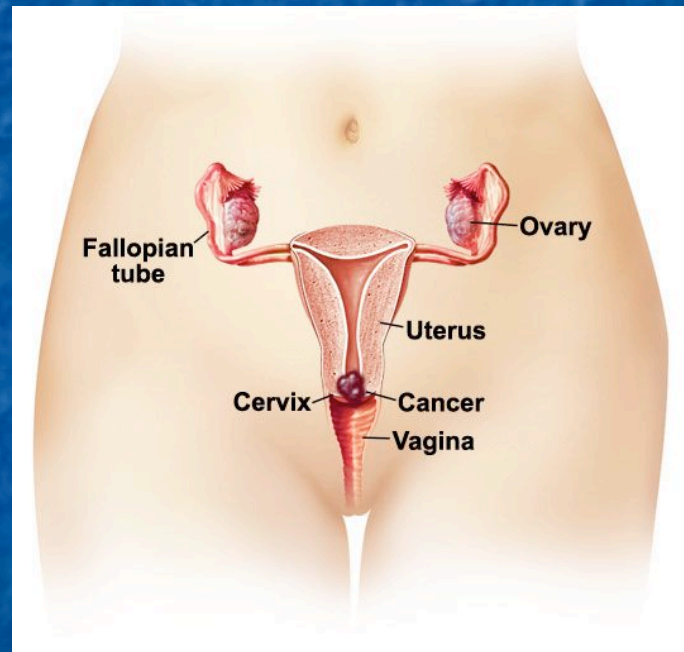


# Cervical Cancer

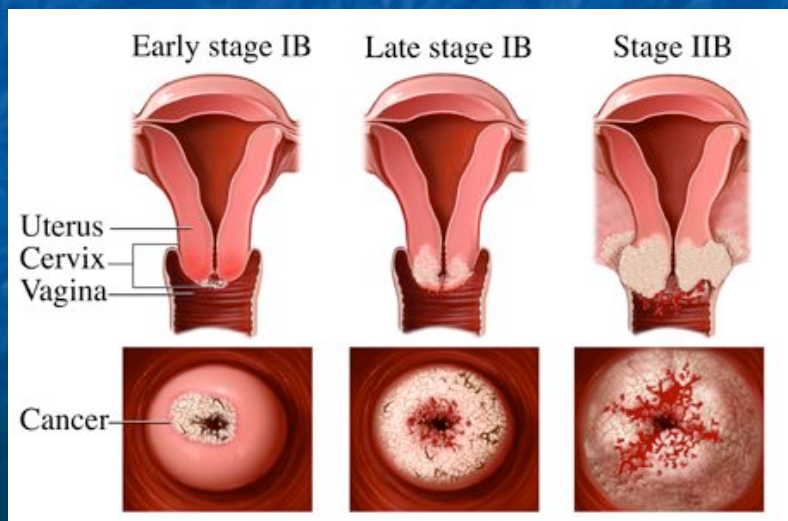


# Learning Objectives

- At the end of the presentation, students will be able to:
  - Define cervical cancer
  - Identify the virus causing cervical cancer
  - Identify 2 cervical cancer symptoms and 2 risk factors
  - Mention at least 2 types of cervical cancer treatment
  - List 2 ways of cervical cancer prevention

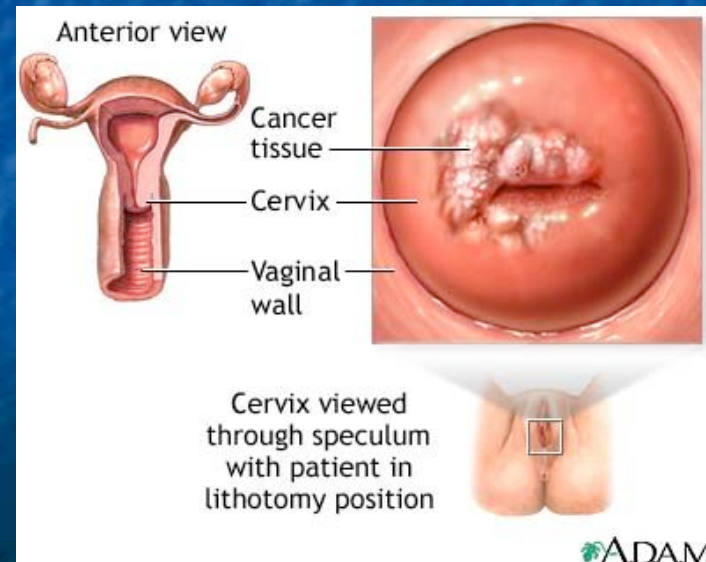
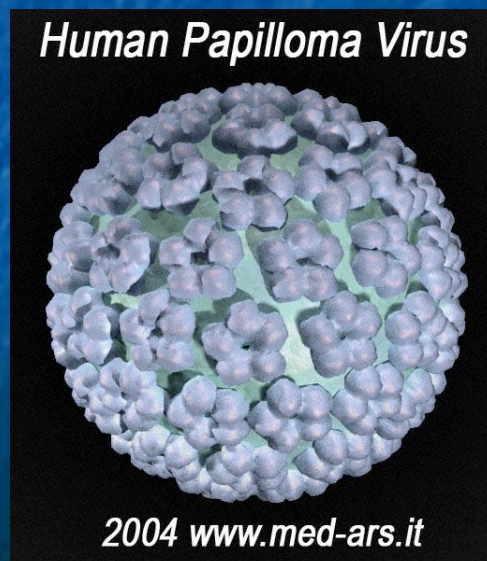
# What is Cervical Cancer?

