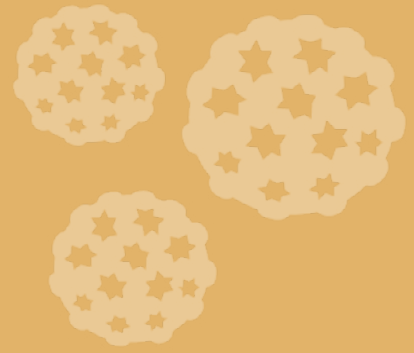


# 2024 HPV GUIDE

## FOR HEALTHCARE PROFESSIONALS



### ABOUT HPV

Around **90% of Australians will get human papillomavirus (HPV) at some point in their lives**<sup>[1]</sup>

HPV can cause genital warts in some people, and different types of HPV can cause cell changes that can lead to cancers.<sup>[2]</sup> These include cancers of the cervix, genital area, anus, mouth and throat.<sup>[3]</sup>

### CAUSE OF HPV

HPV is a common virus which can affect anyone, regardless of biological sex.

There are over 100 types of HPV; they vary according to the site of infection. Around 40 types infect the anogenital area, they are known as genital HPV.<sup>[4]</sup> Depending on their ability to cause cancer, the HPV types are classified as low risk or high risk.

### HPV SYMPTOMS

Most HPV infections cause no symptoms and are cleared naturally from the body in one or two years.

Low risk genital HPV types (including types 6 and 11) can cause genital warts. Genital warts do not cause cancer. Infections caused by these HPV types are usually cleared from the body within a short time.

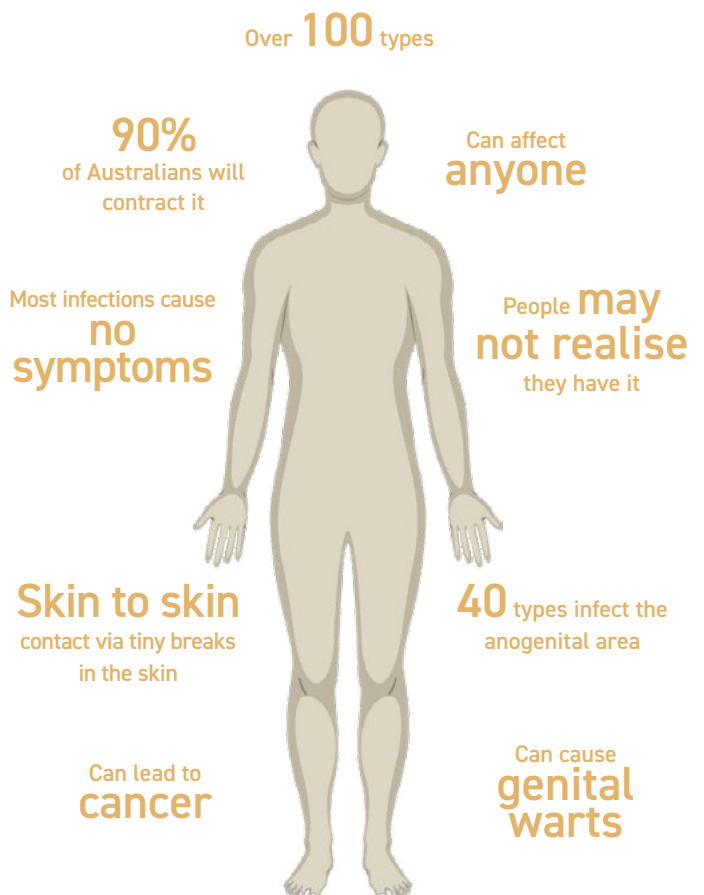
High risk types (including types 16 and 18) have a higher risk of significant cell changes which can progress to cancer if not discovered and treated. A further 11 types are classified as carcinogenic (types 31, 33, 35, 39, 45, 51, 52, 56, 58, 59) or probably carcinogenic (type 68). Infections with these HPV types remain in the body for a long time. HPV related cancers can take up to ten years to develop.

### HPV TRANSMISSION

HPV is spread by skin to skin contact via tiny breaks in the skin. Genital HPV is spread through intimate genital contact.<sup>[5]</sup> Individuals can be exposed to HPV as soon as they become sexually active even with just one partner. People with HPV infection may not realise they have it and can continue to spread it to others.

People with multiple sexual partners are at increased risk of developing HPV.

