Pharmaceutical Society of Australia

HPV Quick Reference Guide

HPV and Vaccination

Australia leads the world in Human papillomavirus (HPV) vaccination rates, with elimination of HPV in sight if current vaccination and screening rates are maintained.[1] Coverage rates among adolescents have remained steady since 2021, with male coverage lagging behind female coverage (77.6% male to 80.6% females in 2025).[2]

The optimal age for vaccination is around 12-13 years of age, prior to expected exposure to HPV.[3] Vaccination is often delivered via school-based programs, but due to various reasons such as illness or relocation children may miss the opportunity to receive the vaccine. In 2025 two out of 10 adolescents has not received a dose by 15 years of age, with this increasing to three out of 10 in Aboriginal and Torres Strait Islander adolescents.[4]

Vaccination has been shown by multiple studies to reduce rates genital herpes and pre-cancerous lesions.[5]

Rates of genital warts have declined more than 90% in vaccinated people.[6]

Reduction in cervical cancer rates between 86-92% (in long-term international studies)[6]
*In women vaccinated at age 16 or younger

90-100% reduction in cancerous and pre-cancerous lesions in females 16-26[6]

Gardasil-9

Gardasil-9 is a single-dose vaccine that contains virus-like particles of nine different HPV types (9vHPV). **In Australia it is recommended to be received by all adolescents and young adults from age nine and onwards.**[3]

The vaccine is funded under the National Immunisation Program for young people aged 12 to 25 years of age.[3]

While vaccination does not treat existing infection or prevent disease caused by existing infection there is still benefit to vaccination for sexually active men and women. Adults vaccinated for the first time when older than 25 may need a different dosing schedule.

Gardasil-9 is indicated for males and females up to 45 years of age.[7]

ATAGI recommends that older adults can receive 9vHPV if they are at risk of future HPV exposure.[3]

Who should not receive Gardasil-9?[3,7]

There are only two absolute contraindications to HPV vaccine:

- Anaphylaxis after a previous dose of HPV vaccine or any component of HPV vaccine
- Anaphylaxis to yeast

Caution

Pregnancy - Vaccination is not recommended in pregnancy due to a lack of evidence of use in large populations. There is evidence suggesting that vaccination does not harm mother or fetus if given inadvertently.[3]

The vaccine should be given with caution to people with thrombocytopenia or coagulation disorders due to risk of bleeding following administration.

Refer to product information and Australian Immunisation Handbook for more information.

Dose schedule

Gardasil Product Information suggests a three-dose schedule, at 0, 2 and six months. However, the Australian Immunisation Handbook recommends a single dose for immunocompetent people who receive the vaccination before their 26th birthday[3]

Clinical trials showed efficacy of a single-dose schedule of 9vHPV was 95.7% in young women aged 15-20 years.[3]

Variation from schedule[3]	
Starting vaccination age > 26 years old	Three doses at 0, 2, 6 months schedule
People who are immunocompromised (any age)	Three doses at 0, 2, 6 months schedule

Administration

Administration is by intramuscular injection. The deltoid is the recommended injection site for all people over the age of 12 months. ***(Link to video of IM administration)***

Pharmacist immunisers are permitted to initiate and administer Gardasil-9 nationwide, with some differences in age eligibility.[8]

The NIPVIP program funds the administration fee for National Immunisation Program (NIP) funded HPV vaccines in community pharmacy for people up to their 26th birthday (subject to state and territory age restrictions).[9]

Post-vaccination observation

As per ATAGI and PSA recommendations, all patients should remain in the pharmacy or vaccination setting for at least 15 minutes after vaccination.[3,10] This allows for prompt recognition and management of any immediate adverse events, such as syncope or anaphylaxis.

Coadministration

Co-administration of HPV vaccines is generally considered safe. Co-administration has been specifically studied with the following vaccines, using different injection sites:[3,7]

- dTpa and dTpa-IPV
- Hepatits B
- MenACWY
- COVID-19 vaccinations

Potential side effects

Gardasil is generally well-tolerated. HPV vaccines have been used globally for 20 years, and have been shown to be safe.[3,6,7]

Injection site reactions are the most common adverse events	Rare but serious adverse events occur at the same rate as other vaccines including
• Pain • Redness • Swelling	Anaphylaxis

Storage

Ensure the vaccine is kept at +2°C to +8°C at all times, must not be frozen and must remain in the carton until use to protect from light.

Pharmacists must follow the 'National vaccine storage guidelines: Strive for 5.[12]

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