



Breast Cancer: 1 in 8

Cancer Information and Awareness

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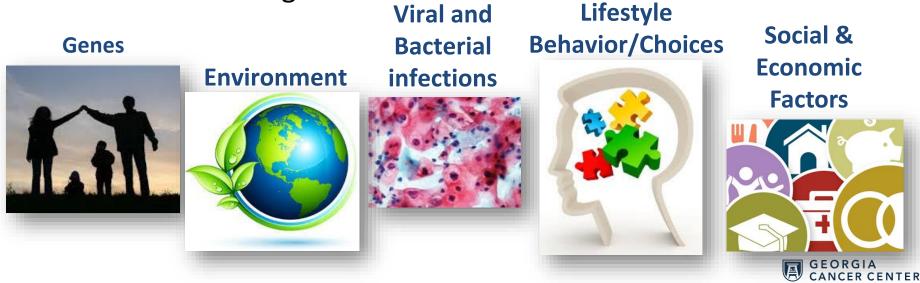
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Teledermatology in Rural Georgia Funded by the USDA Rural Utilities Service, Distance Learning & Telemedicine Grant Program

What are Risks and Risk Factors for Cancer?

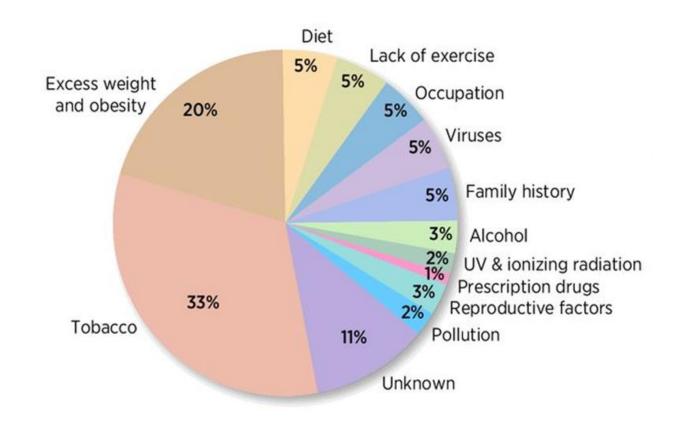
Risks

- Anything that increases chances or risk of getting a disease
- Having a risk factor does not mean you will get a specific disease
- Some risk factors can be changed (modified) others cannot be changed



Source: https://www.cancer.gov/about-cancer/causes-prevention#:~:text=Cancer%20 prevention%20 is %20 action%20 taken, can%20 prevent%20 from %20 developing.

Causes of Cancer



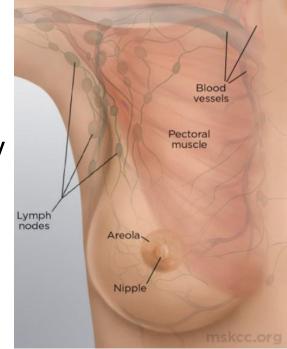
1/3 to 1/2 of cancer deaths in Western populations are linked to risk factors that can be changed. (2018)

What is Breast Cancer?

Abnormal cells or uncontrolled cell growth in the breast

There are two different kinds of breast cancer, depending on the cells where the cancer forms.

- Invasive breast cancer cancer cells have moved beyond original place where it started
 - Can spread to other distant parts of the body
- Non-invasive breast cancer abnormal cells have <u>not</u> spread

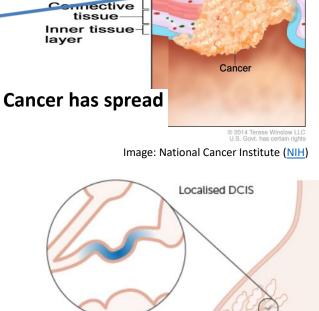




Common Types of Breast Cancer

Invasive Ductal Carcinoma (IDC)

