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# **Breast cancer in Australia**

## **An overview, 2009**

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National Breast and Ovarian Cancer Centre**

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National Breast and Ovarian Cancer Centre (NBOCC) is Australia's authority and source of evidence-based information on breast and ovarian cancer. Funded by the Australian Government, NBOCC works in partnership with health professionals, cancer organisations, researchers, governments and those diagnosed to improve outcomes in breast and ovarian cancer. NBOCC plays a vital role in the translation of worldwide cancer research into meaningful and evidence-based information to guide the work of Australian health professionals, improve health service delivery, inform people with breast or ovarian cancer about all aspects of their diagnosis and treatment, inform policy and raise community awareness about these diseases. For more information, visit <[www.nbocc.org.au](http://www.nbocc.org.au)>.

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# Foreword

*Breast cancer in Australia: an overview, 2009* brings together under one cover the most up-to-date national statistical information available on the epidemiology, public health and health services impact of breast cancer in Australia. These data, collected through population-based cancer registries and other sources, are central to advancing our efforts to understand and ultimately control this disease. This report not only builds on previous monitoring reports but additionally provides data about the burden of disease due to breast cancer, and survival by Indigenous status and different histology types.

*Breast cancer in Australia: an overview, 2009* also represents the significant contributions and the continuing partnership of National Breast and Ovarian Cancer Centre, the Australian Institute of Health and Welfare, and the Australasian Association of Cancer Registries and it highlights the importance of cancer registries as a national resource. The current report provides a nationwide snapshot of a major condition affecting a substantial number of Australians.

The value of data and monitoring is its relevance to outcomes and its capacity to impact on change. This report identifies areas of significant gain over time and provides some predictions for the future. Our ability to plan for services and patient needs are predicated on this understanding of the impact of the disease as it affects our population.

We would like to thank the staff members of the various cancer registries and data repositories. It is through their effort and diligence that these data are available to the Australian public. We anticipate that the information contained in *Breast cancer in Australia: an overview, 2009* will be used extensively to further our goal of reducing the mortality from breast cancer and improving the wellbeing of Australians with the disease.

Dr Helen Zorbas  
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# Abbreviations

AACR	Australasian Association of Cancer Registries
ABS	Australian Bureau of Statistics
ACD	Australian Cancer Database
ACHI	Australian Classification of Health Interventions
ACT	Australian Capital Territory
AIHW	Australian Institute of Health and Welfare
ALOS	average length of stay
ASR	age-standardised rate
BCC	basal cell carcinoma
CI	confidence interval
CS	crude survival
DALY	disability-adjusted life year
DCIS	ductal carcinoma in situ
DoHA	Australian Government Department of Health and Ageing
IARC	International Agency for Research on Cancer
ICD-10	International Statistical Classification of Diseases and Related Health Problems, 10th revision
ICD-O-3	International Classification of Diseases for Oncology, 3rd edition
IRSD	Index of Relative Socio-economic Disadvantage
LCIS	lobular carcinoma in situ
MBS	Medicare Benefits Schedule
MIR	mortality-to-incidence ratio
NBOCC	National Breast and Ovarian Cancer Centre
NHMD	National Hospital Morbidity Database
NMSC	non-melanoma skin cancer
NSW	New South Wales
NT	Northern Territory
NZ	New Zealand
Qld	Queensland
RS	relative survival
SA	South Australia
SCC	squamous cell carcinoma
SEER	Surveillance Epidemiology End Results
SEIFA	Socio-Economic Indexes for Areas

Tas	Tasmania
TNM	a staging system for classifying tumours based on size of the tumour (T), lymph node involvement (N) and presence of distant metastases (M)
UK	United Kingdom
USA	United States of America
Vic	Victoria
WA	Western Australia
WHO	World Health Organization
YLL	years of life lost
YLD	years lost due to disability

## **Symbols**

–	nil or rounded to zero
..	not applicable
<	less than
>	greater than
+	and over

# Executive summary

On an average day in 2006, 35 Australian women were diagnosed with invasive breast cancer and 7 women died from this disease. These and other data in this report show that breast cancer continues to be a major health problem for Australian women, their families, the health system and society as a whole.

*Breast cancer in Australia: an overview, 2009* provides a comprehensive picture of national statistics on breast cancer for both females and males using a range of data sources. The latest available data and trends over time are examined in this report. As well, differences by geographical area, socioeconomic status, Indigenous status and country of birth are discussed.

## Breast cancer is a major cause of illness for Australian women

Breast cancer is the most common cancer in women (excluding 2 types of non-reportable skin cancer), representing over a quarter (28%) of all reported cancer cases in women in 2006. A total of 12,614 invasive breast cancer cases were diagnosed in women that year, the largest number recorded to date. More than two-thirds (69%) of these cases were in women aged 40 to 69 years. In the same year, 102 cases of invasive breast cancer were diagnosed in men, accounting for 0.8% of breast cancer cases.

While breast cancer is the most commonly reported cancer in Indigenous women in the four jurisdictions for which data were available, Indigenous women were significantly less likely to be diagnosed with breast cancer than non-Indigenous women in 2002 to 2006 (69 and 103 new cases per 100,000 women, respectively).

Breast cancer was the sixth leading cause of burden of disease for women in 2003 and it accounted for 7% of all years of life lost due to premature mortality.

There were 1,558 cases of ductal carcinoma in situ (a non-invasive tumour of the breast) diagnosed in women in 2005.

## Breast cancer mortality is decreasing and survival is improving

A total of 2,618 women died from breast cancer in 2006, making it the second most common cause of cancer-related death for Australian women after lung cancer (2,683 deaths). However, breast cancer mortality rates have been decreasing since 1994. In 2006, there were 22 breast cancer deaths per 100,000 women, the lowest recorded rate in the period considered (1982 to 2006).

Outcomes for women diagnosed with breast cancer have improved significantly. Overall, 5-year relative survival was 88% for women diagnosed with breast cancer in 2000 to 2006 compared with 73% for women diagnosed in 1982 to 1987.

In the 2002 to 2006 period, 5-year crude survival for Indigenous women diagnosed with breast cancer in four jurisdictions was significantly lower than for non-Indigenous women (65% and 82% crude survival, respectively), but mortality rates did not differ significantly.

## **The number of screening mammograms and hospitalisations has increased**

The number of women who had a screening mammogram through the BreastScreen Australia Program increased by 31% between 1996–1997 and 2005–2006.

In 2007–08, 2.6% of all hospitalisations of women were due to breast cancer. This comprised just over 106,000 hospitalisations, which was 74% higher than the 1999–00 figure.

Health expenditure on breast cancer for females grew by 32%, from \$252 million in 2000–01 to \$331 million in 2004–05 (with prices adjusted for inflation).

## **The future**

Due to ageing of the population, the number of women diagnosed with breast cancer is expected to continue to increase. Projections suggest that in 2015, the number of new breast cancer cases diagnosed in Australian women will be approximately 15,400, which is 22% more than the number diagnosed in 2006. This would equate to 42 women being diagnosed with breast cancer every day in 2015.