- Cervical cancer is one of the most common cancers that affect women.
- This cancer begins in the lining of the cervix. Cervical cancers do not form suddenly and develop pre-cancerous changes that turn into cancer.



# What is Cervical Cancer?

- It is a slow-growing cancer that may not have symptoms but can be found with regular Pap Smear tests.
- The **Human Papilloma Virus (HPV)** is responsible for many cervical cancers.



# Types of Cervical Cancer

- **Squamous Cell Carcinoma**

- 80-90% of cervical cancers
- Composed of cells that resemble the flat, thin cells called squamous cells that cover the surface of the endocervix.

- **Adenocarcinomas**

- 10-20% of cervical cancers
- Develops from the mucus-producing gland cells of the endocervix.

# Risk Factors

- Many sexual partners
  - Great chance of acquiring HPV
- Early sexual activity
  - Before 18 increases your risk due to immature cells
- Other sexually transmitted diseases
  - Chlamydia, gonorrhea, syphilis, or HIV
- A weak immune system
- Cigarette smoking

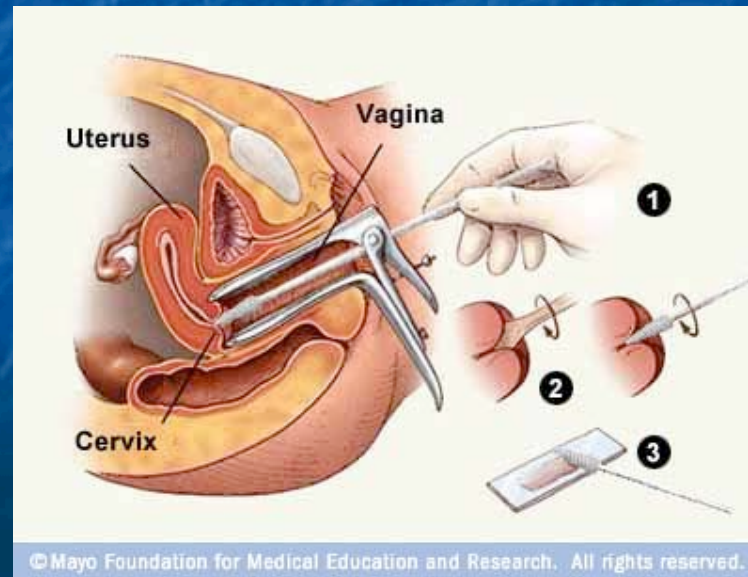
# Symptoms

- Early cervical cancer generally produces no signs. As the cancer progresses:
  - Vaginal bleeding after intercourse, between periods or after menopause
  - Watery, bloody vaginal discharge that may be heavy and have foul odor
  - Pelvic pain or pain during intercourse

# Screening and Diagnosis

## ■ Pap Test

- The doctor/nurse brushes cells from the cervix, smears them onto a glass slide and send it to the laboratory for abnormal cell examination.

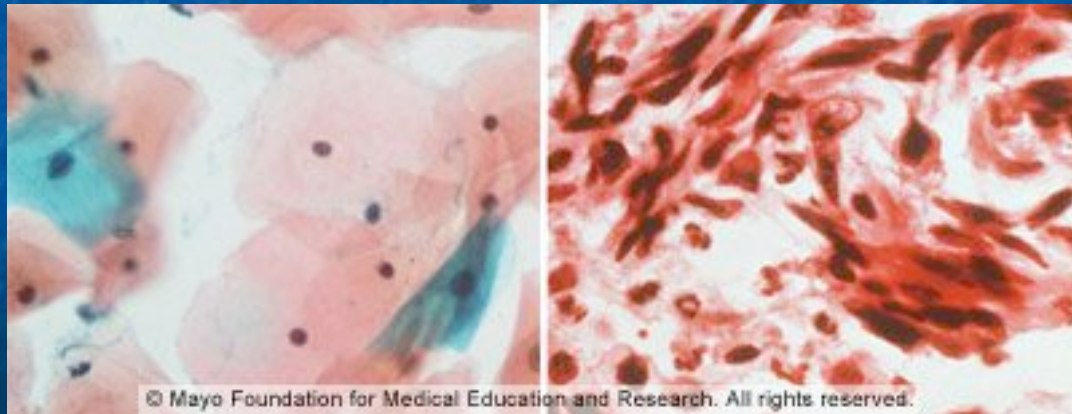


© Mayo Foundation for Medical Education and Research. All rights reserved.



