


# Breast Imaging in Developing Countries


**Louise C. Miller, R.T.(R)(M)(ARRT), CRT(M), FSBI, FNCBC**  
 Director of Education, Mammography Educators




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## Statistics



- 1.4M** diagnosed  
1.4 million women globally are diagnosed with breast cancer each year\*
- 1.7M** new cases  
By 2020, there will be over 1.7 million new cases of breast cancer annually\*
- 500,000** deaths  
Globally, breast cancer causes more than 500,000 deaths each year\*
- 10.5%** of cancers  
Breast cancer comprises 10.5% of all new cancers worldwide\*




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## Statistics

**BREAST CANCER SURVIVAL RATES VARY GREATLY WORLDWIDE**



- 80%** IN SOME HIGH-INCOME COUNTRIES
- 40%** IN SOME LOW-INCOME COUNTRIES

CANCER.gov  
<http://bit.ly/WWBreastcancer>

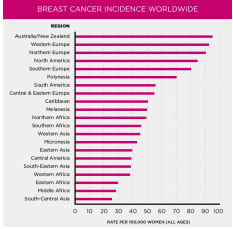


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## Statistics

### BREAST CANCER INCIDENCE WORLDWIDE



Region	Estimated age-standardized incidence rates (2018), breast, all ages
Australia/New Zealand	133.2
Western Europe	94.5
Northern Europe	93.6
North America	88.8
Southern Europe	84.9
Polynesia	83.8
South America	80.0
Central & Eastern Europe	59.8
Caribbean	57.6
Oceania	36.3
Northern Africa	65.5
Western Africa	46.3
Western Asia	
Middle East	
Eastern Asia	
Central America	
South-Eastern Asia	
Western Africa	
Eastern Africa	
World	
South-Central Asia	



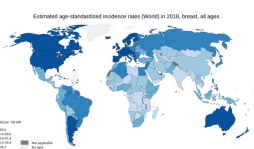
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## Statistics


### Breast Cancer Incidence Worldwide\*

Estimated age-standardized incidence rates (2018), breast, all ages



Country	Age-standardized rate per 100,000 women
Belgium*	133.2
Australia*	94.5
United Kingdom*	93.6
Denmark*	88.8
United States*	84.9
Canada*	83.8
Singapore*	64.0
South Korea*	59.8
Japan*	57.6
China*	36.3
Hong Kong**	65.5
World*	46.3

\*2018 data; \*\*2019 data. \*\*Hong Kong Cancer Registry figures published in 2020.

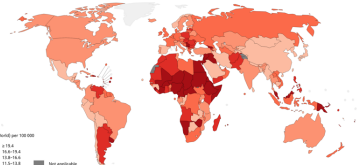


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## Statistics


### Estimated age-standardized mortality rates (World) in 2020, breast, all ages



Age-standardized mortality rate per 100,000

- 115.0
- 100-114.9
- 85-100
- 70-84.9
- 55-70
- 40-54.9
- 25-40
- 10-24.9
- 0-10

Not applicable

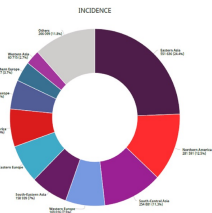


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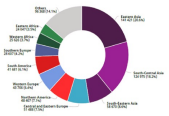
## Statistics

### INCIDENCE




2,261,419 new cases

### MORTALITY



684,996 deaths




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## Commonalities

- Low income
- Lack of resources
- Lack of education




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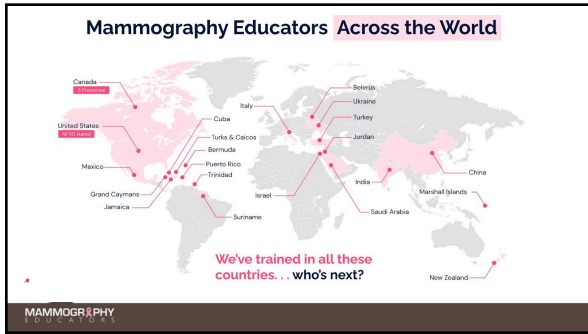
## Leading the Way

