

BREAST
CANCER
HUBSM

Age: 14 - 18

Pink Pandas

Breast Cancer Screening-Issues with Mammograms

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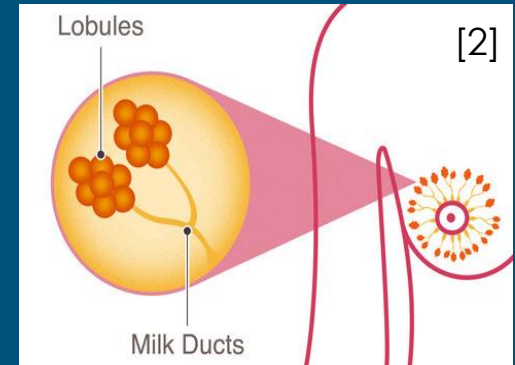
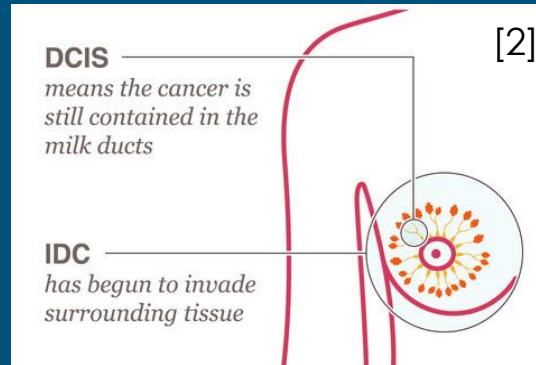
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ABSTRACT

- Some different ways you can detect breast cancer at an early age are mammograms, MRI, and self-check. All of these ways will benefit you with almost no cons.
- The aim of this research project is to address issues with mammograms at an early age.
- Some methods that our group suggests using are self-check, mammograms, and ultrasound.
- An observation that we drew from the research was that people should try to get mammogram if Breast cancer is in the family-screenings at an earlier age than forty so they can take early action to prevent it. Breast Self Exam from age 17-18 & clinical Breast exam suggested.
- We believe that people should take precautions so they are able maintain their health and be aware of potential diseases.

Types of Breast Cancer [1]

- Ductal Carcinoma In Situ:
 - Non-invasive cancer where abnormal cells have been found in the lining of the breast milk duct.
- Invasive Ductal Carcinoma:
 - Abnormal cancer cells that began forming in the milk ducts have spread beyond the ducts into other parts of the breast tissue.



Early Detection [3]

- Early detection is a vital part of minimizing the amount of people diagnosed with fatal breast cancer.
- There are several different ways to detect the cancer early. The most common ways for screening Breast Cancer are Breast Self Exam, clinical breast exam, mammogram, ultrasound

Benefits of Early Detection [3]





- If breast cancer is found early then there are more treatment options and a better chance of survival.
- Women have a 93% survival rate in the first five years when their breast cancer is detected at an early stage. [1]
- Two important factors in determining the outlook of the disease:
 - Size of the cancer
 - How far it has spread

Breast Cancer Hub produced Breast Self Exam cards in collaboration with Sarah Cannon Cancer Institute & Male Breast Cancer Coalition- Monthly Breast Self Exam (BSE) is advisable [4/5]


14 Languages available. English, Bahasa, German, Portuguese, Spanish; Urdu, Indian languages (Assamese, Bengali, Hindi, Marathi, Malayalam, Tamil, Telugu, Kannada, Odia), Gujarati, Nepali in progress.

Breast Self-Exam for Her!

Check your breasts the same day every month.
Check yourself a week after your period starts when swelling and sensitivity are less.



1. Check your breasts in front of a mirror for any symptoms or abnormalities.
2. Check your nipples carefully, lumps may be found behind the nipple.
3. In a sitting or standing position, use the pads of the three middle fingers - examine using light, medium, and deep pressure. (See step 4, for area to be examined)
4. Examining starts at the collarbone and continues down and up the entire breast in a vertical pattern.



