

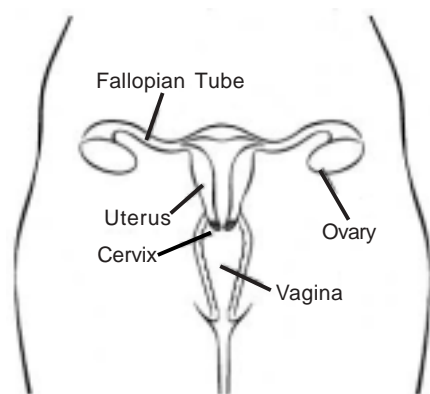
## Cervical Cancer

Each year about 730 women are diagnosed with cervical cancer in Australia (11 in the ACT). About 220 Australian women will die from the disease each year.

Cancer of the cervix can be prevented through the early detection of abnormalities in cells lining the cervix and is almost entirely curable at an early stage.

### The Cervix

The cervix is the lower part of the uterus (womb) which extends into the vagina. It produces some of the moistness that helps lubricate the vagina, produces the mucus that helps sperm travel up to the fallopian tube to fertilise an egg from the ovary and holds the developing baby in the uterus during pregnancy. During childbirth, the cervix widens to allow the baby to be born.



### Cervical Cancer

Cervical cancer is a malignant tumour that starts in the tissue of the cervix. As a rule it normally takes years to develop and is usually preceded by abnormal changes in the cervical cells (that are not cancerous).

There are two main types of cervical cancer which are named after the type of cell from which they originate:

- **Squamous cell carcinoma** - This is the most common, accounting for 80% of all cervical cancers. It starts in the squamous or skin-like cells of the cervix.
- **Adenocarcinoma** - This is a less common type of cervical cancer, which develops from the glandular cells. This type is more difficult to diagnose because it starts higher in the cervix and is more difficult to reach with the brush or spatula used in taking a Pap smear.

In addition, cervical cancer may be microinvasive or invasive.

- **Microinvasive cervical cancer** - This is when cancer cells have just broken through the bottom layer of the skin of the cervix. At this stage, the cells have not spread more than five millimetres into the tissues of the cervix.

- **Invasive cervical cancer** - In this, the cancer cells have spread from the surface skin of the cervix into the deeper tissues of the cervix. The cancer may also have spread to part of the vagina or to the lymph nodes and other tissues around the cervix, within the pelvis, or beyond the genital and pelvic areas into nearby organs.

### Symptoms

Early changes in the cells of the cervix (epithelial abnormalities) rarely cause symptoms, which is why doctors encourage women to have regular Pap tests. If early cell changes develop into cervical cancer, the most common signs include:

- vaginal bleeding between periods
- bleeding after intercourse
- pain during intercourse
- unusual vaginal discharge
- vaginal bleeding after menopause
- excessive tiredness
- leg pain or swelling
- lower back pain

All these symptoms are common to many conditions and may not mean cervical cancer. However, any of these symptoms should be checked by a doctor.

### Causes

Some factors seem to put some women at a higher risk of cervical cancer. These risk factors include:

- Human Papilloma Virus (HPV) which is a common infection affecting the surface of any part of the body, including the skin, vagina and cervix. Almost everyone will become infected with the genital HPV at some time in their lives and, for most, it will clear up on its own. Most women who have HPV don't ever show signs of abnormal cell changes. However, in some women it can cause cell changes which lead to dysplasia (abnormal cells). If untreated, these changes may become cancer.
- Smoking which increases the risk of cervical cancer fourfold.
- Daughters of women who used the drug diethylstilboestrol (DES) during pregnancy to prevent a miscarriage.

Having one or more of these risk factors does not mean that a woman is certain to develop cervical cancer.

