



INSIGHT ON BREAST CANCER

News and information on breast cancer and screening in Ontario

HIGHLIGHTS

- ▶ **The Ontario Breast Screening Program targets women aged 50–69 to be screened with mammography every two years.**
- ▶ **Fewer women aged 50–69 are dying from breast cancer in Ontario.**
- ▶ **Survival for breast cancer has improved steadily since the 1980s.**
- ▶ **Participation in breast screening is well below recommended rates and does not appear to be increasing.**
- ▶ **Strategies for increasing screening and shortening time to diagnosis are being implemented in Ontario.**



Insight on Cancer is a series of joint Cancer Care Ontario and Canadian Cancer Society (Ontario Division) publications, designed to provide up-to-date information for health professionals and policy-makers about cancer and cancer risk factors in the province.

insight on cancer
volume six
october 2007



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ACKNOWLEDGEMENTS

To order additional copies, contact the Canadian Cancer Society *Cancer Information Service* at 1 888 939-3333 or through e-mail at cancercontrol@ontario.cancer.ca.

Insight on Cancer can be found on both the Canadian Cancer Society's and Cancer Care Ontario's websites.

Please visit the Publications section of the Ontario pages of the Canadian Cancer Society's website located at www.cancer.ca or visit www.cancercare.on.ca.

Published and distributed by the Canadian Cancer Society (Ontario Division).

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The authors are grateful to the following colleagues who reviewed this issue of *Insight on Cancer*: Loraine Marrett, Fiona Taylor, Janine Hopkins, Anna Chiarelli, Verna Mai, Cancer Care Ontario; Patti Payne, Irene Nicoll, Canadian Cancer Society (Ontario Division).

Citation: Material appearing in this report may be reproduced or copied without permission; however, the following citation to indicate the source must be used:

Cancer Care Ontario: Insight on Cancer. News and Information on Breast Cancer and Screening in Ontario. Toronto: Canadian Cancer Society (Ontario Division), October, 2007.



Disclaimer

Many of the tables and charts in this report contain information derived from the Ontario Cancer Registry. Cancer Care Ontario made efforts to ensure the completeness, accuracy and currency of this information at the time of writing this report. This information changes over time, however, as does our interpretation of it. Accordingly, Cancer Care Ontario makes no representation or warranty as to the completeness, accuracy or currency of this information.



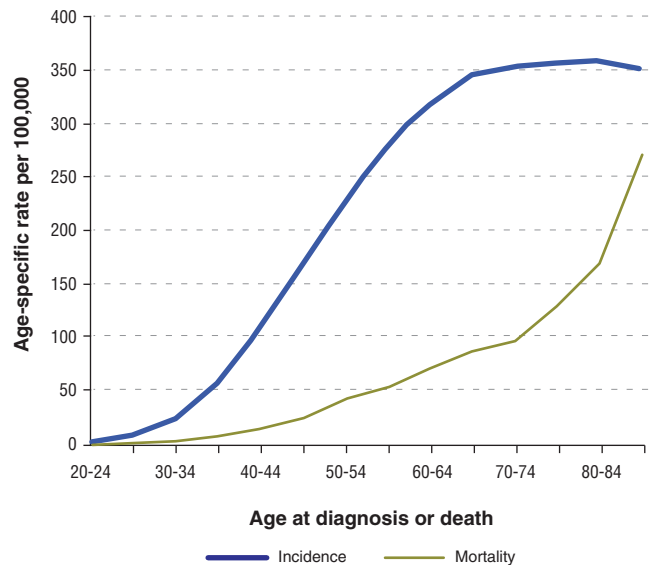
REGULAR BREAST SCREENING IS RECOMMENDED

An estimated 8,000 or so Ontario women will be diagnosed with breast cancer in 2007 and around 2,000 women will die from it. Breast cancer is the most common cancer in Ontario women.

Breast cancer risk increases with age. Incidence rises rapidly to age 65 and then more slowly to age 85. Mortality is relatively low before age 60. Median age at diagnosis was 61, and median age at death was 69, during the period 2000–2004.

