Why has the NCSP changed?

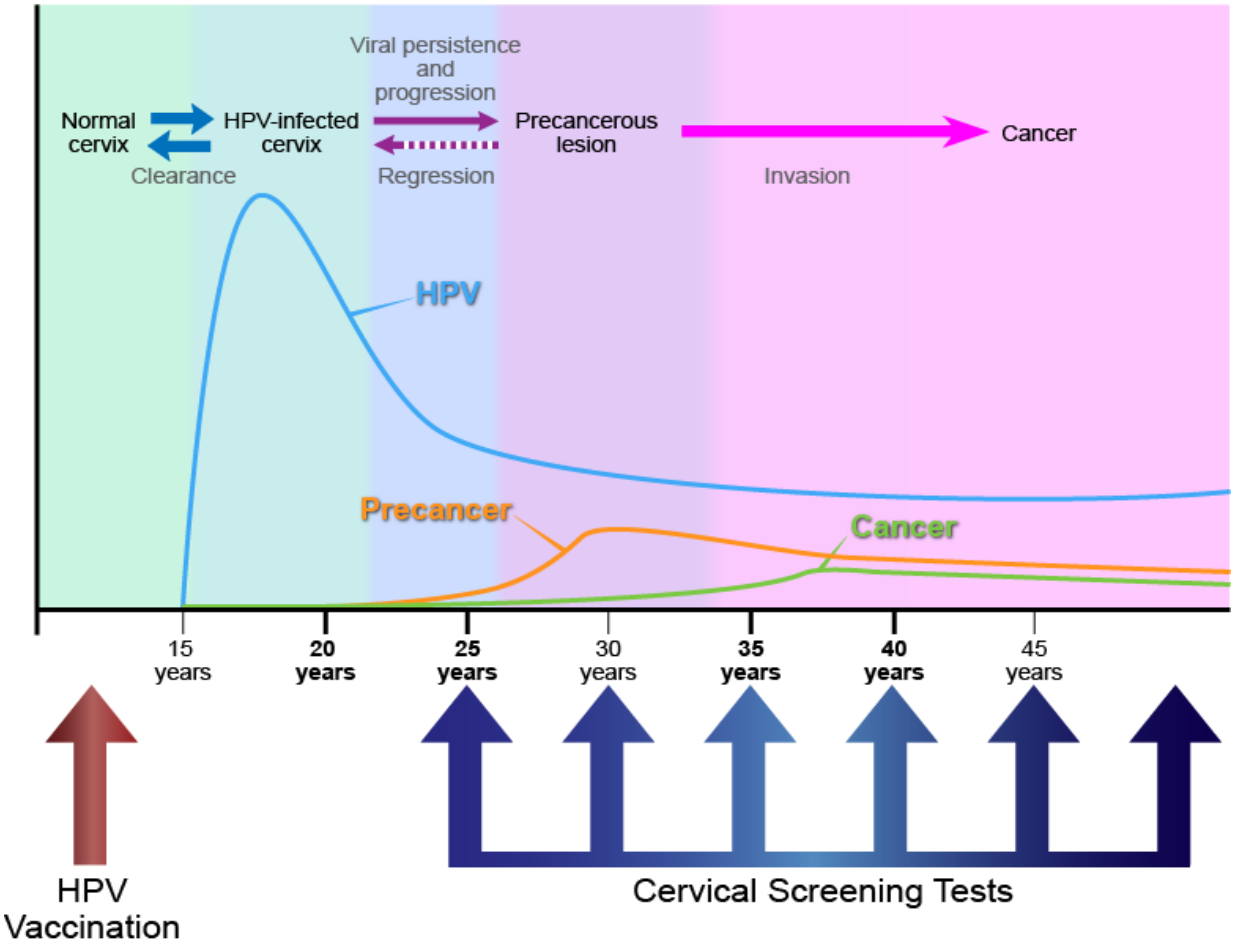
The screening test and testing intervals were recommended by the Medical Services Advisory Committee after a comprehensive investigation of clinical evidence and statistical modelling, which was completed between 2012 and 2014.[1] The program aims to achieve the optimal balance between risks and benefits of screening.[1]

The renewed NSCP is expected to result in a significant reduction (24–36%) in both the incidence of cervical cancer and mortality due to cervical cancer among Australian women.[1]

Why test for HPV?