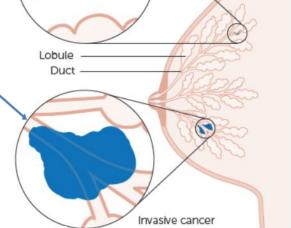
- <u>Invasive</u> means cancer has spread beyond the layer of tissue where it formed
- Begins in the milk duct
- Most common type of breast cancer
 - 8 in 10 breast cancers
- Most common type in men
- Spreads to other healthy breast tissues
- Spreads to other parts of body by way of the lymph system and blood system (metastasis)



Outer tissue

Muscle layers

laver



Common Types of Breast Cancer

Ductal Carcinoma in Situ (DCIS)

- In situ means abnormal cells remain in the original place where they formed
- Stage 0 is non-invasive or pre-invasive cancer
- 1 in 5 breast cancers are DCIS

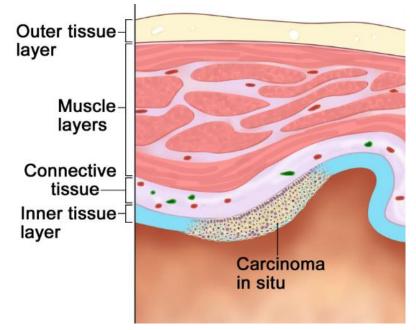


Image: National Cancer Institute (NCI)



Common Types of Breast Cancer

Classified as: Low, Intermediate, or High Grade based on how the cells look under a microscope

• *Grade 1 (low)* – cancer cells slowergrowing; look more like normal breast tissue

Grade 2 (intermediate) – cancer cells look somewhat different

 Grade 3 (high) – Higher grade; cancer cells look very different from normal cells

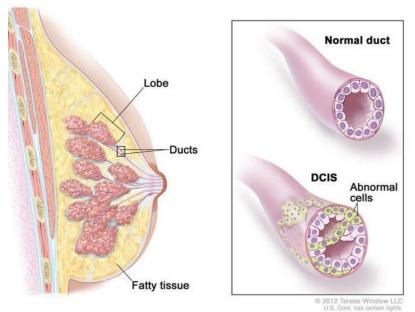
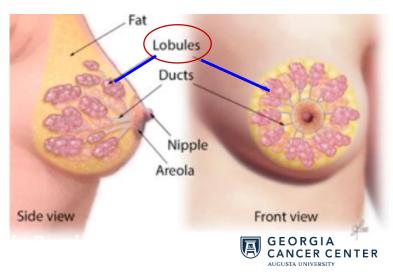


Image: National Cancer Institute (NCI)



Common Types of Breast Cancer Invasive Lobular Carcinoma (ILC)

- Begins in the **lobules** which are milk-producing glands
- Cancer breaks through wall of lobule, invades nearby breast tissue
- 2nd most common invasive breast cancer
 - Accounts for **1 in 10** of invasive breast cancers
 - Tends to occur later in life; early 60s
- Does not cause a firm or distinct lump; can be a thickening or swelling that feels different from surrounding area; nipple is inverted
- Often involves both breasts
- Can spread to lymph nodes and other parts of the body (metastasis)



Men Can Get Breast Cancer Too

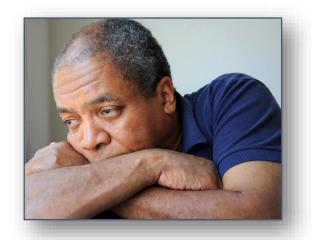
Breast cancer in men is rare.

It is 100 times less common in men, than in women.

- 1 in 833 men will get breast cancer in the U.S.
- **Disparity:** African American men are twice as likely to have breast cancer than White men.

Breast cancer in men is often diagnosed at a later stage.

- More than 1.5 years between the 1st symptom and the time of diagnosis
- Men may be MORE likely to die in the first 5 years after diagnosis





Breast Cancer & Disparities

- Most often diagnosed cancer among Black women
- Leading cause of cancer deaths for Black women

Black women

- Less likely to be diagnosed with breast cancer than White women
 <u>but</u> 41% more likely to die of breast cancer than White women
 - More likely to have aggressive breast cancer at younger ages

Why this disparity?

