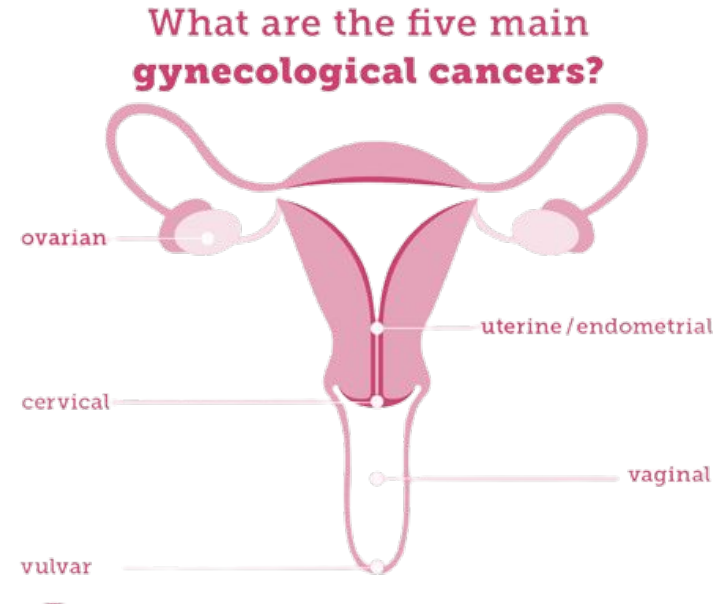


Asking Questions
About
Gynecologic Cancers



What is Gynecologic Cancer?

- *Cancer* is characterized by abnormal, uncontrollable cell growth that has the potential to invade and spread to other parts of the body
- *Gynecologic cancer* is a type of cancer that starts in woman's reproductive organs



Asking Questions About Cervical Cancer



Cervical cancer arises in the cervix

Common symptoms may include:

- Abnormal vaginal bleeding or discharge

Examples include:

- Vaginal bleeding unrelated to menstrual period
- Postmenopausal bleeding
- Pain or vaginal bleeding during intercourse
- Foul-smelling and/or watery discharge

Cervical cancer is the **only** type of gynecologic cancer that can be detect through early screening

~90% of cervical cancer is caused by HPV, human papillary virus, infections, and can be prevented through HPV vaccines.



Asking Questions about Cervical Cancer

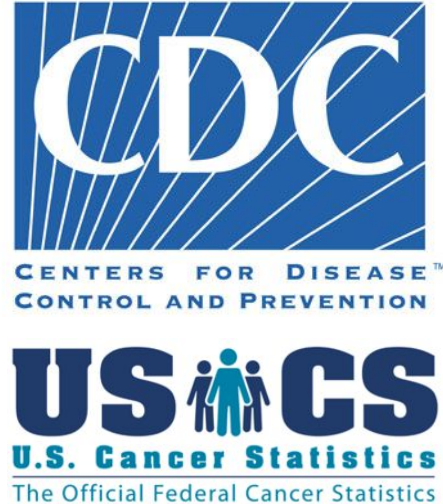
Research Question: How does the prevalence of cervical cancer screenings differ across different states in the U.S.?

Visit the [CDC's U.S. Cancer Statistics Data Visualizations Tool](#)

The USCS Data Visualization tool is an interactive dataset that provides information on official federal cancer statistics in the United States

How to use:

1. In the At a Glance dropdown menu, select Screening and Risk Factors
2. In the Area tab, select United States
3. In the Measure tab, select Cervical Cancer Screening
4. Explore the Cervical Cancer Screening Map and hover over each state to find and compare prevalence rates for each state



Click on image to access dataset link!

Asking Questions about Vaginal Cancer



Vaginal cancer arises in the vagina

Common symptoms may include:

- Abnormal vaginal bleeding or discharge
- Frequent and/or urgent need to urinate and/or constipation

Most vaginal cancers occurs after another type of gynecologic cancer spreads, making this a secondary cancer.

~70% of vaginal cancer cases are caused by HPV.

80-90% of primary vaginal cancers are squamous cell carcinomas, a common form of skin cancer.



Asking Questions about Vaginal Cancer

Research Question: How have survival rates for vaginal cancers changed over time?



Visit the [National Cancer Institute SEER Explorer](#)

SEER is an interactive tool that provides cancer statistics from the NCI Surveillance, Epidemiology, and End Results Program



How to use:

1. In the Get Started with a Cancer Site tab, select Vagina
2. In the Choose a Statistic to Explore tab, select Survival
3. Explore the Recent Trends in SEER Relative Survival Rates, 2000-2020 graph and make note of survival rate trends over the years

Asking Questions about Uterine Cancer



Uterine cancer arises in the uterus

Common **symptoms** may include:

- Abnormal vaginal bleeding or discharge
- Pelvic pain or pressure

Uterine cancer is the most common gynecologic cancer.