Breast screening using mammography is recommended for women aged 50 to 69 by the International Agency for Research on Cancer of the World Health Organization, the U.S. Preventive Services Task Force and the Canadian Task Force on Preventive Health Care.

Breast cancer incidence and mortality rates Ontario, 2000–2004, by age



Source: Cancer Care Ontario (Ontario Cancer Registry, 2007)

Ontario Breast Screening Program (OBSP)

The OBSP targets women 50–69 to be screened with mammography every two years. The Program offers high quality mammograms and (at some locations) physical breast examination, plus:

- accessibility (women can book their own appointments)
- reminders to return to screening
- close monitoring for follow-up of abnormal screening results

Once a woman visits the OBSP she is very likely to return. Over 80% of clients return for their recommended two-year re-screen.

OBSP assists family physicians in facilitating follow-up by automatically booking the diagnostic tests recommended by the screening radiologist, if authorized by the family physician.



BREAST SCREENING IN ONTARIO

Breast screening rates are below target and have stalled in recent years.

An estimated 60% of Ontario women aged 50–69 had screening mammograms in 2004–2005 in the Ontario Breast Screening Program and other diagnostic centres. (Rates are shown at <http://www.cancercare.on.ca/qualityindex2007/access/breastScreening/index.html>.) Participation in the OBSP was 33% for 2005–2006, slightly increased from 30% for the previous two years. These rates are well below the Ontario target of 90% of women in this age group by the year 2020 (70% by the year 2010). Overall screening participation rates (the proportion of Ontario women aged 50–69 receiving a screening mammogram in a two-year period) have not increased in recent years. Within the OBSP, the proportion of women screened who are new to the Program has not increased since 2000.

Increasing the participation rates in breast screening will continue to pose a challenge as the population ages and the number of women entering the 50–69 age range increases. More women need to be screened each year to maintain current participation rates. In particular, more needs to be done to reach under-screened women and particularly women in vulnerable populations, including those who live in poverty, new Canadians and Aboriginal women.

Although more Ontario women now have screen-detected abnormalities resolved within the recommended time if they do not require a biopsy, time to diagnosis has not improved for women with abnormalities requiring a biopsy.

Recruitment and time-to-diagnosis strategies

Cancer Care Ontario and the Canadian Cancer Society, Ontario Division, are taking measures to increase the proportion of women screened through the OBSP:

- The Canadian Cancer Society's Lay Health Educator initiative in northeast Ontario is designed to recruit and train volunteers as lay health educators, "natural helpers" such as relatives, friends, neighbours or co-workers, to work with their local communities and the formal health care system to encourage women to get screened.
- Cancer Care Ontario and the Canadian Cancer Society are developing a resource tool kit targeted at health promoters in

Chinese communities to help them recruit women to screening.

Cancer Care Ontario is implementing some specific initiatives to increase participation rates and improve time to diagnosis:

- Recruiting additional OBSP breast assessment affiliates and exploring the use of rapid diagnostic assessment units to improve time to diagnosis for women requiring a biopsy.
- Working with facilities as they implement digital mammography. Digital mammography offers better diagnostic accuracy for women with dense breasts. Digital

images can be enhanced, magnified and manipulated to improve detail, which can reduce the need for repeat mammograms and so contribute to reduced wait times.

- Analyzing the feasibility and benefits of an integrated approach to screening for breast, cervical and colorectal cancer. The objective is to increase participation and early detection rates, reduce the number of people dying from cancer, improve efficiency and convenience for individuals and for health professionals, and improve flexibility to adapt to new technologies.



REGIONAL VARIATION

Participation rates in the Ontario Breast Screening Program varied widely across Ontario Local Health Integration Networks (LHINs)* in 2005–2006, from 20% in Toronto Central to 54% in the North East LHIN.