- Complex social and economic factors, including structural racism
- Lack of health insurance and less access to high-quality treatment
- Diagnosed at later stages when cancer is harder to treat
- Higher presence of obesity
- More comorbid conditions





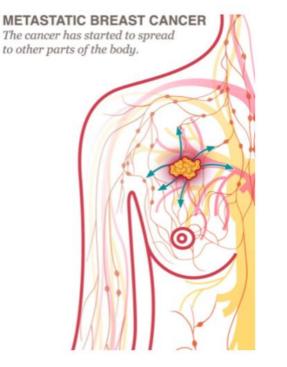


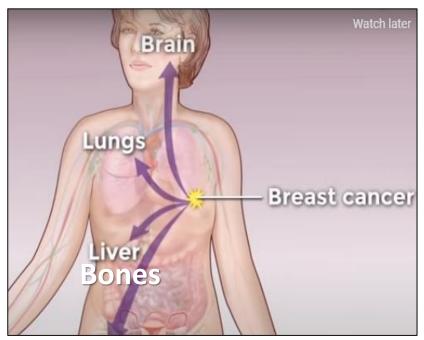


How is Breast Cancer Staged? TNM Staging System

- T = Tumor Size of original (primary) tumor in centimeters
- N = Nodes Whether cancer spread to nearby lymph nodes
- M = Metastasized Cancer has spread to other distant body parts

Breast cancer tends to spread to the bones, lungs, liver and brain

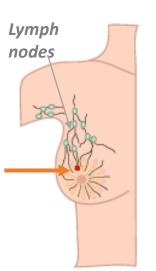


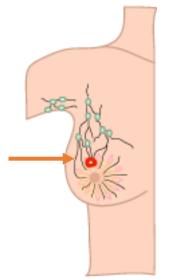


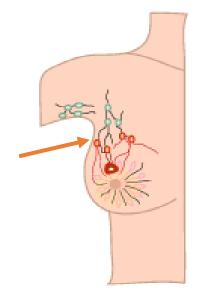
Source: National Cancer Institute (NCI)

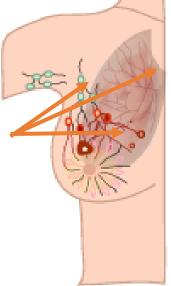
Stages of Breast Cancer

STAGE 0 - Abnormal cells are present but have not spread to nearby tissue









STAGE I

Cancer has spread to other tissue in small area within the breast

STAGE II

Cancer has grown; Confined to breast

STAGE III

Cancer has grown; moved outside the breast; lymph nodes affected

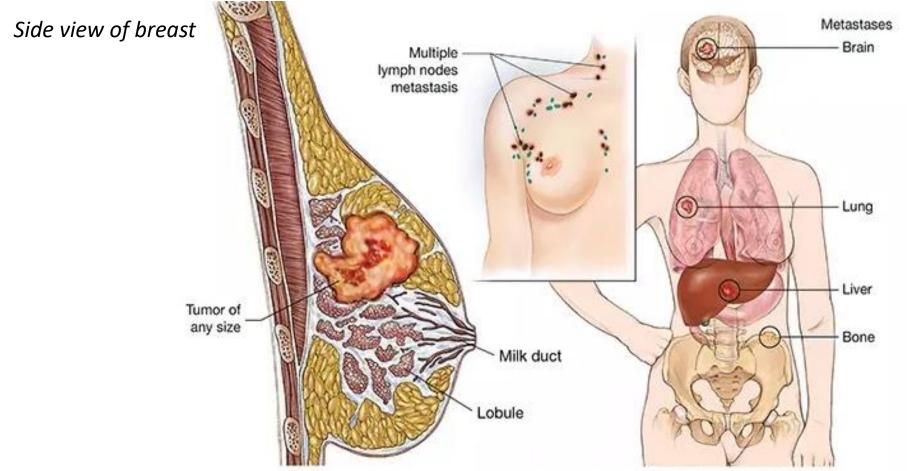
STAGE IV

Cancer has spread widely outside the breast to distant lymph nodes or other organs