5. Position yourself in bed which leads to a more even distribution of your breast tissue. Repeat step 3 and 4.





Signs and Symptoms

- ✓ Swelling of all or part of a breast (even if no distinct lump is felt).
- ✓ Skin irritation or dimpling (sometimes looking like an orange peel).
- ✓ Breast or nipple pain.
- ✓ Nipple retraction (turning inward).
- ✓ Redness, scalliness, or thickening of the nipple or breast skin.
- ✓ Nipple discharge (other than breast milk).


BREAST CANCER HUB breastcancerhub.org **SARAH CANNON Cancer Institute** hcamidwest.com **ICCA** **The Male Breast Cancer Coalition** malebreastcancercoalition.org **Kurlbaum Illustration** kurlbaumillustration.com

Breast Self-Exam for Him!

Check yourself the same day every month.



1. Check your breasts in front of a mirror for any symptoms or abnormalities.
2. Examine the nipple, most men find their lumps under the nipple.
3. In a sitting or standing position, use the pads of the three middle fingers - examine using light, medium, and deep pressure. (See step 4, for area to be examined)
4. Examining starts at the collarbone and continues down and up the entire breast in a vertical pattern.



5. Position yourself in bed which leads to a more even distribution of your breast tissue. Repeat step 3 and 4.

Signs and Symptoms

- ✓ A painless lump or thickening in your breast tissue.
- ✓ Changes to the skin covering your breast, such as dimpling, wrinkling, redness, or scaling.
- ✓ Changes to your nipple, such as redness or scaling, or a nipple that begins to turn inward.
- ✓ Discharge from your nipple.

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Problems with Mammograms [6]

- Women who are 40 years or older are recommended to get a mammogram.
- About half have dense breasts which means that mammograms could miss breast cancer as fibroglandular breast tissue.
- Since there is a high chance of not recognizing breast cancer if you have dense breasts, you must take other alternative precautions to ensure you do not have breast cancer and the next step could be an ultrasound.

Issues with Mammograms [7]

- Several negative things can happen while testing for breast cancer. One, as mentioned before, is dense breast. Dense breast tissue can make it harder to find cancer on a mammogram. Another problem that can happen is a false positive mammogram is when looks abnormal but there is no cancer in the breast. On the other hand, a more dangerous thing is a false negative mammogram. This is when the results come saying you without seeing abnormalities, but there is cancer in the breast.

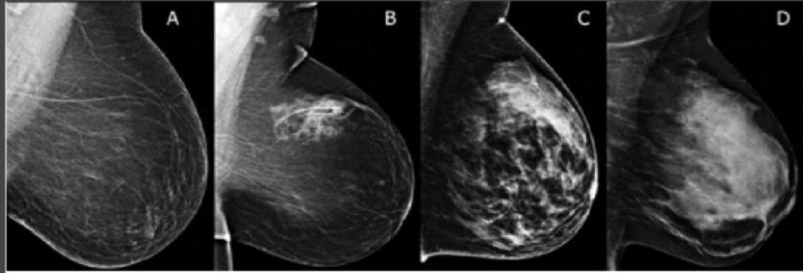
Issues with Mammograms Cont. [8]

- As before said, a false negative mammogram looks normal even though cancer is present. Women with dense breast have a much higher chance of receiving a false negative mammogram. Dense breast makes this chance higher because while fatty tissue appears black on a mammogram, both cancer and dense breast tissue (supportive tissue) appear white on the mammogram. This makes it a lot harder to see the cancer.
- When you get your annual mammogram, there will be a low-dose of radiation which may increase breast cancer risk. Women who are high risk for breast cancer should look into other screening processes other than mammogram at a young age.

Issues with Mammograms Worldwide [9]

Dense Breast Tissue Categories:

(A) Fatty; (B) Scattered fibroglandular density; (C) Heterogeneously dense; (D) Extremely dense



Breasts which are (C) heterogeneously dense, or (D) extremely dense, are considered "dense breasts"



Late Dr. Nancy Capello...
Why Mammogram missed her tumor..
[Founder, Are You Dense, Inc.](https://www.areyoudense.com/), and Are
You Dense Advocacy, Inc., 36 states
density reporting laws
[https://www.breastcancerhub.org/mentor-
r-blog/2018/6/18/nancy-m-cappello-phd](https://www.breastcancerhub.org/mentor-blog/2018/6/18/nancy-m-cappello-phd)

Misconception [10]

- Women can get breast cancer from antiperspirants and underwire bras.
- There is no evidence to suggest such claim
- Breast injury can lead to breast cancer .A reason for this myth is that an injury or bruise will draw attention to this area making it easier to notice cancer that has been present there for some time
- If a mammogram screening results normal then another screening will not have to be done the following year.
 - Evidence shows that women who skip a yearly mammogram may miss the opportunity for an early diagnosis
 - Young women will not develop breast cancer
 - Breast cancer can affect women at any age; 25% of women with breast cancer are younger than 50.