By testing for the presence of oncogenic HPV as well as cytology when needed, the new cervical screening test is more accurate than cytology alone (ie Pap tests). HPV infection is an earlier marker of the potential for progression to a high-grade lesion or cancer than abnormal cytology (Figure 1).[1]

Figure 1. Timing of cervical cancer screening.



Adapted from Schiffmann M, Castle PE (2005). The promise of global cervical-cancer prevention. N Engl J Med 353:2101-2104

More than 99% of cervical cancers (squamous cell carcinomas and adenocarcinomas) are caused by a HPV infection.[2] More than 70% of cervical squamous cell carcinomas and about 78% of cervical adenocarcinomas are caused by oncogenic HPV types 16 and 18. HPV 16 is

the most carcinogenic, accounting for about 55–60% of cervical cancers, while HPV 18 accounts for a further 10–15% of cervical cancers.[1]

HPV is easily transmitted through skin contact during sexual activity. HPV infection is extremely common in men and women who have ever been sexually active.[2] Up to 80% of people (men and women) are infected with genital HPV at some time during their life.[3] Prevalence is high in young women (30% within 1 year of becoming sexually active and 48% within 3 years), including in those who have only had one sexual partner.[1]

HPV infections and associated cytological abnormalities are normally cleared naturally by the immune system. Most infections are cleared by the immune system within 1–2 years.[2] It is estimated that fewer than one in 10 new HPV infections results in cervical cancer.[1]

Persistent HPV infection and cytological abnormalities can develop into cervical cancer. Women with persistent HPV infections, especially with HPV 16, are at significantly higher risk of cervical cancer and its immediate precursor lesion, cervical intraepithelial neoplasia grade 3 (CIN3).[1] It usually takes 10–15 years for an HPV infection to develop into cervical cancer.2

Why do cervical screening for HPV-vaccinated women?

The HPV vaccination protects against HPV types 16 and 18, but does not protect against other oncogenic HPV types.[2]

Why raise starting age to 25?

Starting age 25 achieves the best balance of benefits and harms for cervical screening.[1]

Except for women at higher risk due to early sexual activity before age 14 or immune deficiency, routine cervical screening is not recommended in women under the age of 25 years for several reasons:

- Cervical cancer is rare in women younger than 25 years. HPV infection and cervical abnormalities are common in women younger than 25, but these usually clear without treatment.[2] Even in completely unvaccinated populations, rates of invasive cervical cancer are low in women younger than 25 years.[1]
- HPV vaccination, which began in 2007, is expected to substantially reduce infection rates in young women.[1]
- Cervical screening has not been shown to be effective in women younger than 25 years.[1]

References

1. Cancer Council Australia Cervical Cancer Screening Guidelines Working Party (2017). National Cervical Screening Program: Guidelines for the management of screen-detected abnormalities, screening in specific populations and investigation of abnormal vaginal bleeding. Sydney: Cancer Council Australia. Available at: https://wiki.cancer.org.au/australia/Guidelines:Cervical_cancer/Screening/Introduction
2. Australian Government Department of Health. Changes to the National Cervical Screening Program (NCSP) for Healthcare providers [factsheet]. Available at: http://www.cancerscreening.gov.au/internet/screening/publishing.nsf/Content/1-december-changes-fact-sheet
3. Australian Government Department of Health (2016). The Australian immunisation handbook. 4.6 Human papillomavirus. 4.6.3 Epidemiology (chapter amended July 2016) [website] Available at: http://www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/Handbook10-home~handbook10part4~handbook10-4-6#4-6-3
4. Schiffmann M, Castle PE (2005). The promise of global cervical-cancer prevention. N Engl J Med 353:2101-2104.