It is not very common but sometimes during pregnancy, HPV may be passed on to the newborn child. The child could develop a dangerous condition known as recurrent respiratory papillomatosis where warts develop inside the throat.<sup>[6]</sup>



## HPV PREVENTION

### WHO SHOULD BE VACCINATED?

#### CHILDREN

HPV vaccine may be considered in children aged <9 years who are at risk of exposure to HPV (for example, have a history of sexual abuse or have been diagnosed with a sexually transmitted infection). A subsequent dose should be given as routinely recommended at age ≥9 years, ideally at age 12–13 years.<sup>[4]</sup>

#### ADOLESCENTS

HPV vaccine is now recommended as a single dose on the National Immunisation Program (NIP) for children:

Vaccine	When is it given?	Doses
Gardasil 9	12-13 years of age (Year 7)	Single Dose

#### CATCH-UP PROGRAM

People who have not received HPV vaccine by 13 years of age can receive a single dose up to 25 years of age (increased from 19 years of age).

A 3-dose schedule is recommended for:

- Anyone who is immunocompromised (at any age)
- 9vHPV vaccine at 0, 2 and 6 months intervals

Those who receive first HPV vaccine dose on or after their 26th birthday, either:

- 9vHPV vaccine at 0, 2 and 6 months
- 2vHPV vaccine at 0, 1 and 6 months

#### MALES WHO HAVE SEX WITH MALES

Males who have sex with males are at increased risk of genital warts and anal cancer.

#### FEMALES TREATED FOR HIGH-GRADE CERVICAL DISEASE

HPV vaccination is recommended for females who have high-grade cervical disease to prevent re-infection (from a partner) with another HPV type.

#### ADULTS 26 YEARS OR OLDER

Routine vaccination is **not** recommended in all adults aged 26 years and older, as they are likely to have been exposed to one or more HPV type through sexual activity.

## VACCINES

Two HPV vaccines are registered in Australia:

#### GARDASIL 9 (9VHPV):

Gardasil 9 replaced Gardasil in the 2018 NIP. Gardasil 9 includes the HPV types covered by Gardasil (6, 11, 16 and 18) plus an additional five cancer producing HPV types (31, 33, 45, 52 and 58).<sup>[7]</sup> These five HPV types cause an additional 15% of all cervical cancers above those caused by HPV 16 and 18.<sup>[8]</sup> Gardasil 9, HPV vaccine is free at school for all males and females aged 12-13 years through the National Immunisation Program. This is the best time to vaccinate before individuals become sexually active. If individuals have become sexually active and they have been infected with any of the nine types of HPV then vaccination will be less effective in reducing cancers and other diseases. This age group also has an improved immune response to the vaccine compared to older teenagers.<sup>[9]</sup> Gardasil 9 is registered for males and females 9-45 years of age.



#### CERVARIX (2VHPV):

Cervarix protects against HPV 16 and 18. It is registered for females aged 10-45 years of age and is available on private prescription.



## OTHER PREVENTION MEASURES

#### CERVICAL SCREENING

Vaccination does not prevent infection against all HPV types therefore cervical screening remains an important preventative strategy against cervical cancer.

From 1st December 2017, under the renewed National Cervical Screening Program, the two-yearly Pap test for people with cervixes aged 18 to 69 years changed to a five yearly human papillomavirus (HPV) test if aged between 25 to 74 years.<sup>[10]</sup>

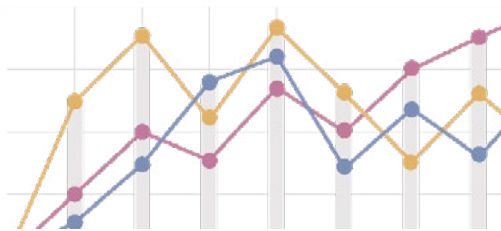
#### CONDOMS

Condoms offer some but not complete protection against HPV as they do not cover all parts of the genital area.

## HPV VACCINE EFFICACY

Multiple studies have found a single dose of 9vHPV provides similar protection against HPV 16 and 18 as two-dose and three-dose schedules.<sup>[11][12]</sup>

In a randomised, multi-centre, double-blind, controlled trial of Kenyan females, aged 15-20 years, it was found that single-dose bivalent and nonavalent HPV vaccines were each highly effective (VE 97.5%) in preventing incident persistent oncogenic HPV infection, similar to multi dose regimens.<sup>[13]</sup>



## VACCINE SAFETY

Immunisation against HPV is safe and effective. Side effects after immunisation are usually mild and transient (occurring in the first few days after vaccination). Side effects may include: pain, swelling and redness around the injection site, mild fever, headache or nausea.<sup>[14]</sup>



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