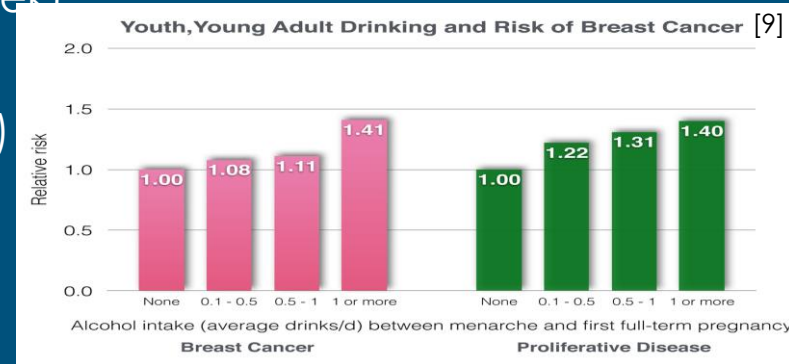
Breast Cancer in Men [10]

- Breast cancer in men make up less than 1% of all cases of breast cancers and the risk of them getting breast cancer is 1 in 1,000; because of this there are no available screenings meant specifically for men.
- Mammograms are more efficient in men than in women because their breast tissue is not as dense.
- Risk factors in men:
 - Advanced age
 - Prior radiation exposure to the chest
 - Liver disease
 - Exogenous estrogen
 - Androgen deficiency
 - Genetics

Ways to Reduce the Risk of Breast Cancer [11]

- According to Lynne P. Clark, M.D. the best ways to improve your breast health are...

- Plant foods (5-10 servings of fruits and vegetables per day)
- Reduce alcohol consumption (1-2 drinks a week)
- Exercise (5 times a week for 30 minutes)
- Vitamin D supplement (minimum 2000 IU daily)
- Examine your breasts monthly
- No tobacco
- Take care of yourself
- Ideal BMI < 25 (obese women are at an increased risk of breast cancer)
- Olive oil for cooking (9 g. daily)
- Nutrition (balanced diet, rich in plant food and fiber)



Understanding Breast Health [12]

- According to Carol Milgard Breast Center:
 - Know your risk
 - Talk to your family and health care provider
 - Get Screened
 - Ask your healthcare provider about yearly mammograms
 - Have a clinical breast exam
 - Know what is normal for you

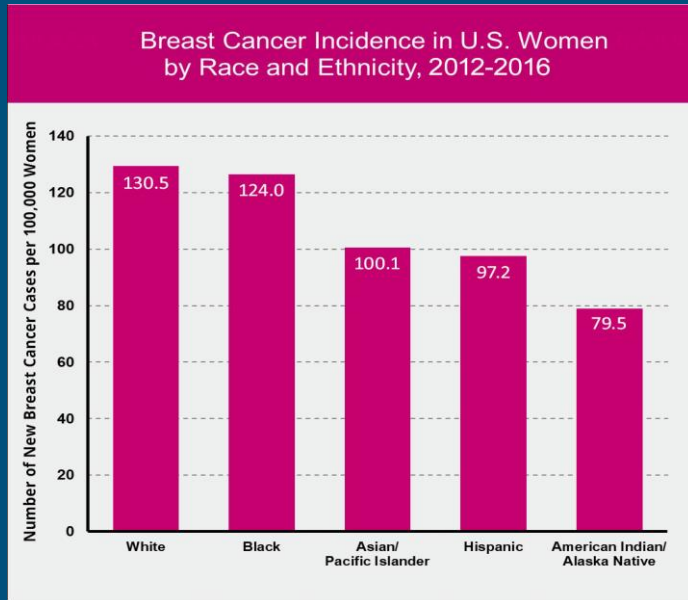
Treatment Methods [13]