### A Worldwide Perspective on Breast Cancer Detection



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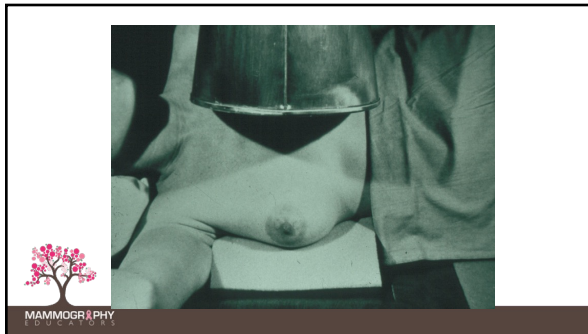
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- ### Developing Countries
- Cuba
  - Ukraine
  - China
  - Israel
  - Jordan
  - Ghana
  - Saudi Arabia
  - Oman
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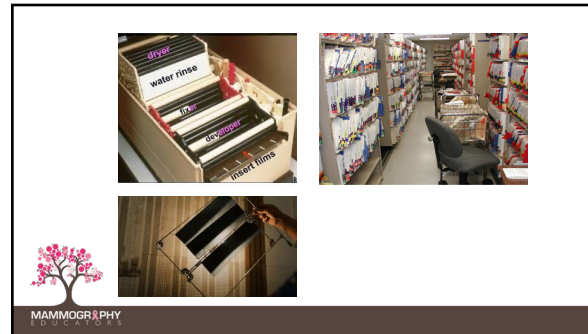
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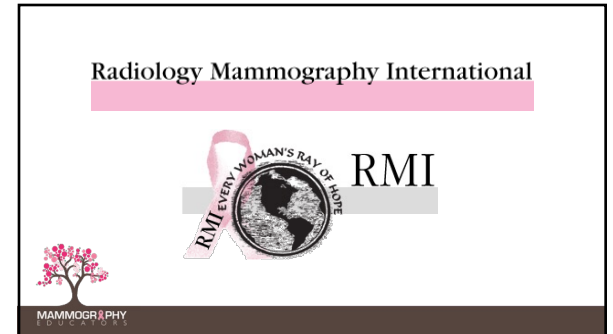
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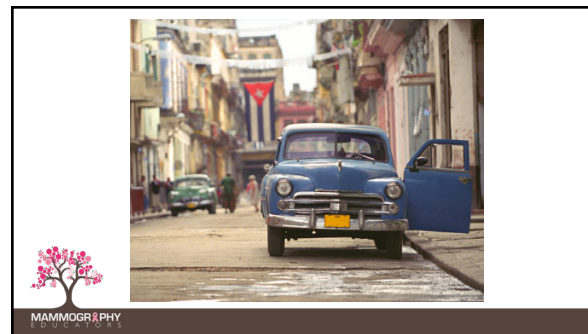


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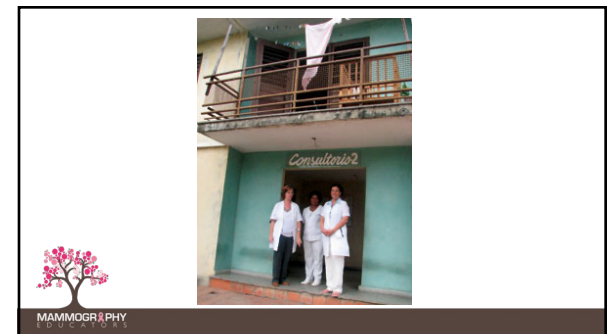
CUBA

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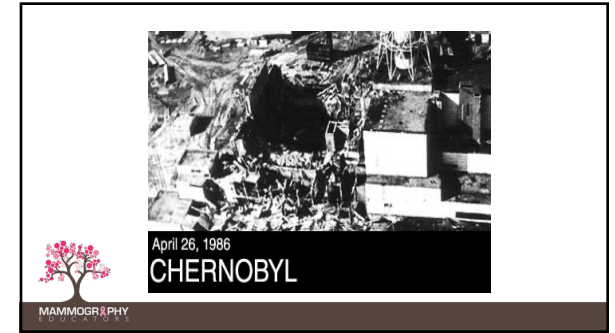
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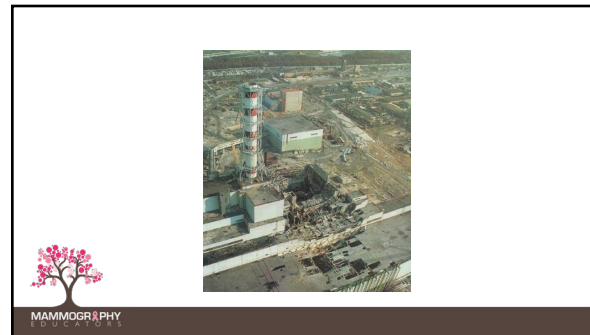