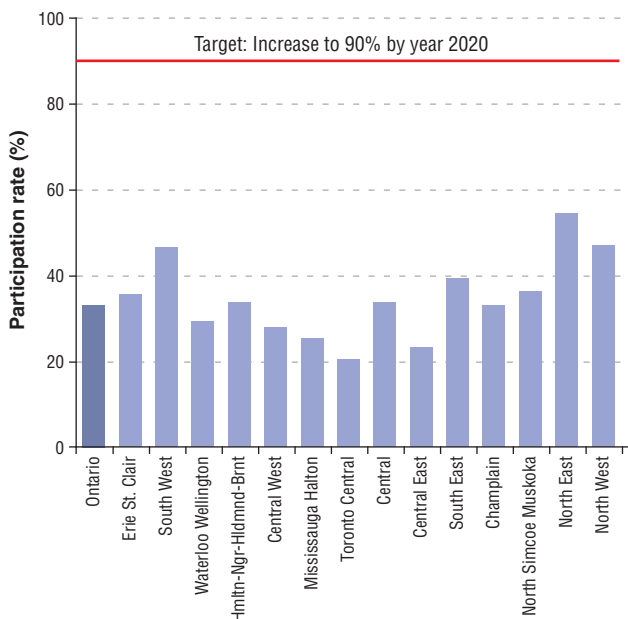
For women aged 50–69, both breast cancer incidence and mortality are lower in the Central West Local Health Integration Network (LHIN) than for Ontario as a whole. Incidence is also lower than the provincial rate in Waterloo Wellington and Toronto Central, and higher in Hamilton-Niagara-Haldimand-Brant and in South East.

Mortality for this age group is above the provincial rate in South West, and below the provincial rate in Central West.

Comparatively low incidence in Toronto and two other central southern Ontario LHINs may reflect areas where high proportions of immigrants in the population have different risk factors from the provincial norm, including earlier childbearing, higher parity, and lower obesity rates. Lower screening rates may also be a factor; information from Ontario’s Cancer System Quality Index shows relatively low overall screening rates in the three LHINs where incidence is lowest. Opposite extremes of at least some of these factors may explain higher incidence in Hamilton-Niagara-Haldimand-Brant and in South East.

* Map of Ontario Local Health Integration Networks (LHINs) is on page 7.

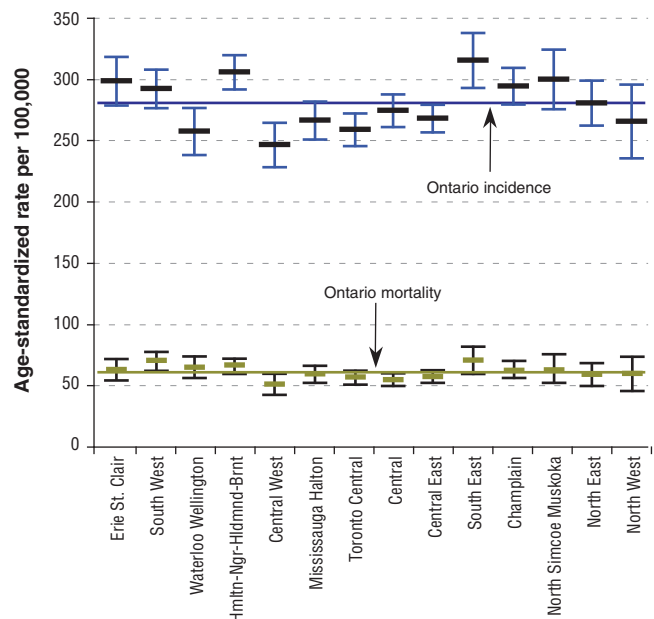
**OBSP participation rates, Ontario, 2005–2006
age 50–69**



LHIN/Regional Cancer Program

Source: Cancer Care Ontario (Integrated Client Management System)

