# TIGERS

May is National Women's Health Month



## **Cervical Cancer Screening - Pap Smears and HPV Tests**

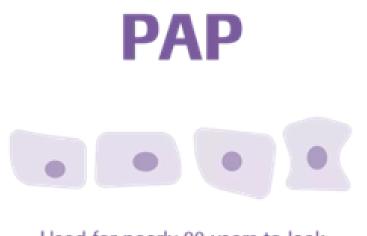
Submitted by Madison Sanders, PharmD Candidate 2023

### Cervical Cancer Statistics(1):

In the United States, about 13,000 new cases of cervical cancer are diagnosed and about 4,000 women die every year from this disease. In Alabama in 2019, about 10 in every 100,000 women were diagnosed with cervical cancer, which was the 3rd highest rate of all states in the US.

### What screenings are used for cervical cancer and why are they important?(2,3)

Pap smears and HPV tests can help prevent cervical cancer. Pap smears look for cervical cell changes that may be "precancerous." This means they are not currently cancer but may become cancer later on. HPV tests look for the human papillomavirus (HPV), which is a sexually transmitted infection (STI) that can cause cervical cancer. The earlier you detect cervical cancer, the easier it is to treat.



Used for nearly 80 years to look





# Uses modern technology

# for abnormal changes in cells.

to detect DNA of high-risk HPV to identify a woman's risk for pre-cancer or cancer.

### How often should you get tested?(3)

- 21-29 years old: Routine Pap smears should start at 21 years old. These are usually repeated every 3 years or sooner if abnormal. No HPV test is recommended.
- 30-65 years old: Three options, repeated every 3-5 years, depending on test type and results:
  - Pap smear only
  - HPV test only
  - Pap smear and HPV test
- >65 years old: May not have to be screened anymore if:
  - Normal screening test results for several year
  - No cervical precancer in the past
  - Cervix removed for non-cancerous conditions

Women in monogamous relationships.

... may feel that **HPV** screening is not necessary for them, but it is!

A woman may not even know she has a low level HPV infection for many years before it ever progresses and leads to health problems.



### What do the test results mean?(4)

Pap Smear

- Normal or Negative No cervical cell changes were found
- Unclear (ASC-US) Cervical cells look like they could be abnormal, but it is not clear if it's related to HPV
- Abnormal Abnormal cell changes were found, likely caused by HPV. These may be minor or more serious. More serious changes may be "pre-cancer" because they are not currently cancer, but may become cancer later.
- Unsatisfactory Not enough cells or cells were clumped together making the test unable to be completed properly. Test must be repeated.

### HPV

- Negative
  - <u>Do Not</u> have an HPV type that is linked to cervical cancer
- Positive
  - **Do** have an HPV type that is linked to cervical cancer
  - Does not indicate cancer, but does indicate being at risk for developing cancer later

### What can I do to reduce my risk of cervical cancer?(5,6)

- Get vaccinated against HPV!
  - HPV vaccine is recommended in all children, both male and female who are 11-12 years old, but can be given as early as 9 years old.
  - HPV vaccine is still recommended in everyone, both males and females, through 26 years old, if not previously vaccinated.
  - - In everyone 27-45 years old, the HPV vaccine may still be recommended based on your specific risks. Talk to your doctor to discuss your specific risks to decide if the HPV vaccine is right for you.
  - Have regular screenings, even if you are in a monogamous relationship.
- Always follow-up with your doctor if your test results are not normal.

### **Cervical Cancer References:**

1. CDC: Cervical cancer statistics [Internet]. U.S. Department of Health & Human Services. Atlanta (GA): Centers for Disease Control and Prevention. Updated 2022 Aug 10 [cited 2023 Apr 4]. Available from: https://www.cdc.gov/cancer/cervical/statistics/index.htm

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6. CDC: HPV schedule and dosing [Internet]. U.S. Department of Health & Human Services. Atlanta (GA): Centers for Disease Control and Prevention. Updated 2021 Nov 1 [cited 2023 Apr 4]. Available from: https://www.cdc.gov/hpv/hcp/schedules-recommendations.html



**Breast Cancer Screening - Mammograms** 

Submitted by Jose Calderon-Reyes, PharmD Candidate 2023

### Breast Cancer Statistics(1)

In the United States in 2019, more than 264,000 new cases of female breast cancer were diagnosed and about 42,000 women died of this cancer. This same year in Alabama, about 127 in 100,000 women were diagnosed.

### What screenings are used for breast cancer and why are they important?

Mammogram screenings are x-ray images of the breast.(2) Screening mammograms consist of two or more x-ray images of each breast in order to detect tumors that may not have been felt. Diagnostic mammograms consist of several x-ray images and various angles in order to check for breast cancer after a lump or signs/symptoms of the disease are found.

Screenings do not prevent breast cancer but can help detect it earlier when it is easier to treat.

### How often should you get screened?(3)

- Women aged 40-49 years Individual based off risk
- Women aged 50-75 years Biennial screening mammography
  - Women aged 75 years or older No recommendation

### What do the results mean?

Mammography reports are set in a standard format using the Breast Imaging Reporting and Data Systems (BI-RADS) which includes seven categories.(2).

### Category 0

- Assessment Need additional imaging evaluation
- Follow-up Additional imaging needed before a category can be assigned

### Category 1

- Assessment Negative
- Follow-up Continue regular screening mammograms

### Category 2

- Assessment Benign findings
- Follow-up Continue regular screening mammograms

### Category 3

- Assessment Probably benign
- Follow-up Receive a 6 month follow-up mammogram

### Category 4

- Assessment Suspicious abnormality
- Follow-up May require biopsy

### Category 5

- Assessment Highly suggestive of malignancy (cancer)
  - Follow-up Requires biopsy

### Category 6

- Assessment Known biopsy-proven malignancy (cancer)
- Follow-up Biopsy confirms presence of cancer before treatment begins

### Additionally, breast density is reported. Dense breasts are a risk factor for breast cancer. The higher the density, the more difficult it is to read mammograms.

Density	Description
Least Density	Breasts are almost entirely fatty
	Dense glandular tissue and fibrous connective tissue are scattered (also known as fibro glandular density.
	More areas of fibro glandular density (also known as heterogeneously dense)
Highest Density	Extremely dense

### Where can you get high-quality mammograms?(2)

Mammograms can be obtained in a variety of places including breast clinics, hospital radiology departments, mobile vans, private radiology offices, and doctor's offices. Inquire about the facility's FDA certification before making an appointment. Seek the facility's Mammography Quality Standards Act (MQSA) certificate and check the expiration date. Information about local FDA-certified mammography facilities is available through NCI's Cancer Information Service at 1-800-4-CANCER. You may also access a searchable list of facilities by Clicking Here

### Breast Cancer References:

1. CDC: United States Cancer Statistics: Data Visualization [Internet]. U.S. Department of Health & Human Services. Atlanta (GA): Centers for Disease Control and Prevention. Updated 2022 November. [Cited 2023 April 4]. Available from https://gis.cdc.gov/Cancer/USCS/#/AtAGlance/

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