

FACT SHEET 4

EARLY DETECTION TESTS TO PREVENT CERVICAL CANCER

This series of health education materials is designed to provide information to primary health care providers and the general public about the Human Papillomavirus (HPV) and cervical cancer prevention and control.

The series is comprised of the following health education materials:

FACT SHEET 1:
HUMAN PAPILLOMAVIRUS (HPV)

FACT SHEET 2:
HUMAN PAPILLOMAVIRUS (HPV) VACCINES

FACT SHEET 3:
WHAT IS CERVICAL CANCER?

FACT SHEET 4:
EARLY DETECTION TESTS TO PREVENT CERVICAL
CANCER

FACT SHEET 5:
TREATMENT OF CERVICAL CANCER



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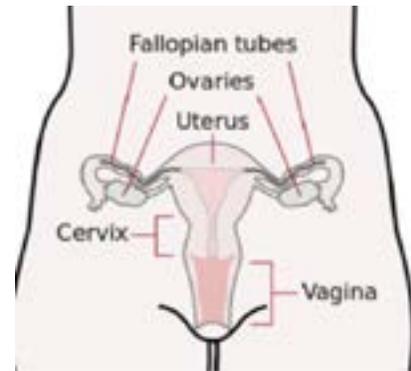


CERVICAL CANCER
PREVENTION IN LATIN AMERICA
AND THE CARIBBEAN

FACT SHEET 4: EARLY DETECTION TESTS TO PREVENT CERVICAL CANCER



This health education material provides information on detecting cervical cancer before any signs or symptoms appear. It is intended for use by health providers and by women to be informed about early detection tests that can prevent cervical.



WHAT IS CERVICAL CANCER?

Cancer is a disease in which cells multiply uncontrollably. When cancer develops in the cervix, or neck of the uterus, it is called cervical cancer. If the cancer continues to grow, it can spread to other parts of the body, beyond the cervix.

WHAT CAUSES CERVICAL CANCER?

Persistent infection with the Human Papillomavirus (HPV) is the main cause of cervical cancer. HPV is a common infection, transmitted sexually. Everyone who has had sexual activity, whether vaginal, anal, oral or skin to skin contact, can be infected with HPV.

Most women and men will have an HPV infection during their lifetime, even though they do not know and may not have any signs or symptoms of infection. HPV infection usually clears on its own with the body's immune system response. However, in some women, especially those older than 30 years of age, HPV infection may persist over time, and lead to changes in the cervix that can develop into cervical cancer.

Pre-cancerous lesions in the cervix are the first changes in the cells, before cervical cancer develops. These lesions can be detected with tests and treated effectively, before cancer develops.

Cervical cancer can be treated and cured, if detected in its early stages. If treatment is not provided, cervical cancer can be fatal.

CAN CERVICAL CANCER BE PREVENTED?

Yes, HPV vaccines can prevent HPV infection, the cause of cervical cancer. HPV vaccines are recommended for girls aged 9 to 14 years, prior to onset of sexual life. Some country guidelines recommend HPV vaccines also for boys. Cervical cancer can be prevented in adult women with early detection tests, such as the HPV test or PAP test, followed by treatment. Early detection tests can identify pre-cancerous lesions in the cervix, which can then be treated before the lesion develops into cervical cancer. These tests are recommended for women aged 30 years and older, although the recommended age group may vary by country, according to national guidelines.

EARLY DETECTION TESTS TO PREVENT CERVICAL CANCER

All women, especially those aged 30-49 years, should undergo a gynecological exam and a test to determine if a precancerous lesion exists in the cervix, or if there is a high risk for developing one because of an HPV infection.

Three different early detection tests are currently available: HPV test, PAP (Papanicolaou) test; and visual inspection with acetic acid (VIA). The type of test used may vary by country, according to national guidelines.

* HPV (Human Papillomavirus) Test

The HPV test detects infections caused by HPV, and identifies those women at high risk of developing precancerous lesions in the cervix, which if left untreated, can develop into cervical cancer.

This test involves taking a sample of cells from the cervix, during a gynecological examination performed by a medical provider. This sample is then sent to a laboratory for analysis. In some countries, HPV test is administered by the woman herself and the sample is mailed to the laboratory for analysis. HPV test results are usually provided to women, as an HPV positive or HPV negative result. HPV testing is not yet available in all countries.

* **PAPANICOLAU (PAP) TEST**

The PAP test is the more commonly available cervical cancer early detection test. The test involves a gynecological examination by a medical provider, who takes a sample of cells from the cervix. The sample is then sent to a laboratory for analysis. The PAP test detects changes in the cervical cells and can identify precancerous or cancerous lesions. PAP test results are usually provided to women, as a normal or abnormal PAP test result.

