What is HPV?
The human papillomavirus (HPV) is a group of over 150 related viruses. About 40 of them can infect the genital area, but these can also infect the mouth and throat. These viruses are sexually transmitted, through skin-to-skin contact, and are really common, so if you are – or ever have been – sexually active, there’s a fair likelihood of contracting one or more of them at some point in your life. Even if you’ve had only one partner, you could be exposed to HPV.

Most of the time, an infection goes away on its own within one or two years and you won’t be aware that you’ve had it. But if your HPV infection persists, you could face health problems such as genital warts and a variety of cancers, like oropharyngeal cancer (at the back of the throat, base of tongue and tonsils) or cervical cancer – depending on the strain of the virus you’re infected by. HPV types 6 and 11 cause 90% of all genital warts. Types 16 and 18 are responsible for most HPV-caused cancers.

If your immune system is weak, and if you smoke, your risk of developing cervical cancer (among others) is increased. Cancer Research UK notes that, ‘a recent meta-analysis showed the risk of squamous cell cervical cancer is increased by 50% in women who currently smoke.’ But they go on to say, ‘If you have mild pre-cancerous changes in your cervical screening test, the cells are more likely to go back to normal without any treatment if you stop smoking.’

Should we vaccinate our daughters (and sons) against HPV?
The most common cancer in women in South Africa is cervical cancer. In most cases, it’s caused by human papilloma-virus (HPV). Now the HPV vaccine is available here – but it costs up to about R3000. Is it worth the spend?

It is estimated that one in 26 South African women will develop cervical cancer during their lifetime. More than 6 500 new cases of cervical cancer are diagnosed each year and more than 3 000 deaths a year are due to cervical cancer.’ – SASOG

We asked three experts
(two academics in research/policy and one in practice): should I get my teen daughter (and son) vaccinated against HPV?

Prof Lynette Denny
• Head of Department: Obstetrics & Gynaecology, UCT Faculty of Health Sciences
• Chief Specialist: Dept of Obstetrics & Gynaecology, Groote Schuur Hospital
‘What are the risks? The HPV vaccine offers protection against cervical cancer and cervical pre-cancer. HPV types 16 and 18 are responsible for any cervical cancer. However, boys should be vaccinated as well. HPV types 16 and 18 are responsible for genital warts, which are common among men and women. HPV types 6 and 11 are responsible for anogenital warts, which are common among women. It’s estimated that 1 in 3 South African women will develop cervical cancer during their lifetime. If you think about that, it is quite scary.’

Dr Elna Rudolph
• Sexual Health Physician at sexual medicine clinic MySexualHealth.co.za
• Fellow of European Committee for Sexual Medicine
‘Parents are irresponsible if they don’t give their children the HPV vaccination. This is the cancer that kills the most women in SA. Giving your child the vaccination can prevent it, so why wouldn’t you, if you can afford it? As a sexual health physician who sees STIs all day, every day, I have strong feelings about this. You shouldn’t see it as promoting promiscuity. There’s very good research that indicates that if you educate children about sex, they tend to make better decisions, and to delay sexual debut. Don’t make vaccination a moral thing – just do it.’

Prof Anna-Lise Williamson
• Principal Investigator, HIV Vaccine Development Group and Human Papillomavirus Research Group at the Institute of Infectious Disease and Molecular Medicine, UCT
• Chair in Vaccinology of SA Research Chairs Initiative
‘Boys should also be vaccinated, if budget allows. For boys, only the Gardasil vaccine is licenced. It protects from the two major viruses causing cancer as well as those two types causing genital warts. Cervarix does not protect against genital warts. The vaccine will also protect boys from the oncogenic viruses that cause HPV-related cancers such as oral, anal and penile cancers – there are no screening programmes to detect these in men. Also, they won’t be transmitting the viruses to their partners.’

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HOW DOES HPV AFFECT MY HEALTH?
Most of the time, an infection goes away on its own within one or two years and you won’t be aware that you’ve had it. But if your HPV infection persists, you could face health problems such as genital warts and a variety of cancers, like oropharyngeal cancer (at the back of the throat, base of tongue and tonsils) or cervical cancer – depending on the strain of the virus you’re infected by. HPV types 6 and 11 cause 90% of all genital warts. Types 16 and 18 are responsible for most HPV-caused cancers.

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ARE THERE WAYS OF REDUCING THE RISK OF CONTRACTING HPV?

Limiting your number of sexual partners lowers your chances, say the US Centers for Disease Control and Prevention (CDC) and Cancer Research UK. The CDC and NHS also recommend the use of condoms as a preventative measure – but they add that they are no guarantee against the spread of HPV as they don’t cover the entire genital area and are often put on after sexual contact has begun.

Then there’s vaccination against HPV. The UCT Health Economics Unit policy brief on preventing cervical cancer refers to studies estimating that ‘a vaccine preventing 75% of persistent HPV (types 16 and 18) infections could be associated with a 70-83% reduction in HPV-related cancer’.

WHO SHOULD HAVE THE VACCINE AND WHAT DEGREE OF PROTECTION DOES IT OFFER?

