

# What you need to know –

## Human Papillomavirus (HPV)

### What is HPV?

HPV (human papillomavirus) is a common virus that affects both females and males.<sup>1</sup> Most types of HPV are harmless, do not cause any symptoms, and go away on their own.<sup>1</sup>

About 30 types of HPV are known as genital HPV since they affect the genital area.<sup>1</sup> Some types are high risk<sup>2</sup> and can cause cervical cancer or abnormal cells in the lining of the cervix that sometimes turn into cancer. Others are low risk<sup>1</sup> and can cause genital warts and changes in the cervix that are benign (abnormal but noncancerous).

### Who gets genital HPV?

Anyone who has any kind of sexual activity involving genital contact could get genital HPV.<sup>1</sup> Because many people who have HPV may not show any signs or symptoms, they can transmit the virus without even knowing it.

HPV is more common than you might think. In 2005, approximately 20 million Americans had genital HPV.<sup>1</sup> More than 6 million new cases of genital HPV are diagnosed in the United States every year.<sup>1</sup>

### How do I know if I have HPV?

Because HPV may not show any signs or symptoms, you probably won't know you have it. Most women are diagnosed with HPV as a result of abnormal Pap tests.<sup>1</sup> A Pap test (also known as a Pap smear) is part of a gynecological exam and helps detect abnormal cells in the lining of the cervix before they have the chance to become precancers or cervical cancer.<sup>1</sup>

Many cervical precancers (changes that could lead to cancer) are related to HPV and can be treated successfully if detected early.<sup>1</sup> That's why early detection is so important.

### What happens if I get HPV?

In most people, the body's defenses are enough to clear HPV. If not cleared by the body, some HPV types cause genital warts. Other types cause abnormal changes in the cells lining the cervix that can lead to precancers and even turn into cervical cancer later in life.<sup>1</sup>

*This fact sheet does not cover everything there is to know about HPV. Talk to your healthcare professional or visit [HPV.com](http://HPV.com) for more information.*

## Cervical Cancer

### What is cervical cancer?

Cervical cancer is cancer of the cervix. The cervix is the part of the uterus that connects the upper part of the uterus (the womb) and the vagina.<sup>1</sup>

Cervical cancer is a serious condition that can be life threatening. When a woman becomes infected with certain high-risk types of HPV<sup>2</sup> and does not clear the infection, abnormal cells can develop in the lining of the cervix.<sup>1</sup>

If not discovered early and treated, these abnormal cells can become cervical precancers and then possibly cancer.<sup>1</sup> Most often this can take a number of years, although in rare cases it can happen within a year.<sup>1</sup>

### Who gets cervical cancer?

About half of all females diagnosed with cervical cancer are between 35 and 55 years old.<sup>3</sup> What many of these women may not realize is that they were most likely exposed to one of the high-risk types of HPV during their teens and 20s.<sup>4</sup>

The American Cancer Society estimated that in 2005 there were 10,370 new cases of cervical cancer diagnosed in the United States, and 3,710 women died from the disease.<sup>5</sup>

### How do I know if I have cervical cancer?

The usual way to detect cervical cancer is through a Pap test.<sup>1</sup> If the results of a Pap test indicate that you have abnormal cervical cells, it's important to follow your healthcare professional's recommendations for more testing, such as repeat Pap testing, HPV DNA testing, colposcopy (examination of the cervix through a magnifying device), and possible biopsy (obtaining a tissue sample for analysis in the lab).<sup>1</sup>

### How is cervical cancer treated?

The three main methods are surgery (an operation to remove the cancer), radiation therapy (using high energy beams to destroy cancer cells), and chemotherapy (using medications to disrupt the growth of cancer cells). Sometimes treatment includes two or more of these methods.<sup>1</sup>

Before choosing a treatment, a healthcare professional will consider the size of the cancer, whether it has spread, the woman's age and overall health, and patient preferences.<sup>3</sup> The treatment that is right for one person may not be right for someone else.

*This fact sheet does not cover everything there is to know about cervical cancer. Talk to your healthcare professional or visit [HPV.com](http://HPV.com) for more information.*

# What you need to know – Abnormal Cervical Cells

## What are abnormal cervical cells?

Abnormal cervical cells (also called cervical dysplasia) are cells in the lining of the cervix that have changed in appearance.<sup>4</sup>

The more severe the cervical abnormality, the more likely it is that cervical cancer could develop in the future. Most often this can take a number of years, although in rare cases it can happen within a year.<sup>4</sup>

## What causes abnormal cervical cells?

Abnormal cervical cells may have a number of different causes, such as an infection or inflammation, but are commonly caused by certain types of HPV (human papillomavirus).<sup>5</sup>

## How do I know if I have abnormal cervical cells?

The usual way to detect abnormal cervical cells is through a Pap test.<sup>6</sup> You may have additional testing, such as repeat Pap testing, HPV DNA testing, colposcopy, and possible biopsy.<sup>7</sup>