Stage IV Breast Cancer

 Metastatic Breast Cancer - Cancer has spread widely outside the breast to other body parts including to distant lymph nodes and organs



C Robert Morreale, CM/

Source: CancerSupportCommunity.org

Breast Cancer Risk Factors With the Most Impact

- Gene mutations BRCA1, BRCA2
- Family history of breast cancer
- Some medical treatments
 - Radiation exposure of chest for treatment of other diseases, *example: lymphoma*
 - Chemotherapy
 - Drugs that suppress the immune system
- Increasing age





You Can Reduce Your Risks for Breast Cancer

- If taking birth control pills or hormone replacement therapy (HRT) Talk to your healthcare provider about risks
- Avoid alcohol and heavy drinking
- Maintain a healthy weight
- Be physically active
- Encourage new moms to breastfeed
 - Breastfeed your babies for at least 1 year

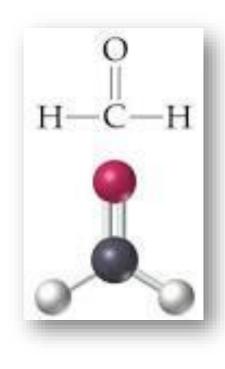






You Can Reduce Your Risks for Breast Cancer

- Avoid exposure to cancer-causing <u>chemicals</u>
 - Arsenic, asbestos, formaldehyde, nickel, radon, and others
- Limit radiation exposure talk with your provider
 - X-rays medical/dental
 - CT OR CAT (computed tomography) scans
 - PET (positron emission tomography)





Mammogram Follow these Breast Screening Guidelines

- 40-44 years Choice to start annual mammogram (breast x-ray)
- **45-54 years** Mammogram and breast exam by doctor, every year
- **55+ years** Mammogram every 2 years or continue yearly screening
- 70-74 years Talk to your doctor



American Cancer Society, 2022

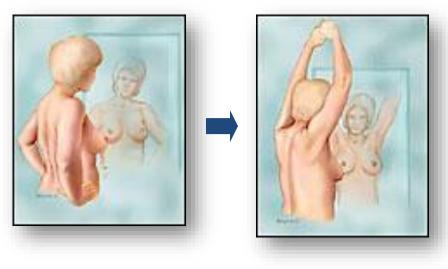
 Continue screening as long as in good health and expected to live 10 more years or longer.

Screening & Early Detection Saves Lives

Breast Self-Exam – Monthly

- Women can detect changes in their breast
- Does not replace other screening techniques (Mammogram, Clinical Breast Exam, or Doctor Visits)
- Know what is normal for your breasts
 Note any changes and tell your health provider

Visual check in mirror.



Physically examine own breasts.







What Breast Cancer Can Look & Feel Like

This picture uses lemons to show the kind of changes to look for in your breasts.



How is Breast Cancer Diagnosed?

Biopsy

- Tissue from breast lump is removed
 - Tissue is examined under microscope by a Pathologist
- Biopsy Types methods to remove breast tissue
 - Needle Biopsy
 - Surgical Biopsy incision (cut)
 - Incisional Biopsy
 - Part of lump removed
 - Open Excisional Biopsy
 - Entire lump removed (lumpectomy)



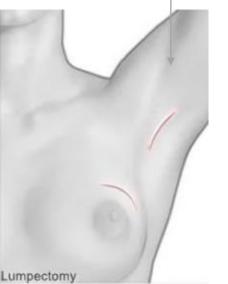


Breast Cancer Treatments: Surgery

Lumpectomy

Cancerous tissue or lump is removed.

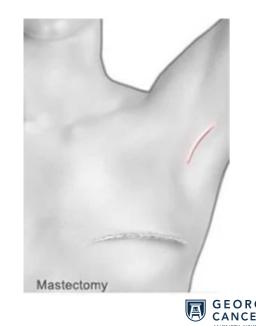
 Lymph nodes under arms, chest, and neck may be removed.