**Breast cancer incidence and mortality rates
by region, 2000–2004, age 50–69**



LHIN/Regional Cancer Program

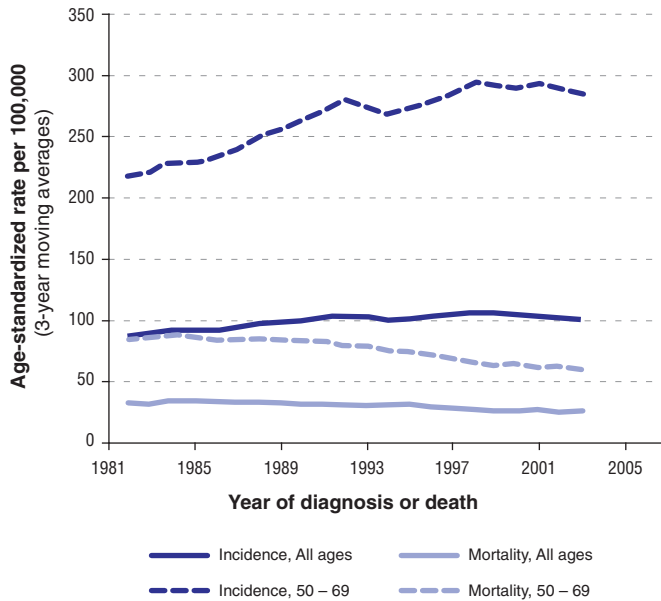
Source: Cancer Care Ontario (Ontario Cancer Registry, 2007)

I = 95% confidence intervals



INCIDENCE AND MORTALITY OVER TIME

Breast cancer incidence and mortality rates
Ontario, 1981–2004



Source: Cancer Care Ontario (Ontario Cancer Registry, 2007)

Breast cancer incidence increased across the 1980s and has remained stable since the early 1990s for women aged 50–69. A similar pattern of a rise and then stability since the early 1990s is seen for women of all ages.

Mortality from breast cancer in women aged 50–69 was stable through the 1980s and then declined, with a decrease of 33% between 1989 and 2004. The rate for women of all ages began to fall in the mid 1980s.

The rise in incidence for women aged 50–69 is larger than the rise for any other age group, and may reflect increasing uptake of breast screening in this age group over the 1980s. Stable rates across the 1990s may reflect a lack of increase in the proportion of women screened. Screening mammography rates did not increase in the period 2000–2005.

Breast cancer mortality has been falling in all age groups. The fall is usually attributed both to better treatments and to more screening, which detects cancers when they are still small so that treatment can be more effective.

SURVIVAL

Estimated five-year relative survival* has improved steadily and significantly over two decades.

Survival rose to 88% for women aged 50–69 followed during 2000–2004, up from 75% in 1985–1989.

Breast cancer survival across LHINs showed no statistically significant differences from survival for the province as a whole.

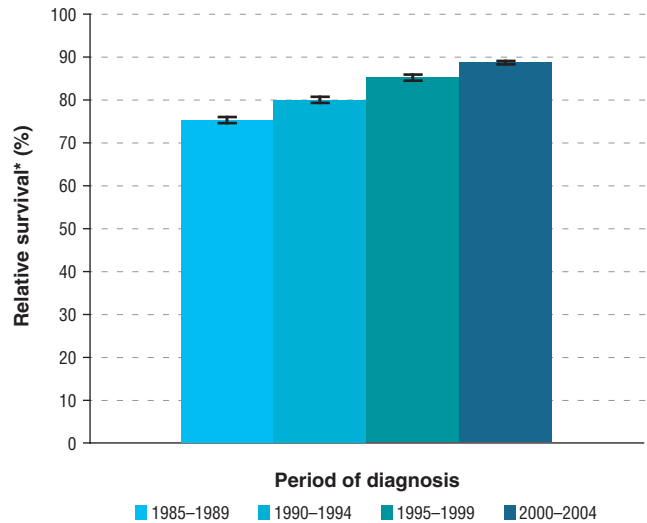
Improved survival is, like lower mortality, usually attributed to a combination of better treatments and more detection of early-stage disease.

