THE FACTS ABOUT

Breast cancer and mammography screening among women in upstate New York

**Upstate New York**
- Women diagnosed with breast cancer (2002-2006): 19,200 (152.2 per 100,000)
- Breast cancer deaths (2003-2007): 3,700 (29.7 per 100,000)
- Mammography screening rate (within the past two years, women ages 50+): 84.6%

**Central New York**
- Women diagnosed with breast cancer (2002-2006): 3,700 (137.1 per 100,000)
- Breast cancer deaths (2003-2007): 700 (26.2 per 100,000)
- Mammography screening rate (within the past two years, women ages 50+): 88.8%

**Finger Lakes Region**
- Women diagnosed with breast cancer (2002-2006): 4,200 (156.1 per 100,000)
- Breast cancer deaths (2003-2007): 700 (26.0 per 100,000)
- Mammography screening rate (within the past two years, women ages 50+): 85.5%

**Western New York Region**
- Women diagnosed with breast cancer (2002-2006): 6,600 (162.5 per 100,000)
- Breast cancer deaths (2003-2007): 1,400 (35.1 per 100,000)
- Mammography screening rate (within the past two years, women ages 50+): 83.2%

**Southern Tier Region**
- Women diagnosed with breast cancer (2002-2006): 1,900 (149.0 per 100,000)
- Breast cancer deaths (2003-2007): 400 (31.1 per 100,000)
- Mammography screening rate (within the past two years, women ages 50+): 80.1%

**Utica/Rome/North Country Region**
- Women diagnosed with breast cancer (2002-2006): 2,800 (148.5 per 100,000)
- Breast cancer deaths (2003-2007): 500 (27.6 per 100,000)
- Mammography screening rate (within the past two years, women ages 50+): 84.5%

Upstate New York refers to the New York counties highlighted in the map above.
Breat cancer occurrence and death rates are from the New York State Department of Health’s Community Health Data Set: http://www.nyhealth.gov/statistics/chac/cancer/ca_bre.htm

New York State mammography data is based on the Centers for Disease Control and Prevention’s Behavioral Risk Factor Surveillance System http://apps.nccd.cdc.gov/brfss/list.asp?cat=WHY&yr=2008&qkey=4427&state=All
Mammography rates are based on the sample of women who reported “ever” having a mammogram.
Breast cancer is second only to lung cancer as the leading cause of cancer death among American women.\(^1\) Each year, treating breast cancer costs the U.S. nearly $7 billion.\(^2\) This disease claimed the lives of more than 14,000 New York state women from 2003 through 2007, and a total of about 70,000 new cases were diagnosed statewide from 2002 through 2006.\(^3,4\) For upstate New York women, the most recent five years of data available show a total of about 19,000 new diagnoses, as well as 3,700 deaths.\(^5,6\)

### Average annual breast cancer incidence in upstate New York, 2002-2006

- The 19,000 new diagnoses among upstate New York women from 2002-2006 translate to an average annual breast cancer incidence rate of 152.2 per 100,000 women;
- There is regional variation in breast cancer occurrence. Average annual incidence ranged from 137.1 per 100,000 in the Central New York to 162.5 per 100,000 in Western New York (2002-2006).


- In the upstate New York region overall, there were 3,700 breast cancer deaths from 2003-2007, an annual average of 29.7 deaths per 100,000 women;

- Average annual mortality ranged from 26.0 per 100,000 in the Finger Lakes Region to 35.1 per 100,000 in Western New York.

Film mammography (an X-ray of the breasts) is the primary method for detecting breast cancer. There is considerable evidence that early detection through screening, along with treatment advances in recent years, have contributed to substantial reductions in breast cancer death rates. According to the Centers for Disease Control and Prevention, mammography every one to two years can reduce mortality by 20 percent to 25 percent over a 10-year period among women ages 40 and older.

Experts disagree on what is the most beneficial age to begin regular screening and how often women should be screened. Revised U.S. Preventive Health Services Task Force recommendations, released in November 2009, reignited the breast cancer screening controversy by calling long-standing guidelines into question. The USPSTF now advises that for women of average breast cancer risk:

- Screening every two years from age 50 to age 74 confers moderate benefit and is recommended;
- The decision to begin screening before age 50 should be individualized rather than routine because the net benefits of screening in the 40 to 49 age group are relatively small;
- There is insufficient evidence of benefits to justify mammography screening beyond age 74;
- There is insufficient evidence to weigh the harms and benefits of conducting a clinical breast exam beyond screening mammography in women ages 40 and older;
- Current evidence is insufficient to assess the additional benefits and harms of either digital mammography or magnetic resonance imaging instead of film mammography as screening modalities for breast cancer.

