



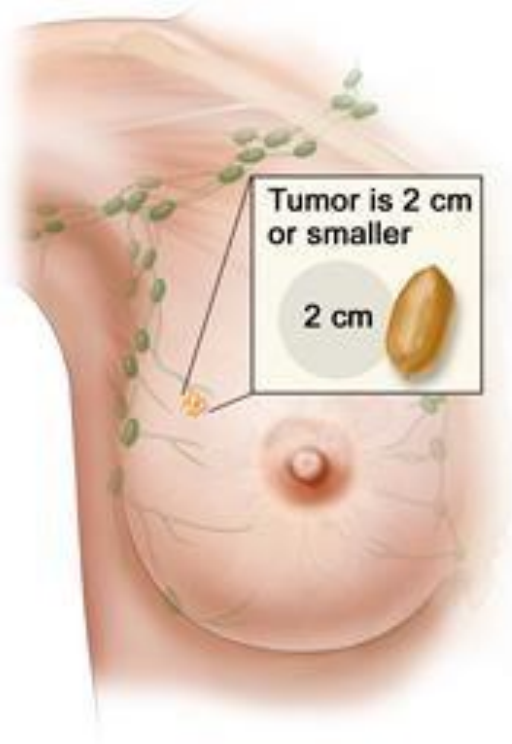
# Overview of Breast Cancer Screening

**National Health Mission**  
**Deptt. of Health & Family Welfare**  
**Govt. of Odisha.**

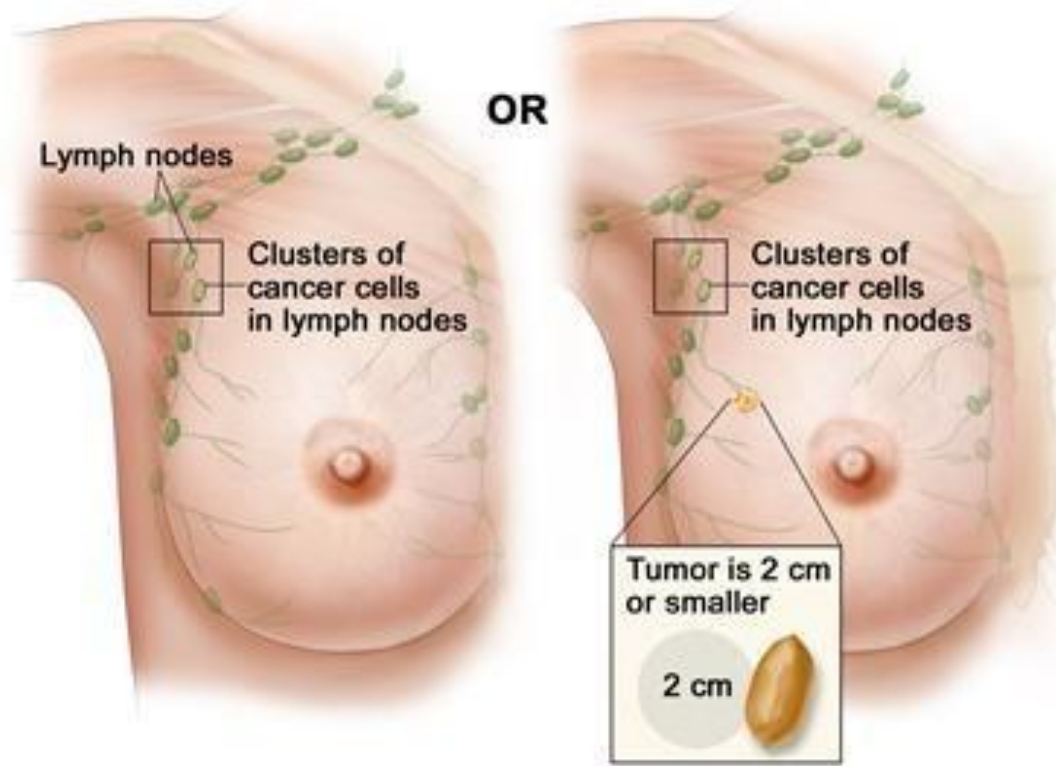
# What is Cancer ?

- Uncontrolled growth of cells
- Purposeless
- Undisciplined like terrorist
- Robs all the food that you eat and continues to grow till host dies.