There are two types of uterine cancers: endometrial cancer (common) and uterine sarcoma (very rare).



Asking Questions about Uterine Cancer

Research Question: In which countries are uterine cancer mortality rates the highest?

Visit [WHO Cancer Today Data Visualization Tool](#)

Cancer Today is a data visualization tool that explores the global cancer burden for 36 cancer types in 185 countries using 2020 data



How to use:

1. Select **Map** as your preferred visualization form
2. For **Map Mode**, select **Maps**
3. For **Indicator**, select **Mortality**
4. In the **Cancer sites** tab, select **Corpus uteri**
5. Explore the **Estimated Age-Standardized Mortality Rates (World) in 2020** map to compare mortality rates (per 100,000 females) for each country

Asking Questions about Vulvar Cancer



Vulvar cancer in the vulva

Common **symptoms** may include

- Itching, burning, pain, or tenderness of the vulva
- Changes to vulva color or skin
 - Rash, sores, or warts

Most vulvar cancer affect the outer vaginal lip.

~70% of vulvar cancer cases are caused by HPV.



Asking Questions About Vulvar Cancer

Research question: How does the prevalence of vulva cancer differ across age groups in the U.S.?

Again, visit the [National Cancer Institute SEER Explorer](#)



How to use:

1. In the Get Started with a Cancer Site tab, select Vulva
2. In the Choose a Statistic to Explore tab, select Prevalence
3. For Compare by: section, select Age of Prevalence and choose which age ranges to explore on the left-hand side
4. Explore the People Alive with Cancer (U.S.) Prevalence graph to identify prevalence rate differences between age groups



Asking Questions about Ovarian Cancer



Ovarian cancer arises in the ovaries

Common symptoms may include:

- Abnormal vaginal bleeding or discharge
- Feeling full too quickly
- Difficulty eating
- Bloating
- Abdominal or back pain
- Pelvic pain or pressure
- Frequent/urgent need to urinate and/or constipation

Ovarian cancer is the deadliest gynecological cancer.

It often goes undetected until it metastasises since symptoms are vague and are often wrongly attributed other benign conditions.



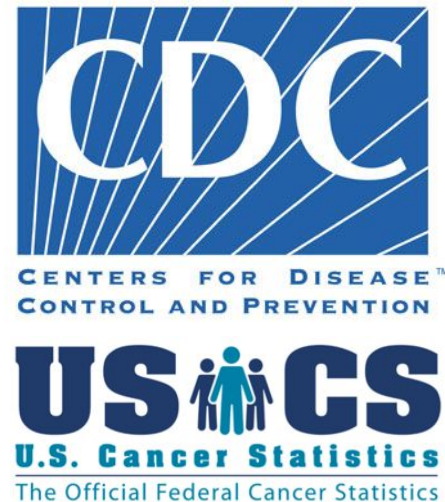
Asking Questions about Ovarian Cancer

Research Question: At what stage (how far a cancer has spread from its origin) is ovarian cancer most commonly diagnosed at? How does this differ across age groups?

Again, visit the [CDC's U.S. Cancer Statistics Data Visualizations Tool](#)

How to use:

1. In the At a Glance dropdown menu, select Stage/Survival
2. In the Cancer Type tab, select Ovary
3. In the Age tab, first explore All Ages and then explore each subgroup
4. Explore the Stage Distribution (%) of New Cancer Cases graph to find which stage of diagnosis is most common in each age group



How are Gynecologic Cancers Commonly Treated?

Hysterectomy: removal of the uterus and cervix through surgery (for cervical, uterine, and ovarian cancers), eliminating cancer cells and preventing further spread

- Oophorectomies may accompany this surgery to also remove the ovaries

Radiation Therapy: use of high-energy rays to damage and kill cancer cells, preventing further spread

Chemotherapy: use of chemical drugs to damage and kill cancer cells, shrinking tumors and preventing further spread

Hormone Therapy: use of drugs that blocks or alters hormones in the body to stop the growth of cancers that disrupt hormone supply

Immunotherapy: use of drugs that activate or suppress the immune system to help the immune system fight the cancer



Additional Resources to Explore

[American Cancer Society's Cancer Facts & Figures 2023](#)



[National Program of Cancer Registries \(NPCR\)](#)



[Childhood Cancer Data Catalog](#)