### Diagnosis

The **Pap test** (also called Pap smear) is a simple test that detects abnormal or cancerous cervical cells. This test does not diagnose cancer but finds early changes which might later become cancer. These early changes can then be treated before they progress to cancer. If a Pap test detects changes, more tests will be needed to confirm the

diagnosis, these include:

- **Colposcopy** This is an examination that shows where the changed cells are and what they look like. It is done using an instrument called a colposcope, which is like binoculars on a stand. The colposcope gives a magnified view of the cervix and vagina but does not enter the body.
- **Biopsy** A small sample of tissue, called a biopsy, may be taken from any abnormal area on the cervix and sent to a laboratory for examination under a microscope.
- **Cone biopsy** This removes a cone-shaped piece of tissue containing the abnormal cells from the cervix. This procedure is used to see if the cancer cells have spread to tissue beneath the surface of the cervix. It is also used to treat very early and very small tumours. Further treatment is needed for cancers that are larger or have spread.
- **Large loop excision of the transformation zone (LLETZ)** This removes a large sample of the cervix for examination under a microscope. A loop of wire carrying an electric current is used to cut out tissue from the cervix.

Further tests may be performed to determine the extent of the cancer and if it has spread.

### Treatment

Treatments for cervical cancer include surgery, radiotherapy, chemotherapy or a combination of these treatments.

### Surgery

Surgery is common for small tumours found only within the cervix. The extent of the cancer in the cervix will determine the type of surgery needed.

- **Cone biopsy** Some very early cervical cancers may be treated with cone biopsy. (see above)
- **Hysterectomy** A hysterectomy is the removal of the uterus by surgery.

There are two kinds of hysterectomy:

- Total hysterectomy—the uterus including the cervix is removed.
- Radical hysterectomy—the uterus, cervix, support ligaments and top part of the vagina are removed. The ovaries are usually not removed in women who are still having periods. Lymph node dissection may also be done during a radical hysterectomy for cervical cancer.

### Radiotherapy

Both external and internal radiotherapy may be used to treat cervical cancer, if the cancer has spread into the tissues around the cervix or if the tumour is very large as this would be difficult to cure by surgery alone, after surgery or combined with chemotherapy.

### Chemotherapy

Chemotherapy is usually combined with radiotherapy to make the radiotherapy more effective or may also be used on its own for advanced cervical cancer.

### Prevention

**All women who have ever had sex should have a regular Pap test every two years from the ages of 18-20 to 70 years.**

Because the Pap test can detect cervical changes before they progress to cancer, it is very effective in reducing the number of cervical cancers diagnosed and deaths from the disease. The test involves a doctor or nurse taking a sample of cells from the surface of the cervix that is then smeared onto a glass slide. The slide is sent to a laboratory for analysis and the results are usually available within a week or so.

Most Pap test results are normal. A small number show changes in the cells of the cervix, which are mostly minor infections that usually clear up naturally or are easily treated. In a very small number of cases if the abnormality persists and is left untreated the changes may develop into cervical cancer. When detected early, changes to the cells of the cervix are easily managed.

### Cervical cancer /HPV vaccine

There is now a vaccine that will prevent up to 70% of cervical cancer and is most effective if given before the start of sexual activity. It's currently free for girls in Year 7 as part of the school-based National Immunisation Program.

Women aged 9 to 45 years can have the vaccine, although it can be less effective in older women. Women should speak to their doctor to find out if they would benefit from having the vaccine. As the vaccine won't prevent all cervical cancers from developing, it's important to remember that, vaccinated or not, a Pap test every 2 years is still vitally important for all women aged 18 to 70 who have ever been sexually active.

### Where are Pap tests available in the ACT?

- Your medical practitioner
- Womens Health Service Ph:6205 1078
- Sexual Health and Family Planning ACT Ph: 6247 3077
- The Junction Youth Health Service (for women aged 12-25) Ph: 6247 5567
- Winnunga Nimmitjyah Aboriginal Health Service (for Aboriginal and Torres Strait Islander women) Ph: 6284 6222

### Other information

#### ACT Cervical Cytology Registry

The register is a central and confidential list of ACT women's Pap test results, it also provides a reminder system for women who have not had a Pap test within two and a half years of their last one. Women may choose whether they wish to have their results stored on the register or not. Ph:6205 1545

*This information sheet contains general information, for specific information regarding your cancer diagnosis or treatment, it is always best to talk to your doctor or health care team.*