**Stage IA Breast Cancer**



**Stage IB Breast Cancer**



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# Breast cancer

# Stages of Breast Cancer



**0**

Abnormal cells in lining of the ducts or sections of the breast. Results in increased risk of developing cancer in both breasts.

**100%**  
SURVIVAL RATE



**1**

Cancer in the breast tissue tumor less than 1 inch across.

**98%**  
SURVIVAL RATE



**2**

Cancer in the breast tissue tumor less than 2 inches across. Cancer may also spread to auxiliary lymph nodes.

**88%**  
SURVIVAL RATE



**3**

Tumor is larger than 2 inches across with extensive spread to auxiliary or nearby lymph nodes. Possible dimpling, inflammation or change of skin color.

**52%**  
SURVIVAL RATE



**4**

Spread of cancer beyond the immediate region of the breast.

**16%**  
SURVIVAL RATE

4 Stages

# Risk Factors

- **Reproductive & Hormonal factors**

- ✓ The older a woman is when she has her first child, the greater her chance of having breast cancer.
- ✓ Early menarche (before age 12), late menopause (after age 55) or never had children
- ✓ Women who take menopausal hormone therapy (oestrogen and progesterone) for five years or more after menopause

- **Family History: Risk of Breast cancer increases in women with a first-degree relative with breast cancer**

- **Being obese after menopause**

- **Physical inactivity.**

- **Alcohol intake**

# High Risk Groups

- Personal history of Breast Cancer
- Family History of Breast/ Ovarian/Colon Cancer
- Chronic Benign Breast Diseases

# Breast Awareness

The first person to detect any lump in the breast is the woman herself which is by teaching the woman to be aware of

- A change in size
- A nipple that is pulled in or changed in position or shape
- A rash on or around the nipple
- Discharge from one or both nipples
- Puckering or dimpling of skin
- Lump or thickening in the breast
- Constant pain in the breast or armpit

**In case a woman notices any such change, she should promptly visit the health center or health professional.**

# Factors Increasing the risk

**Hormones:** Hormone replacement therapy (HRT) - Magnitude of Effect for Combination Therapy: Approximately a 24% increase in incidence of invasive breast cancer if a lady takes HRT for 10 years continuously

**Ionizing radiation:** Exposure of breast to ionizing radiation increases risk of developing breast cancer, starting 10 years after exposure and persisting lifelong. Risk about 6 times, depends on dose and age at exposure, with the highest risk occurring during puberty.

**Obesity:** Obesity increases breast risk in postmenopausal women Comparing women weighing more than 82.2 kg with those weighing less than 58.7 kg, the relative risk (RR) is 2.85



# Protective Factors - Breast Cancer

## Exercise:

- Exercising strenuously for more than 4 hours per week reduces risk
- RR reduction is 30% to 40%.
- The effect may be greatest for premenopausal women of normal or low body weight

## Early pregnancy:

- Women having full-term pregnancy before age 20 years have decreased risk.
- 50% decrease in breast cancer compared to nulliparous women or those who give birth after age 35 years.

## Preventive Mastectomy:

- Bilateral mastectomy reduces the risk in women with a strong family history.
- Risk is reduced as much as 90%

## Preventive Oophorectomy:

- Oophorectomy in women with BRCA gene mutations lowers risk.
- Breast cancer incidence is decreased by 50%. ( same as Tamoxifen)<sup>9</sup>

# Primary Prevention

- **Reduce weight**
- **Eat less animal fat and red meat**
- **Increase physical exercise 4 hrs/ week**
- **First child below 20-25 yrs breast feed**
- **Chemoprevention- Tamoxifen 20 mg for 5 years**
- **Risk Reduction Mastectomy or Oophorectomy**

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# Breast Cancer early detection

- Mammography
- Clinical Breast Examination- CBE
- Breast self examination- BSE

# Screening for Breast Cancer

## Screening by Mammography

Mammography in women aged 40 to 70 years decreases breast cancer mortality. The benefit is higher for older women, because their breast cancer risk is higher.

# Screening by Clinical Breast Examination- CBE

- Screening by clinical breast examination reduces breast cancer mortality.
- Breast cancer mortality same (for women aged 50 to 59 years) CBE alone vs CBE + mammogram ( Canadian study)

# Clinical Breast Examination

- All women > 30 years visiting screening centre, will be provided a pre-procedure counselling, and then screened using Clinical Breast Examination (CBE).
- Clinical Breast Examination is to be performed by a trained physician or a nurse or a health worker.

*Thank you*