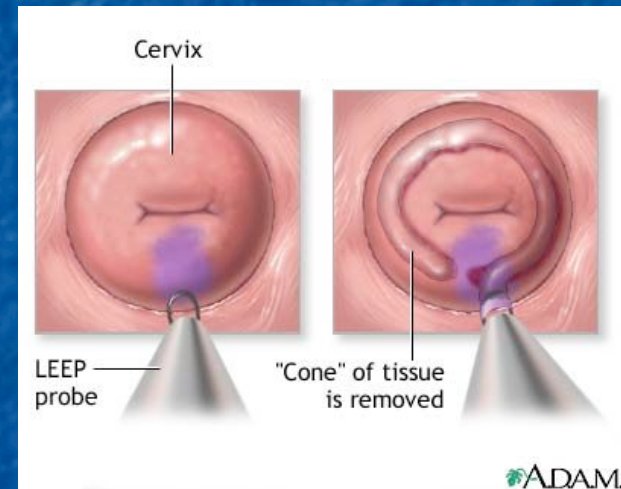
# Screening and Diagnosis

- HPV DNA test
  - This is used to determine whether there is an infection with any of the 13 types of HPV.
  - This test also involves cervical cells for lab testing.



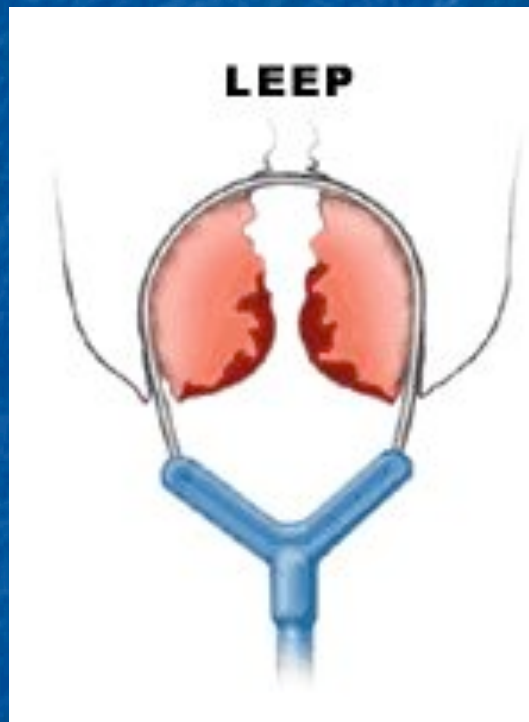
# Treatment

- **Pre-invasive stage**  
(Outer layer of the cervix is affected):
  - **Conization** - removal of a cone-shaped piece of cervical tissue where the abnormality is.
  - **Laser surgery** – intense light used to kill cancerous cells.



# Treatment

- **Loop electrosurgical excision procedure (LEEP)** - A wire loop that passes electricity to cut and remove cells from the cervix.
- **Cryosurgery** – freezing and killing cancer cells
- **Hysterectomy** – removal of the cervix and uterus



Compressed nitrogen gas flows through a cryo probe making the metal cold enough to freeze and destroy the abnormal cervical tissue



ADAM.

Before



After



ADAM.

# Treatment

- **Invasive stage**
  - **Hysterectomy**
  - **Radical trachelectomy** – removal of the cervix and lower part of the uterus.
  - **Radiation** – rays shrink tumors by killing cells
  - **Chemotherapy** – anti-cancer drugs that enter bloodstream.

# Prevention

- Delay first intercourse
- Use a condom during intercourse to reduce HPV and other STDs risk of infection.
- Have fewer sexual partners
- Do not smoke
- Routine Pap tests
  - Initial pap test at age 21 or when you begin having sex.
  - A regular pap test every year is recommended

# HPV Vaccine

- Vaccine “**Gardasil**”

- It offers protection from the most dangerous types of HPV.
- Routine vaccination is recommended for girls age 11-12 and women ages 13-26.
- The vaccine is more effective if given to girls before they become sexually active.



# Review Questions

1. Define cervical cancer
2. List 2 risk factors of cervical cancer
3. Vaginal bleeding and painful intercourse are symptoms of cervical cancer:  
TRUE                      FALSE
4. The two tests used to diagnose cervical cancer are \_\_\_\_\_ test and \_\_\_\_\_ test.
5. List 2 ways to prevent cervical cancer