Other professional organizations, such as the American Cancer Society, continue to recommend more aggressive mammography screening. For women of average risk, the American Cancer Society recommends incorporating clinical breast exams into routine screenings and beginning mammography at age 40. In issuing its guidelines, the USPSTF urged considering the potential mammography harms that can affect every age group: false positive results leading to unnecessary anxiety and invasive testing; treatment of cancers that never would have become clinically apparent; and treatment of cancers that would have surfaced but not shortened a woman’s life. Despite these considerations and given its demonstrated benefits, mammography remains the gold standard for breast cancer early detection.
Breast Cancer Risk Factors:

A risk factor is anything that affects one's chances of getting a disease. Having a breast cancer risk factor does not mean one will necessarily develop the disease. Conversely, many women diagnosed with breast cancer have no known risk factors.

Some breast cancer risk factors cannot be changed:

- **Age** is one key breast cancer risk factor, as risk increases with age. About one in eight cancers are found in women under age 45, while two out of three are found in women ages 55 and older.

- **Genetic factors** account for 5 percent to 10 percent of breast cancer cases. An inherited mutation of certain genes (BRCA1 and BRCA2) is the most common cause of hereditary breast cancer. Other specific genetic changes have an impact as well.

- **Family history of breast cancer** raises one's breast cancer risk. Having a first-degree relative (mother, sister, daughter) with breast cancer doubles one's risk, while having two first-degree relatives with the disease raises the risk about fivefold.

- **Personal history of breast cancer** confers a threefold to fourfold risk of developing a new cancer.

- White women are slightly more likely to develop breast cancer than are black women, although black women who develop the disease are more likely to die from it than their white counterparts.

- **Certain breast tissue conditions** increase breast cancer risk, including dense breast tissue, certain benign breast conditions and certain benign cysts that may or may not spread.

- **Exposure** to chest irradiation as a young child or adult or to diethylstilbestrol increases breast cancer risk.

- **Early-onset menstruation** (before age 12) and/or late menopause (after age 55) slightly raise breast cancer risk.

Lifestyle factors that influence breast cancer risk include:

- Not having children or having them later in life;
- Recently using oral contraceptives;
- Taking post-menopausal hormone therapy;
- Not breastfeeding;
- Being overweight or obese;
- Not being physically active;
- Using alcohol.

Source: The American Cancer Society: http://www.cancer.org/docroot/CRI/content/CRI_2_4_2X_What_are_the_risk_factors_for_breast_cancer_5.asp
The vast majority of women ages 40 and older have had a mammogram. Since 2002:

- The percentage of upstate New York women ages 40 and older who have ever had a mammogram rose from 89.8 percent in 2002 to 94.1 percent in 2008;

- The percentage of upstate New York women ages 40 and older who had a mammogram within the past two years has fluctuated since 2002. The percentage ranged from a low of 80.9 percent in 2004 to a high of 85.8 percent in 2006. The percentage dropped to 82.3 percent in 2008.
Mammography use by upstate New York women ages 50 and older, 2008

- Almost all (96.4 percent) of upstate New York women ages 50 and older have had a mammogram. The percentage of women who have “ever” had a mammogram varied little across upstate New York regions.

- The percentage of upstate New York women in this age group who have utilized mammography within the past two years is lower and varies more among the regions than the percentage who have ever had a mammogram. The rate of mammography within the past two years (2008) ranged from 80.1 percent in the Southern Tier to 88.8 percent in Central New York.
The higher a woman’s income, the more likely she is to report having had a mammogram within the past two years. Two-year mammography rates are 82.8 percent among women with annual household incomes at or below $15,000, compared to 87.7 percent among those with incomes of $50,000 or more.

There is no apparent relationship between level of education and two-year mammography rates in the 50-plus age group.

Employed (86.6 percent) and retired (84.5 percent) women have the highest two-year mammography rates among work force classifications, while those who are unable to work have the lowest (79.5 percent).

Having health care coverage increases the likelihood of having had a mammogram within the past two years. Women who report having some type of health coverage have two-year mammography rates of 84.6 percent, versus 76.9 percent of those who are uninsured.
Primary Data Source

Mammography screening and socioeconomic data on upstate New York women were obtained from the New York State Department of Health’s Behavioral Risk Factor Surveillance System (BRFSS). This is an ongoing, state-based, random telephone survey of the non-institutionalized civilian adult population ages 18 and older. State and national data are compiled and reported by the Centers for Disease Control and Prevention.

The BRFSS questionnaire asks all female respondents ages 40 and older whether or not they have ever had a mammogram. Those who respond “yes” are then asked how long it has been since their last mammogram.

To request access: http://www.health.state.ny.us/nysdoh/brfss/index.htm

Endnotes
5 Ibid.
6 New York State Department of Health. “Female Breast Cancer - Deaths And Death Rates Per 100,000 Female Residents.”
8 Centers for Disease Control and Prevention.
9 U.S. Preventive Services Task Force.