classified as high risk, and others as low risk.

Some of the low-risk HPV types can cause minor changes to cells or cause genital warts. Low-risk infections cannot lead to cancer. Infections caused by low-risk HPV types are usually cleared naturally from the body within one to two years.

Some high-risk types of HPV (including types 16 and 18) can take longer to clear from the body. In some people, infection with these HPV types remains for a long time. In these cases, there is a higher risk of developing significant cell changes (dysplasia), and these can progress to invasive cancer if not detected and treated. It is rare for HPV infection to lead to cervical cancer, and if it does, it usually takes ten years or more.

From December 2017 the Cervical Screening Test replaces the use of the Pap test in screening for cervical cancer. The Pap test used to look for cell changes in the cervix, whereas the new Cervical Screening Test looks for HPV which can lead to cell changes in the cervix.

**Immunisation against HPV**

The HPV vaccine GARDASIL®9 protects against seven HPV types which cause over 90 per cent of cervical cancers in women and over 90 per cent of HPV-related cancers in men. It also protects against an additional two HPV types which cause 90 per cent of genital warts.

The HPV vaccine is most effective when given to all young people before they become sexually active and are exposed to HPV. The recommended age for vaccination is 12 to 13 years, as this is when the body produces the
greatest immune response to the vaccine. The vaccine prevents disease but does not treat existing HPV infections.

Since the introduction of the HPV vaccination program in 2007, the number of young Victorian women less than 18 years with high-grade cervical abnormalities has almost halved. The incidence of genital warts in heterosexual men and women less than 21 years has also been reduced by 90 per cent. The vaccine's impact on cancers will not be seen for some decades, as HPV-related cancers can take over 10 years to develop.

Immunisation against HPV using Gardasil®9 involves a course of two injections a minimum of six months apart for children under 15 years of age, or three injections over a six month period for people from 15 years of age.

Immunocompromised individuals require three doses of the HPV vaccine to attain adequate protection regardless of their age. The doses should be given with a minimum interval of two months between doses one and two, and a minimum of four months between doses two and three.

In Victoria, the HPV vaccine Gardasil®9 is available free of charge for all adolescents in year seven of secondary school (aged 12-13 years) under the National Immunisation Program. The two-dose course of the vaccine is given at school, or can also be given by a local doctor or at a council immunisation session.

Contact your state or territory health department for more information about HPV vaccination at your school.

People under 20 years of age who missed the vaccine at secondary school can access free catch-up doses at their local doctor or at a community immunisation session. From 15 years of age the Gardasil®9 vaccine is given as a three-dose course.

- Find my local Council
- Find my nearest immunisation provider

The Victorian Government has also provided funding for a free catch-up HPV vaccination program until 31 October 2019 (while stocks last) for MSM aged up to 26 years who may have missed the school aged vaccination program.

People from 20 years of age are not eligible for free vaccination through the National Immunisation Program therefore they will have to pay for the vaccine. The HPV vaccine is licensed for males aged 9-26 years and females aged 9-45 years.

Immunisation is also recommended for people who are at increased risk including:

- adults with weakened immune systems -- the decision to immunise will take into account the likelihood of past HPV infection and future risk.

Pregnancy and HPV immunisation

Immunisation against HPV is not recommended for women who are pregnant. Women who become pregnant after starting the HPV vaccination course should not receive any further doses of the vaccine while pregnant. They can complete the course of vaccination after the birth of their baby. The HPV vaccine can be given to women who are breastfeeding.

Pre-immunisation checklist

Before receiving the vaccine, tell your doctor or nurse if you (or your child):

- are unwell (temperature over 38.5 C)
- have allergies to any other medications or substances
- have had a serious reaction to any vaccine
- have had a serious reaction to any component of the vaccine
- have had a severe allergy to anything
- have a disease, or are having treatment, that causes low immunity
- are taking any prescription or over-the-counter medication
- are pregnant or intend to become pregnant.

Side effects of the vaccine against HPV

Immunisation against HPV is effective and safe, although all medication can have unwanted side effects. Common

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side effects following immunisation are usually mild and temporary (occurring in the first few days after vaccination). Specific treatment is not usually required.

Side effects may include:

- localised pain, redness and swelling at the injection site
- low-grade temperature (fever)
- mild headache
- mild nausea.

Managing fever after HPV immunisation
If you experience the common side effect of fever after immunisation, treatment options that can reduce its effects include:

- giving extra fluids to drink
- not overdressing
- although routine use of paracetamol after vaccination is not recommended, if fever is present, paracetamol can be given - check the label for the correct dose or speak with your pharmacist, (especially when giving paracetamol to children).

Managing injection site discomfort after HPV immunisation
Many vaccine injections may result in soreness, redness, itching, swelling or a burning sensation at the injection site for one to two days. Paracetamol might be required to ease the discomfort.

Concerns about side effects of immunisation
If a side effect following immunisation is unexpected, persistent or severe, or if you are worried about yourself or your child's condition after a vaccination, see your doctor or immunisation nurse as soon as possible or go directly to a hospital. Immunisation side effects may be reported to SAEFVIC, the Victorian vaccine safety and central reporting service.

In other states or territories, you can discuss with your immunisation provider how to report adverse events. It is also important to seek medical advice if you (or your child) are unwell, as this may be due to other illness rather than because of the vaccination.

Rare side effects of immunisation
There is a very small risk of a serious allergic reaction (anaphylaxis) to any vaccine. This is why you are advised to stay at the clinic or medical surgery for at least 15 minutes following immunisation, in case further treatment is required.

Immunisation and HALO
The immunisations you may need are decided by your health, age, lifestyle and occupation. Together, these factors are referred to as HALO.

Talk to your doctor or immunisation provider if you think you, or someone in your care, have health, age, lifestyle or occupation factors that could mean immunisation is necessary. You can check your immunisation HALO using the Immunisation for Life infographic (pdf) downloadable poster.

Where can I get more information about HPV immunisation?
Find out more about immunisation by speaking with your health professional. The best place to start is with your GP. You can also ask your maternal and child health nurse, paediatrician, local community health centre and local council immunisation service.

There is also lots of information online. When looking for immunisation information, stick to reliable information providers, such as:

- Better Health Channel
- Immunise Australia Program
- Immune Hero

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You can also call:

- **NURSE-ON-CALL** Tel. **1300 60 60 24** -- for expert health information and advice (24 hours, 7 days)
- **Immunisation Section, Department of Health and Human Services**. Victorian Government Tel. **1300 882 008**
- **Immunise Australia Information Line** Tel. **1800 671 811**
- **Melbourne Sexual Health Centre** Tel. **(03) 9341 6200** or **1800 032 017** (toll free from outside Melbourne metropolitan area only)
- **Cancer Council Helpline** Tel. **13 11 20**
- Victorian vaccine safety service (**SAEFVIC**) Tel. **1300 882 924** (option 1) - the line is attended between 9 am and 4 pm and you can leave a message at all other times

This page has been produced in consultation with and approved by:

Department of Health and Human Services - RHP&R - Health Protection - Communicable Disease Prevention and Control Unit

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