Two vaccines are available, targeted at different HPV types:
• CERVARIX, FROM PHARMACEUTICAL COMPANY GLAXOSMITHKLINE (GSK)
  This vaccine prevents cervical cancer caused by HPV types 16 and 18 and is approved for use in females nine to 25 years of age.
• GARDASIL, FROM MERCK (MSD)
  ‘In girls and young women aged nine to 26,’ says MSD, ‘Gardasil helps protect against two types of HPV that cause about 75% of cervical cancer cases, and two more types that cause about 90% of genital warts cases.’
  ‘They also caution that ‘Gardasil may not fully protect everyone’, and that routine cervical cancer screening is important as Gardasil does not prevent all types of cervical cancer.
  The US National Cancer Institute says, ‘HPV vaccination has been found to prevent nearly 100 percent of the precancerous cervical cell changes that would be caused by HPV 16/18.’

SO AGE IS IMPORTANT?

‘If you are sexually active before you have the HPV vaccine you may already have HPV, and the vaccine won’t get rid of it,’ explains Cancer Research UK. ‘The research so far has shown that the vaccine works best at preventing HPV infection in younger women. In the UK, all 12- or 13-year-old girls are offered the HPV vaccine as ‘they are unlikely to be sexually active and to have caught HPV’. (In the US, the HPV vaccination is recommended for girls – and boys – aged 11 or 12).

SURELY MANY WOMEN ARE SEXUALLY ACTIVE WELL BEFORE 26 – IS VACCINATION POINTLESS IF THEY ARE?

‘It does no harm to vaccinate a woman who is sexually active but may be a waste of money if she has already been exposed to the viruses,’ Prof Williamson explains. ‘However, if she does not have a sufficient immune response to protect from re-infection, then vaccination will be of benefit. If she already has a persistent infection with one of the HPV types included in the vaccines, then the vaccine will provide no benefit against disease caused by that HPV type.

‘Much of the time you need to evaluate benefit for a population based recommendation compared to what one would do as an individual. This is the same for Pap smears – just because it is cost effective to screen the population three times in a lifetime does not mean this is the best choice for the individual.’

IF YOUNG GIRLS ARE VACCINATED AGAINST HPV, DO THEY NEED TO BE SCREENED FOR CERVICAL CANCER?

Yes, says Prof Denny. ‘Because this is a new vaccine, we will need at least 30 years of data to be entirely sure of its performance’, says Dr. Rudolph of the Discovery health. ‘The vaccines do not protect from cervical cancer caused by HPV types 16 and 18.’

WHERE DO YOU GET THE HPV VACCINATION?

From your health care professional. Each Cervarix injection costs R629.50, and each Gardasil injection costs R982.70. However, Dr Rudolph points out that you need three over a six-month period.

Ask your medical aid whether they cover it. The Discovery Health Medical Scheme, South Africa’s largest open medical aid, pays vaccine prices through its Klinic partners.

IS THE HPV VACCINE SAFE?

Yes, says Prof Denny. ‘My FIGO [International Federation of Gynecology and Obstetrics] committee has just published its consensus statement of HPV vaccine safety.’ The journal article notes that 175 million doses of the HPV vaccines have been distributed globally. Their safety has been evaluated by analyses of researches like randomised controlled clinical trials, data from the US Vaccine Adverse Event Reporting System (VAERS), the Australian Surveillance of Adverse Events Following Vaccination in the Community (SAEFVIC) and the European Medicines Agency. The article reports that, ‘The most common complaint was pain at the injection site.’

IF HPV DNA TESTING IS OFFERED, HOW IMPORTANT IS IT?

‘From a scientific point of view, women who are immunocompromised for whatever reason – whether it is due to cancer, HIV or transplantation – are less able to recover from HPV infection – are more prone to cervical disease.’

Prof Denny explains. ‘Also, people with HIV who are immunocompromised for whatever reason – whether it is poverty, poor nutrition or HIV infection – are less able to recover from HPV infections. And remember that most poor people will never get a Pap smear.

‘With the vaccine, screening requirements are reduced as women are so much less likely to develop cervical cancer.’

IS HPV DNA TESTING BETTER THAN CYTOLGY?

‘Testing for HPV DNA testing is not recommended for detection of cervical cancer precursors. However it should only be used in women over 30,’ says Prof Denny. ‘HPV DNA testing with a validated test and followed by a “tripe” Pap smear has been shown in multiple randomised controlled trials in Europe to identify the most cases of cervical cancer precursors and to reduce the incidence of cancer. Liquid-based cytology has been shown in all these studies to be less sensitive and less objective of HPV testing) depends on it being performed repeatedly – so what you miss in one round will be picked up in the next.’

WHERE TO GET YOUR HPV SCREENING?

• Women under 30 should not be tested for HPV unless it is needed after an abnormal Pap smear.
• Women between 30 and 65 should have both a Pap test and an HPV test every five years. That’s optimum, but a Pap test alone every three years is sufficient.
• Women over 65 who have had regular screenings with normal results do not need to be screened for cervical cancer. Women who have been diagnosed with cervical pre-cancer should continue to be screened.
• Ask your medical aid whether they cover it. The Discovery Health Medical Scheme, South Africa’s largest open medical aid, pays vaccine prices through its Klinic partners.
• Individual clinics screened.

Age-specific screening guidelines:
• Begin cervical cancer screening at age 25.
• Women under 30 should not be tested for HPV unless it is needed after an abnormal Pap smear.
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• Follow screening recommendations for your age group even if you’ve been vaccinated.

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