Although information on survival by stage is not available for Ontario as a whole, women diagnosed with breast cancer at ages 50–69 in the Ottawa region in the mid 1990s had five-year relative survival estimated at 98% for Stage I, 89% for Stage II, 60% for Stage III and 28% for Stage IV disease.

(Ugnat et al., British Journal of Cancer 2004).

* Five-year relative survival is the proportion of women alive five years after a first diagnosis of breast cancer, adjusted for the mortality expected for women of the same age in the general population.

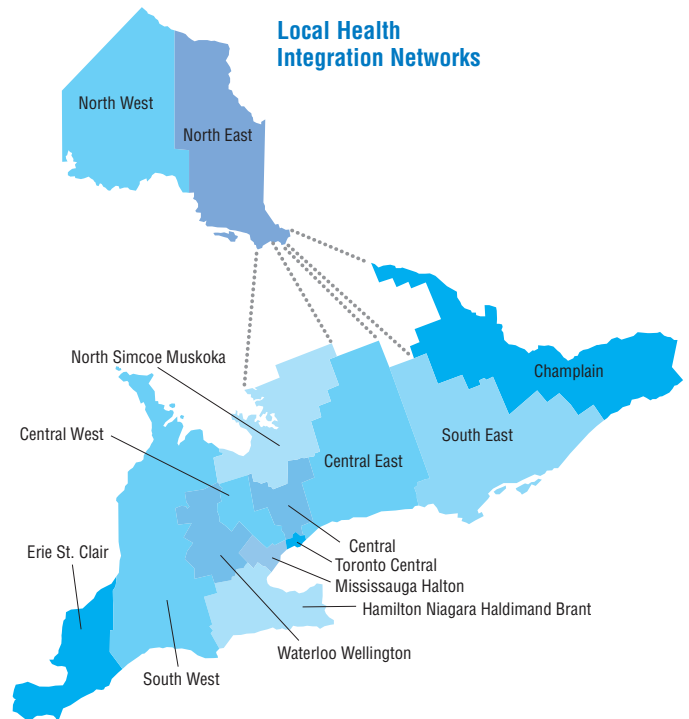
Breast cancer five-year relative survival* 1985–2004, age 50–69



Source: Cancer Care Ontario (Ontario Cancer Registry, 2007)

*Using Brenner's period method, which estimates survival of all cases followed up during the specified periods.

⊥ = 95% confidence intervals





ONTARIO BREAST SCREENING PROGRAM

For more information on the program:

- call: 1 800 668-9304
- visit: http://www.cancercare.on.ca/index_breastScreening.htm
- e-mail: breastscreen@cancercare.on.ca.

For more information on breast cancer:

- call: the Canadian Cancer Society *Cancer Information Service* at 1 888 939-3333
- visit: www.cancer.ca
- e-mail: info@cis.cancer.ca.

Breast screening resources

Ontario Breast Screening Program Information for Family Physicians

This handout outlines key program features and eligibility criteria:

http://www.cancercare.on.ca/documents/OBSP_physician-ENG.pdf.

Fact Sheet on Breast Cancer Screening

This fact sheet provides key points in clear language about breast cancer screening and is available in 18 languages: http://www.cancercare.on.ca/index_screeningBreastresources.htm.

Screening Mammograms: What Every Woman Should Know

This brochure provides information on screening mammography and breast health guidelines. It can be ordered free of charge by contacting a Canadian Cancer Society cancer information specialist at 1 888 939-3333.



Cancer Care Ontario is the provincial agency that steers and coordinates Ontario's cancer services and prevention efforts so that fewer people get cancer and patients receive the highest quality of care.

Cancer Care Ontario's mission is to improve the performance of the cancer system by driving quality, accountability and innovation in all cancer-related services.



The Canadian Cancer Society is a national, community-based organization of volunteers whose mission is the eradication of cancer and the enhancement of the quality of life of people living with cancer.

The Canadian Cancer Society, in partnership with the National Cancer Institute of Canada, achieves its mission through research, education, patient services and advocacy for healthy public policy. These efforts are supported by volunteers and staff and funds raised in communities across Canada.

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