An abnormal biopsy result may be reported as CIN (cervical intraepithelial neoplasia).<sup>7</sup> The term CIN, along with a number

(1 to 3), describes how much of the thickness of the lining of the cervix contains abnormal cells.<sup>8</sup> A diagnosis of CIN 3 means there are severely abnormal cervical cells through the entire thickness of the lining of the cervix.<sup>8</sup>

## How are abnormal cervical cells treated?

Most abnormal cells in the lining of the cervix will eventually go away on their own.<sup>2</sup> If the abnormalities are mild, the healthcare professional may choose to closely monitor them. If the abnormalities are more severe, removing these cells can almost always prevent cervical cancer from developing in the future.<sup>4</sup>

Methods commonly used to treat abnormal cervical cells include freezing, removing them using an electrical instrument, and conventional surgery.<sup>8</sup> The treatment may have to be repeated if the abnormal cells reappear.<sup>4</sup>

*This fact sheet does not cover everything there is to know about abnormal cervical cells. Talk to your healthcare professional or visit HPV.com for more information.*

# Genital Warts

## What are genital warts?

Genital warts are flesh-colored growths that are most often caused by certain types of HPV.<sup>9</sup> Genital warts most often appear on the external genitals or near the anus of females and males. Less commonly, genital warts can appear inside the vagina and on the cervix.<sup>9</sup>

## Who gets genital warts?

Anyone who has any kind of sexual activity involving genital contact could get genital HPV,<sup>1</sup> and certain types of HPV can develop into genital warts. Because many people who have HPV may not show any signs or symptoms, they can transmit the virus without even knowing it. After sexual contact with an infected person, genital warts may appear within weeks, months, years, or not at all.<sup>1</sup>

Genital warts are very common. It is estimated that in 2003, there were over 260,000 new cases of genital warts in the United States alone.<sup>10</sup>

## How do I know if I have genital warts?

A healthcare professional can usually recognize genital warts just by seeing them.<sup>1</sup> Genital warts often do not cause symptoms. In some cases; however, they may cause burning, itching, or pain.<sup>1</sup>

## How are genital warts treated?

Genital warts sometimes disappear on their own without treatment. However, there is no way to tell if they will disappear or grow larger.<sup>9</sup>

A healthcare professional may choose to apply a special cream or solution to the warts. Alternatively, some genital warts can be removed by freezing, burning, or using a laser treatment. If these treatments don't work, they may be removed by surgery.<sup>9</sup>

There is a chance that genital warts can reappear after treatment, since the HPV that caused them may still be present.<sup>9</sup>

*This fact sheet does not cover everything there is to know about genital warts. Talk to your healthcare professional or visit HPV.com for more information.*

**References:** 1. Centers for Disease Control and Prevention. Genital HPV infection fact sheet. Available at: <http://www.cdc.gov/std/hpv/stdfact-hpv.htm>. Accessed July 22, 2005. 2. Walboomers JMM, Jacobs MV, Manos MM, et al. Human papillomavirus is a necessary cause of invasive cervical cancer worldwide. *J Pathol.* 1999;189:12-19. 3. National Cancer Institute, Division of Cancer Prevention. About HPV infections. Available at: <http://www3.cancer.gov/prevention/alts/about/hpv.html>. Accessed July 22, 2005. 4. American Cancer Society. Prevention & early detection. Available at: [http://www.cancer.org/docroot/PED/content/PED\\_2\\_3X\\_Pap\\_Test.asp](http://www.cancer.org/docroot/PED/content/PED_2_3X_Pap_Test.asp). Accessed June 30, 2005. 5. American Cancer Society. Cervical cancer. Available at: <http://documents.cancer.org/115.00/115.00.pdf>. Accessed July 22, 2005. 6. Koutsky L. Epidemiology of genital human papillomavirus infection. *Am J Med.* 1997;102:3-8. 7. National Cervical Cancer Coalition. Patient information: Questions and answers about the Pap test. Available at: <http://www.nccc-online.org/patient.php>. Accessed September 30, 2005. 8. National Cancer Institute. Cancer facts: Human papillomaviruses and cancer: Questions and answers. Available at: <http://www.cancer.gov/cancertopics/factsheet/Risk/HPV>. Accessed September 30, 2005. 9. National Institute of Allergy and Infectious Diseases. Human papillomavirus and genital warts. July 2004. Available at: <http://www.niaid.nih.gov/factsheets/stdhpv.htm>. Accessed July 22, 2005. 10. Centers for Disease Control and Prevention. Sexually transmitted diseases. STD surveillance 2003. Available at: <http://www.cdc.gov/std/stats/tables/table47.htm>. Accessed June 30, 2005. 11. American Social Health Association. Human papillomavirus. Available at: [http://www.ashastd.org/learn/learn\\_hpv\\_warts.cfm](http://www.ashastd.org/learn/learn_hpv_warts.cfm). Accessed October 17, 2005.



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