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### Chernobyl

On April 26, 1986, the world witnessed the costliest accident in history. The Chernobyl disaster has been called the biggest socio-economic catastrophe in peacetime history. 50% of the area of Ukraine is in some way contaminated. Over 200,000 people had to be evacuated and resettled while 1.7 million people were directly affected by the disaster.

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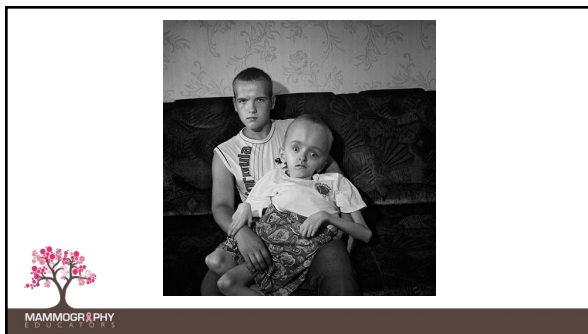


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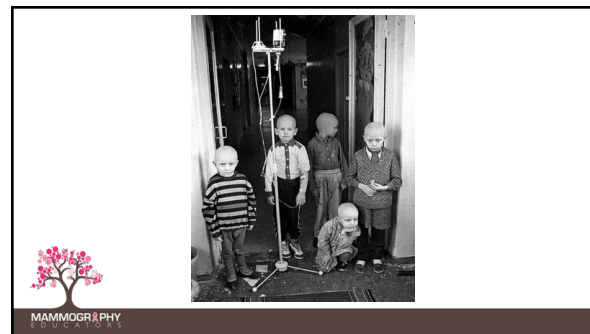
### Environmental and Health Consequences of the Chernobyl accident

Cancer effects of radiation exposure from the Chernobyl accident

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### Incidence increases in types of cancer

- Leukemia
- Thyroid
- Breast
  - Increases in Belarus and Ukraine
  - Ecological study (Belarus and Ukraine)
  - Evaluate whether the reported increases correlate with radiation exposure

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## Breast Cancer Increase

- Women contaminated by radiation after the explosion are 2-3x more likely to develop breast cancer than women in less contaminated areas
- Excess cases began 10 years after the incident
- Risk highest in women who were premenopausal at the time



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## USAID Breast Cancer Assistance Program

- Strengthen early detection, diagnosis, and treatment services in the Ukraine
- Improve quality of life for women with breast ca by providing them with information and psychosocial support
- Encouraging the formation of community-based breast cancer survivor groups



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## Results

- Provided equipment and supplies for mammography screening and dx.
- Train 1,100 health care professionals in CBE
- Conduct training workshops on mammography positioning/reading and US guided bx
- Conduct 3 national symposia
- Establish pilot screening program near Chernobyl
- Adapt and disseminate culturally adapted brochures



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## CHINA



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National Breast Cancer Action - Shanghai, Shanghai City

"Participate in breast screening for women - Qingdao, Qingdao City medical group-study on the 'one million women breast screening project'"

The United Breast Cancer Action (UBCA) is a 501(c)(3) non-profit organization that has been active since 1995. It is a national organization that has been instrumental in the development of the National Breast Cancer Action (NBCA) program. The program is a national program that has been instrumental in the development of the National Breast Cancer Action (NBCA) program. The program is a national program that has been instrumental in the development of the National Breast Cancer Action (NBCA) program. The program is a national program that has been instrumental in the development of the National Breast Cancer Action (NBCA) program.