Mastectomy

Entire breast and surrounding tissue is removed.

• Lymph nodes under arms, chest, and neck may be removed.



Breast Cancer Treatments: Radiation Therapy

- Specialized equipment is used
- Precise placement radiation beam is applied to a targeted area to kill cancer cells
 - Brachytherapy radioactive 'seeds' or pellets are implanted into breast tissue, next to the cancer
 - High-energy beam of radiation is applied to a specific area
- May be used after surgery or to enhance chemotherapy
- Side effects may occur:
 - Swelling
 - Sunburn-like effect
 - Feeling tired





Breast Cancer Treatments: Chemotherapy

- Medications (drugs) are used to kill cancer cells
- They are given to patients by:
 - Intravenous (IV) infusion
 - Pill
 - Injection
- May be used after surgery
- Side effects may occur:
 - Hair loss
 - Nausea, vomiting
 - Pain headaches, muscle aches
 - Changes in thinking and memory
 - Increased risk of infection
 - Tiredness
 - Diarrhea





Summary

- 1. See your doctor to assess your breast cancer risk
 - Know your family health history
 5-10% of breast cancers are passed on through genes
- 2. Some risk factors are under your control

Make changes to reduce your breast cancer risk

- 3. Create your own breast health action plan
 - Know your breasts use self-exams & visual checks
 - Follow screening recommendations Get your mammogram!
- **4. Multidisciplinary treatment** of breast cancer results in better outcomes
- 5. Breast cancer survival is improving!





Assess Your Breast Cancer Risk

To Access this educational material, click here

HIGHER RISK

GEORGIA BREAST CANCER RISKS CANCER CENTER AUGUSTA UNIVERSITY LOWER RISK Where do your answers fall on the spectrum?

1.	Your age	30s	40s	50s	60s	70s
	Risk of breast cancer during the next 10 years*	1 in 208	1 in 65	1 in 42	1 in 28	1 in 25

2. Family history

NO ---- First-degree (parent, sibling, or child) relative with breast cancer ----- YES

3. Possible inherited risk

NO Breast cancer diagnosed at an early age (younger than 50 years)	YES
NO Family members with the same or related cancers	YES
NO Multiple generations that were affected	YES
(such as great grandparent, grandparent, parent)	
NO A close male blood relative with breast cancer	 YES

4. Estrogen exposure

YESI got my first period after age 12	1	NO
YESI gave birth before age 30	!	NO
YESI breast fed my baby/babies	!	NO
YESI started menopause before age 55	1	NO
NO I took hormone replacement therapy for 5 years or more)	YES
NO = = = = = = have recently used hormonal birth control methods = = = = = = = = = = = = = = = = = = =		YES

5. Lifestyle and other factors

NOI have had chest radiation therapy	YES
NO I drink alcoholic beverages	YES
NO I am overweight	YES
NO I am physically inactive	YES
NOI smoke cigarettes and/or other tobacco products	YES
NO I am exposed to chemicals such as benzenes, pesticides, and formaldehyde	YES
NO I have had a previous abnormal breast biopsy	YES

*National Cancer Institute (NCI)

www.cancer.gov/types/breast/risk-fact-sheet#what-is-the-average-american-womans-risk-of-developing-breast-cancer-during-her-lifetime

This document is not a risk assessment tool. This list of breast cancer risk factors is based on information from the National Cancer Institute (NCI). It reviews some of the recognized risk factors for breast cancer but does not calculate your breast cancer risk. Please talk to your doctor to better estimate your breast cancer risk and to make an individualized screening plan.

