

Information on:

Human papillomavirus (HPV)

Jo's cervical
cancer trust



jostrust.org.uk



Human papillomavirus (HPV)

This booklet covers:

- What is HPV?
- HPV and cervical cancer
- How do I get HPV?
- How can I reduce the risks of having a persistent HPV infection?
- Is there a test for HPV?
- Facts about HPV



What is HPV?

Human papillomavirus (HPV) is an extremely common virus. There are over 100 different types of HPV. Some HPVs cause noncancerous skin warts that commonly appear on the hands and feet.

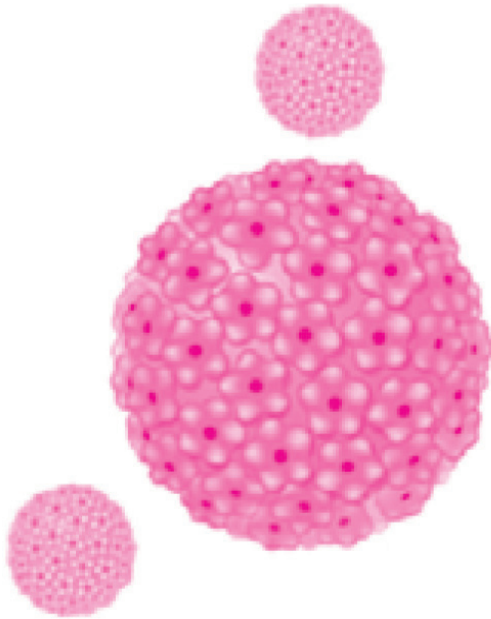
Around 40 of the HPV types affect the genital areas of men and women, including the skin of the penis, vulva (area outside the vagina), anus, and the linings of the vagina, cervix, and rectum. Around 13 of these types are thought to be associated with the development of cancer, so are called high risk. The remaining genital HPV types have been designated low risk as they do not cause cervical cancer but they can cause other problems such as genital warts.

HPV and cervical cancer

HPV infection can cause changes to the cells of the cervix creating abnormalities. Once these abnormalities become severe they can develop into cancer which is why cervical screening and HPV vaccination are important in helping to prevent cervical cancer.

Around 13 high risk types of HPV cause the majority of cervical cancers *i*. Within the high risk group, types 16 and 18 are the most prevalent causing over 70% of cervical cancers *ii*.

Four out of five (80%) women are infected with genital HPV at some point in their lives, but never know they have been infected because HPV is usually cleared (without treatment) by the body's immune system.



However, a small percentage of women do not clear the infection and it can remain 'dormant' (inactive) or persistent in their bodies, sometimes for many years *iii iv*.

We still do not understand why some women are able to clear the infection while in others the virus may lead to the development of abnormal cells and possibly cervical cancer.

How do I get HPV?

High risk HPV infections are very common and a person infected will show no symptoms so they may never even know they have it.

Genital HPV is transmitted primarily by skin-to-skin contact (genital-to-genital contact, anal intercourse and oral sex).

The time from exposure to the virus to the development of warts or cervical disease is highly variable and the virus can remain dormant in some people for long periods of time.

Often it is not possible to determine exactly when or from whom the infection originated.

How can I reduce the risks of having a persistent HPV infection?

You can reduce your risk by practising the following:

- **Not smoking** - Smoking stops your body's immune system from working properly, leaving you more likely to develop HPV infections which do not clear up and therefore increasing your chance of developing cervical cancer v.
- **Safe sex** - Practising safe sex through the use of condoms can help reduce the risk of being infected with HPV but it will not completely eradicate the risk as HPV lives on the skin in and around the whole genital area vi. Genital HPV in men affects the skin of the penis, scrotum, anus, and rectum vii. In women, it affects the vulva (area outside the vagina), the linings of the vagina, cervix, and rectum.
- **Leading a healthy lifestyle** - Keep your immune system – your body's natural defence against disease and infection – strong. A weakened immune system could mean that your risk of cervical cancer is higher than average.

- **Getting the HPV vaccination** - The HPV vaccine provides protection against two high risk types of HPV (types 16 and 18) that cause over 70% of all cervical cancers. In the UK girls aged 12 to 13 are offered the HPV vaccine. Girls have three injections usually given over six months by a nurse at school.

Is there a test for HPV?

HPV testing is not currently available UK wide. It has been introduced in most countries in the UK. The test is carried out using the same sample of cells taken during the cervical screening test.

If a woman is infected with a high risk HPV type and this becomes a persistent infection then she has a higher risk of developing abnormal cells and thus should be monitored more closely. HPV testing can be used to identify women with an increased risk of developing abnormal cells and thus also cervical cancer. It could also reduce the number of unnecessary screening appointments and colposcopies among women with borderline/mild screening results [viii](#).

For more information on HPV testing visit our website:

www.jostrust.org.uk/about-cervical-cancer/hpv/testing-for-hpv

Remember, attending cervical screening provides a very high degree of protection against developing cervical cancer.

Facts about HPV

- HPV is a very common virus. Four out of five individuals will be infected with a genital HPV at some time during their lives
- 99.7% of all cervical cancers are caused by high risk HPV
- Your first sexual experience puts you at risk of infection
- You are still at risk of contracting HPV even if you do not have penetrative sex as the virus is transmitted through genital skin-to-skin contact
- If you get high risk HPV you will not require treatment nor will your partner. However if your cervical screening test detects abnormal cells (caused by the HPV infection) you may be sent for further examination. For more information on this see our factsheets on cervical screening and HPV testing
- A strong immune system can help your body to clear HPV infection

References

- i. Li N et al., 2011. Human papillomavirus type distribution in 30,848 invasive cervical cancers worldwide: variation by geographical region, histological type and year of publication. *International Journal of Cancer* 128, 927–935.
- ii. Bosch FX et al., 2008. Epidemiology and natural history of human papillomavirus infections and type-specific implications in cervical neoplasia. *Vaccine* 26 Suppl 10, K1-16.
- iii. Muñoz N et al., 2009. Persistence of HPV infection and risk of high-grade cervical intraepithelial neoplasia in a cohort of Colombian women. *British Journal of Cancer* 100, 1184–1190.
- iv. Moscicki AB et al., 1998. The natural history of human papillomavirus infection as measured by repeat DNA testing in adolescent and young women. *Journal of Pediatr* 132, 277-284.
- v. Cancer Research UK <http://www.cancerresearchuk.org/cancer-info/cancerstats/types/cervix/riskfactors/> Accessed April 2014.
- vi. Winer RL et al., 2003. Genital human papillomavirus infection: incidence and risk factors in a cohort of female university students. *American Journal of Epidemiology* 157 (3), 218-226.
- vii. Giulano AR et al., 2008. Epidemiology of human papillomavirus infection in men, cancers other than cervical and benign conditions. *Vaccine* 26 Suppl 10, K17-28.
- viii. MaCaffery et al., 2004. Testing positive for human papillomavirus in routine cervical screening: examination of psychosocial impact. *BJOG* 111, 1437-1443.

We also have information on:

- Cervical cancer
- Cervical screening
- HPV vaccine
- HPV testing
- LLETZ

The information included in this publication was correct at the time of going to press. We plan to review publications after two years however updates may happen more frequently. For updates or for the latest information, visit jostrust.org.uk.

**Information booklet:
HPV**

Version 1.1

Date last updated: Mar 2017

Date for Review: Apr 2018

**Jo's cervical
cancer trust**



**Health & care
information
you can trust**

The Information Standard



**Certified
Member**

Call our helpline:

0808 802 8000

Contact us:

**jostrust.org.uk
info@jostrust.org.uk**