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## The 2010-2015 Outlook for Mammography Equipment in Greater China



by  
Professor Philip Y. Parker, Ph.D.  
Chief, Division of Management Science  
NUSAD (Singapore and Tsinghua-Tsinghua Project)

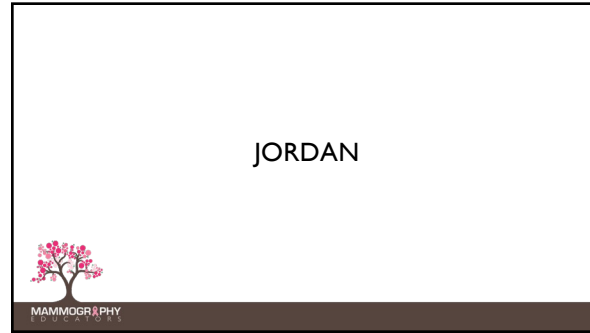


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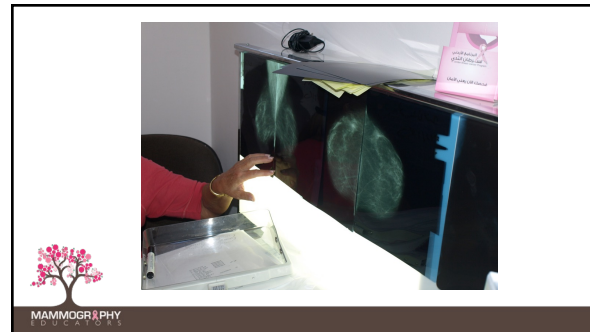
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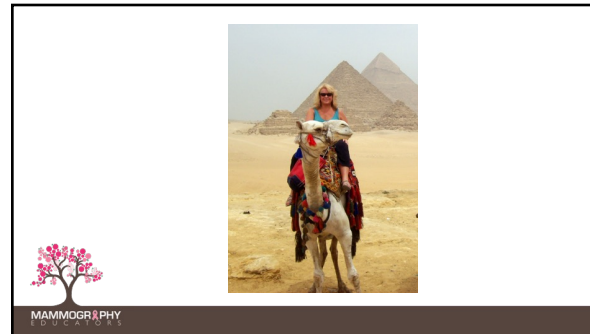
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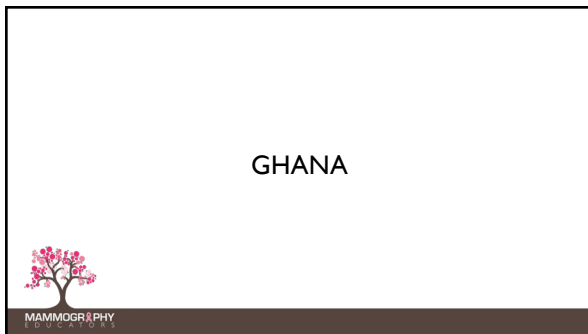
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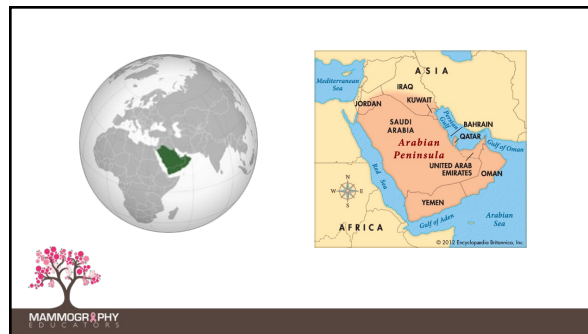
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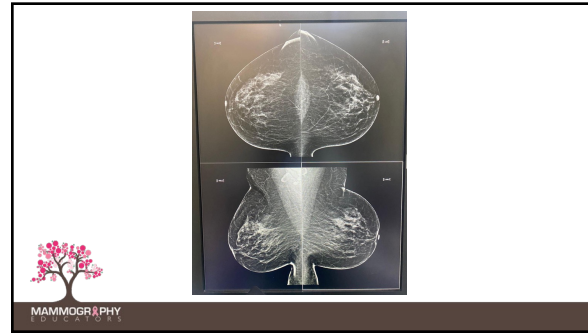
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### What Does This Have to Do With You?

- Appreciation for our access to:
  - Advanced healthcare
  - State of the Art equipment
  - Education
  - Treatment options
- Look for small victories




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## Thank You!

**For questions or more information:**  
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[info@mammographyeducators.com](mailto:info@mammographyeducators.com)

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