- Chemotherapy: Drugs that treat cancer throughout the whole body by killing the cancer cells.
- Radiation: Radiation is used to kill any cancer cells in a specific part of the body (it takes about 20 minutes per day for around six weeks).
- Mastectomy: Removes breasts and lymph nodes to see if the cancer has spread. Some women choose to have reconstruction during this surgery

Breast Cancer in the United States [14]

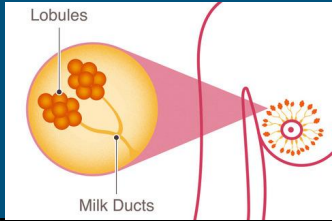
- About 1 in 8 women from the U.S will develop invasive breast cancer throughout their lifetime. On the other hand, about 1 in 883 men will be diagnosed with the same disease
- Breast cancer is the second most common cancer among American woman, second only to skin cancer.
- Approximately 41,760 women in the United States are expected to die in 2019 from breast cancer, though since 1989, death rates have been dropping
- The decrease in the death rate is thought to be the result of advanced treatment options, earlier detection, and increased cancer awareness.

Breast Cancer In Other Countries [14]



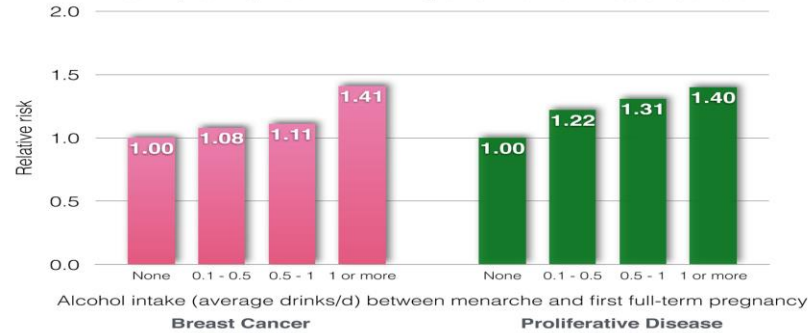
- Some countries that have low breast cancer survival rates:
- Belgium, Luxembourg, Netherlands, France, Lebanon
- These countries face various predicaments:
 - High consumption of alcohol
 - Greater birthweight
 - Higher body fat
- Some ways to prevent these from happening are providing screening early, making cheaper treatments for those who can't afford it, and we could increase cancer awareness so more people will know about it.

Images



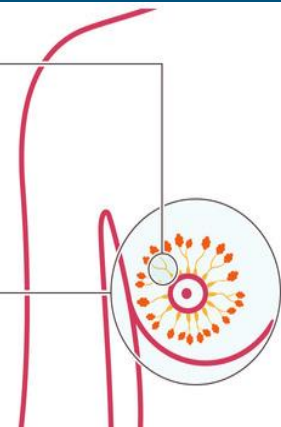
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Youth, Young Adult Drinking and Risk of Breast Cancer

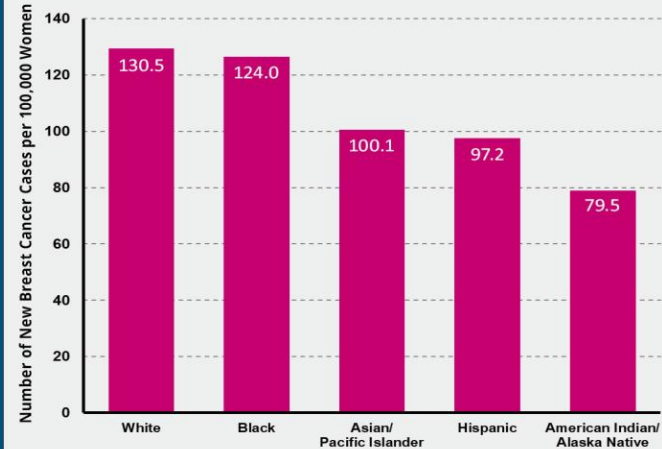


DCIS
means the cancer is still contained in the milk ducts

IDC
has begun to invade surrounding tissue



Breast Cancer Incidence in U.S. Women by Race and Ethnicity, 2012-2016



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