* **VISUAL INSPECTION WITH ACETIC ACID (VIA)**

Visual inspection with acetic acid is a test to detect precancerous cervical lesions. The test involves a gynecological examination by a medical provider, who applies acetic acid (diluted vinegar) to the cervix to observe whether there are any changes in the cells. The VIA test results are provided to women immediately. Results are provided to women as VIA positive, which indicates a precancerous lesion, or VIA negative which indicates no lesion. VIA is not available in all countries.

WHAT IF THE SCREENING TEST RESULTS ARE NORMAL?

In the majority of cases, test results will be normal, indicating a healthy cervix. Women with normal results are recommended to have a test again in 3-5 years' time, which may vary according to country guidelines. It is important for all women, even if their test result is normal, to take another test in the future, since changes in the cervical cells can develop at any point in time.

With HPV tests, if the HPV test result is negative (that is, no HPV infection is detected) and the woman is over 30 years of age, there is a lower chance for cervical cancer to develop. In this case, women are recommended to have an HPV test again in 5-10 years' time.

WHAT IF THE SCREENING TEST SHOWS ABNORMAL RESULTS?

If the test results are abnormal, it may mean there are changes in the cells of the cervix, or that pre-cancerous cells are present. The recommended course of action for women with abnormal results will vary by country guideline. Generally, the health provider may give treatment at the time of providing the test result to the woman; or the health provider may refer the woman to a gynecologist for additional evaluation and treatment. For women referred for further evaluation, this will involve colposcopy, with or without biopsy.

Colposcopy: Colposcopy is a visual examination of the cervix using an instrument called a colposcope. The medical provider will perform a gynecological exam, using a colposcope to examine the cervix more closely. The colposcopy examination may also be used to take a tissue sample from the cervix, called a biopsy. The exam does not cause anymore discomfort or side effects, than any other gynecological exam.

Colposcopy is used to verify whether, or not, pre-cancerous cells or cancer may have developed in the cervix.

During the examination, if mild abnormal changes in the cervix are observed, the woman will be recommended to return in 6-12 months for a repeat colposcopy evaluation. If precancerous lesions are observed, a biopsy will be taken. The medical provider may provide treatment at the time of the colposcopy exam, or may wait for the results of the biopsy, before providing treatment. The recommended course of action will vary by country guideline.

Biopsy: A biopsy is a tissue sample, which is examined by a doctor under a microscope to diagnose precancerous cells or cancer.

The biopsy results show the degree of the abnormality and inform the recommendation for treatment.

The result may be mild cervical changes, which may need monitoring; or a precancerous lesion which must be treated; or cervical cancer, which requires immediate treatment.

The biopsy can cause some discomfort, pain or cramps in some women.

HOW ARE PRE-CANCEROUS CERVICAL LESIONS TREATED?

The treatment for cervical precancerous cells involves destroying the abnormal cells in the cervix. This is typically done by freezing the cells (cryotherapy) or by removing the cells (LEEP or other methods). Treatment is done by a trained medical provider, as an outpatient procedure.

Cryotherapy is the process of freezing and destroying the abnormal cells of the cervix. It involves applying cooled gas through a metal probe directly onto the cervix. This procedure takes only a few minutes to perform. It does not typically cause pain to women, although it may produce some discomfort, cause cramping and lead to vaginal discharge, following the procedure. The health provider will indicate the care steps required for women to follow after cryotherapy treatment. A follow up visit is usually recommended 6-12 months' post treatment.

LEEP is a procedure to remove the abnormal cells of the cervix, using a thin wire heated with electricity. The procedure is performed by a medical provider, under local anesthesia. It takes only a few minutes to perform. It can cause cramping, or mild to moderate bleeding. The medical provider will recommend the care needed, following this treatment.

It is important for all women, especially those aged 30-49 years of age to be screened for cervical cancer, and if precancerous lesions are detected to get treatment. Cervical cancer can be prevented.

SOURCES OF INFORMATION:

- » World Health Organization. Comprehensive Cervical Cancer Control: A guide to essential practice. Second Edition.
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- » American Cancer Society, ACS. Biopsy and Testing for Cancer Cytology Specimens.
- » Centers for Disease Control, CDC. Fact Sheet Cervical Cancer Campaign Know Your Body.
- » National Cancer Institute, NCI. What you need to know about cervical cancer.
- » National Cancer Institute, NCI. Significance of changes in the cervix. Guide to Women's Health.
- » Government of Australia. School HPV Vaccination Program.
- » Public Health Agency of Canada. HPV and Men: Questions and Answers.

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