For more information about breast cancer, turn this page over and visit:

augusta.edu/cancer

GEORGIA CANCER CENTER AUGUSTA UNIVERSITY

MOST COMMON TYPES OF BREAST CANCER

Invasive Ductal Carcinoma (IDC) B0% of breast cancers

- spreads to other breast tissues Ductal Carcinoma in Situ (DCIS)
- Most common non-invasive breast cancer
- Lobular Carcinoma

· Begins in the milk glands (lobules)

REFERENCES & RESOURCES

American Cancer Society (ACS) National Cancer Institute (NCI) Breast Cancer.org (English/Spanish) www.breastcancen.org

The American Society of Breast Cancer Surgeons Foundation provides an interactive website with information and resources about breast cancer. www.breast360.org Breast Cancer Risk Assessment Tool An interactive, on-line tool from NCI that helps estimate a woman's risk of developing invasive breast cancer

www.cancer.gov/bcrisktool

APPS FOR MOBILE DEVICES

Boarding for Breast Cancer (B4BC) - Free Breast self-exam guide and monthly reminder, and wellness information Available on iTunes and Google Play Check Yourself! - Free Gives information about treatment options,

nearby clinical trials, and symptom tracking

iPhone and Android Outcomes4Me - Free

Creative approach to monthly - Available on iPhone and Android

AUGUSTA UNIVERSITY SERVICES Breast Health Center

Mammography - 706.721.3252 Radiology Scheduling - 706.721.XRAY (9729)

FOR MORE INFORMATION augusta.edu/cancer

Georgia Cancer Center Cancer Information and Awareness 1410 Laney Walker Blvd. CN-1179 D Augusta, GA 30912

THIS ILLUSTRATION DEPICTS THE LOBES AND DUCTS OF THE BREASTS.



Source: August University Instructional Design and Development, Lytisev Ekerna, MSMI

GET THE FACTS ABOUT BREAST CANCER IN THE U.S.

- · Most common non-skin cancer in women, regardless of race or ethnicity
- 1 in 8 women, or 13%, are diagnosed with breast cancer
- · 2nd leading cause of death due to cancer for women (lung cancer is 1st)
- · As women get older the chance of being diagnosed with breast cancer increases, but, the risk of breast cancer is not the same for all women in a given age group
- · 85% of women diagnosed with breast cancer have no family history of it
- · Women who have or had a mother, sister, and/or daughter with breast cancer have a greater risk of developing breast cancer
- · Inherited gene defects account for 5-10% of all female breast cancers.
- · Breast cancers from inherited gene mutations tend to be aggressive
- · Some breast cancer risk factors are modifiable a healthy lifestyle, including physical activity and maintaining a healthy weight, may reduce breast cancer risk
- · Long-term weight gain in post-menopausal women increases breast cancer risk as much as 33%
- · Men get breast cancer, too, but 100 times less often than women

SCREENING TIPS

- · Know your breasts and report any changes in color, size or shape to your healthcare provider
- Know your family cancer history
 - · Screening needs to be individualized work with your doctor

Screening for average-risk women

- Begin annual screening between ages 40-44 years
- · Annual screening ages 45-54 years
- · Ages 55+ option to transition to screening every two years or continue annual screening
- . Continue mammography as long as overall health is good and as long as there is a life expectancy of 10 years

NOTE: Screening for women at higher risk (family history, gene mutation, history of radiation) may start earlier in life and involve more frequent evaluation with imaging (including MRI for some) and clinical breast exam.

GEORGIA CANCER CENTER

- Breast Cancer Team www.augusta.edu/cancer/patientcare/services-treatment/breast
- Breast Health Nurse Navigator 706-723-4319 or 706-721-6744

Areola - - - -Ductement

Educational Handout

To Access this educational material, click here

ASCO answers

Breast Cancer

What is breast cancer?

Breast cancer begins when healthy breast cells change and grow out of control, usually forming a mass called a tumor. Breast cancer is the most common type of cancer diagnosed in women in the United States (excluding skin cancer). Men can also develop breast cancer, but it is rare.

What are the parts of the breast?

Most of the breast is fatty tissue. However, it also contains a network of lobes that are made up of tiny, tube-like structures called lobules that contain milk glands. Tiny ducts connect the glands, lobules, and lobes, and carry milk from the lobes to the nipple. Most breast cancers begin in the cells lining the milk ducts and are called ductal carcinomas. The second most common type starts in the lobules and is called lobular carcinoma.

What does stage mean?

The stage is a way of describing where the cancer is located, how much the cancer has grown, and if or where it has spread. There are 5 stages for breast cancer: stage 0 (zero), which is called noninvasive cancer or ductal carcinoma in situ (DCIS), and stages I through IV (1 through 4). Find more descriptions of these stages at www.cancer.net/breast.

How is breast cancer treated?

The biology and behavior of breast cancer affect the treatment plan, and every person's cancer is different. Doctors consider many factors when recommending a treatment plan, including the cancer's stage; the tumor's human epidermal growth factor receptor 2 (HER2) status and the hormore receptors status, which includes estrogen receptors (ER) and progesterone receptors (RR); the presence of known mutations (changes) in breast cancer genes; and the woman's age, general health, and whethers he has gone through menopause. For earlier stages of cancer, surgery to remove the tumor and nearby lymph nodes usually is the first treatment. Additional treatment with chemotherapy, radiation therapy, hormonal therapy, or targeted therapy is usually given after surgery to lower the risk of the cancer returning. These treatments may also be given before surgery to shrink the size of the tumor. The treatment of cancer that has spread or come back after treatment depends on many factors. It can include the therapies list davoe used in a different combination or at a different pace. When making treatment decisions, women may also consider a clinical trial. Clinical trials are an option to consider for treatment and care for all stages of cancer. Taki with your doctor about all treatment options. The side effects of breast cancer treatment can be reduced or managed with a variety of medications and the help of your health care team. This is called pallative care or supportive care and is an important part of the overall treatment plan.

How can I cope with breast cancer?

Absorbing the news of a cancer diagnosis and communicating with your health care team are key parts of the coping process. Seeking support, organizing your health information, making sure all of your questions are answered, and participating in the decision-making process are other steps. Talk with your health care team about any concerns. Understanding your emotions and those of people close to you can be helpful in managing the diagnosis, treatment, and healing process.

ASCO ANSWERS is a collection of oncologist-approved patient education materials developed by the American Society of Clinical Oncology (ASCO) for people with cancer and their caregivers.

Questions to ask the health care team

Regular communication is important in making informed decisions about your health care. It can be helpful to bring someone along to your appointments to take notes. Consider asking your health care team the following questions:

- What type of breast cancer do I have?
- > Can you explain my pathology report (laboratory test results) to me?
- What stage is the breast cancer? What does this mean?
- What is the ER/PR status of the tumor? The HER2 status? What does this mean?
- Would you explain my treatment options?
- What clinical trials are available for me? Where are they located, and how do I find out more about them?
- What treatment plan do you recommend? Why?
- Should treatment before surgery be considered?
- What is the goal of each treatment? Is it to eliminate the cancer, help me feel better, or both?
- > Who will be part of my treatment team, and what does each member do?
- How will this treatment affect my daily life? Will I be able to work, exercise, and perform my usual activities?
- Will this treatment affect my ability to become pregnant or have children? What can be done to preserve my fertility?
- > What long-term side effects are associated with my cancer treatment?
- > If I'm worried about managing the costs of cancer care, who can help me?
- Where can I find emotional support for me and my family?
- If I have a guestion or problem, who should I call?

Find more questions to ask the health care team at www.cancer.net/breast and www.cancer.net/metastaticbreast. For a digital list of questions, download Cancer.Net's free mobile app at www.cancer.net/app.

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Health Care Professionals: To order more printed copies, please call 888-273-3508 or visit www.cancer.net/estore.

Cancer.Net

Doctor-Approved Patient Information from ASCO* AMERICAN SOCIETY OF CUINCLA ONCOLOGY 2316 MIII Road, Suite 800, Alexandrin, VA 2214 Toll Free 888-651-3088 [Phone: 571-488-1300 www.asco.org | uww.cancer.ent | uww.conque.org 8/2019 American Society of Clinical Oncology. Popermissions information, contact permissions flacto.org,

Words to know

Benign: A growth that is not cancerous.

Biopsy: Removal of a small tissue sample that is examined under a microscope to check for cancer cells.

Chemotherapy: The use of drugs to destroy cancer cells.

DCIS: Ductal carcinoma in situ. Cancer that has not spread past the ducts and is not invasive.

Lymph node: A tiny, bean-shaped organ that fights infection.

Lumpectomy: The surgical removal of the tumor and an area of healthy tissue around the tumor

Malignant: A cancerous growth or mass.

Mastectomy: Surgical removal of the entire breast.

Metastasis: The spread of cancer to another part of the body, usually to another organ.

Oncologist: A doctor who specializes in treating cancer.

Radiation therapy: The use of high-energy x-rays to destroy cancer cells.

Tumor: An abnormal growth of body tissue.

AABC19

You Can Lower Your Risk & Prevent Cancer

Avoid tobacco, including secondhand smoke or e-cigarette vapor (aerosol)

If you smoke tobacco, including e-cigarettes or spit tobacco: It's never too late to quit!





You Can Lower Your Risk & Prevent Cancer



Protect your skin from the sun



Prevent infections (*such as* HIV/AIDS, HPV, Hepatitis B, and Hepatitis C)

Avoid or limit alcohol use





Follow Cancer Screening Guidelines



Promoting Health, Preventing Cancer

Maintain a healthy weight







Eat well balanced meals

(fresh fruits, vegetables

& whole grains)

Stay physically active

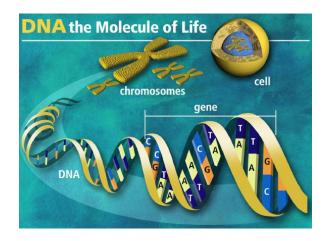
- Exercise regularly 4 hrs. week
- 2.5 hours moderate exercise weekly or
- 1.25 hours vigorous exercise a week





Promoting Health, Preventing Cancer





Know Your Family's Health History

Cancer risks vary; May be related to inherited genes



Genetic Counseling

Assess risk of carrying a gene mutation or developing a particular disease



Breast Cancer Information & Sources

- National Cancer Institute cancer.gov
- NCI SEER (Surveillance Epidemiology and End Results) database Cancer Stat Facts: Prostate Cancer https://seer.cancer.gov/statfacts/html/prost.html
- American Society of Clinical Oncology (ASCO) Cancer.net
- American Cancer Society cancer.org
- American Institute for Cancer Research <u>aicr.org</u>
- Breast Cancer Research Foundation <u>www.bcrf.org</u>
- National Breast Cancer Foundation <u>nationalbreastcancer.org</u>
- susan c. **f** komen.org
- Georgia Cancer Center <u>augusta.edu/cancer/community</u>



Cancer Information & Sources

- National Cancer Institute cancer.gov
- NCI SEER (Surveillance Epidemiology and End Results) database Cancer Stat Facts: Prostate Cancer https://seer.cancer.gov/statfacts/html/prost.html
- American Society of Clinical Oncology (ASCO) Cancer.net
- American Cancer Society cancer.org
- American Institute for Cancer Research <u>aicr.org</u>
- Mayo Clinic <u>mayoclinic.org/diseases-conditions</u>
- Medline Plus U.S. National Library of Medicine National Institutes of Health <u>medlineplus.gov/prostatecancer.html</u>
- Prostate Cancer Foundation <u>pcf.org</u>

Georgia Cancer Center – <u>augusta.edu/cancer/community</u>

The Cancer Atlas canceratlas.cancer.org

World Health Organization who.int/health-topics/cancer#tab=tab_1

WHO Country Cancer Profiles <u>who.int/cancer/country-profiles/en/</u>





augusta.edu/cancer/community

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