

Australian Government

Cancer Australia

Report to the nation gynaecological cancers 2012

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Cancer Australia

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Gynaecological cancers

This document provides a summary of national statistics on gynaecological cancers in Australia from the Australian Institute of Health and Welfare and Cancer Australia report *Gynaecological cancers in Australia: an overview.*¹

About Cancer Australia

Cancer Australia was established by the Australian Government in 2006 to provide national leadership in cancer control to improve outcomes for Australians affected by cancer, and their families and carers.

Cancer Australia works to reduce the impact of cancer and improve the wellbeing of those diagnosed with cancer through improvements in both the quality of care people receive and their quality of life after diagnosis.

The Commonwealth Government provides funding to Cancer Australia, to improve outcomes, service provision and survivorship support for women with gynaecological cancer.

Gynaecological cancers: did you know?

- In 2008, 4,534 women were diagnosed with a gynaecological cancer in Australia, 9.4% of all reported cancer cases* in women.
- The gynaecological cancer incidence rate^{2,3} fell by 12% over the period between 1982 and 2008.
- In 2007, 1,502 women died from a gynaecological cancer in Australia, an average of 4 deaths per day.
- Gynaecological cancers accounted for 8.7% of all cancer deaths in women in 2007.
- Between 1982 and 2007 the number of deaths from all gynaecological cancers combined increased by 22% but the mortality rate^{2,3} decreased steadily by 34%.
- Between 1982-1987 and 2006-2010, five-year relative survival has increased from 60 to 67%.

¹ All data, including data presented in graphs, are from the Australian Institute of Health and Welfare and Cancer Australia report *Gynaecological cancers in Australia: an overview*, unless otherwise specified.

² "Incidence" refers to the actual number of new cancer cases. However, the total number of people in the population may change over time (e.g. from year to year), so to compare changes in the number of new cancer cases over time we calculate the "incidence rate". The "incidence rate" is calculated by taking the number of new cancer cases diagnosed, and dividing it by the number of people in the population who could develop this cancer during a particular period. Similarly, the actual number of deaths (mortality) can also be shown as a "mortality rate".

³ Incidence and mortality rates shown in this document are "age-standardised" which means that the age distribution of the population is also considered. Therefore, any differences we see in these rates are not due to differences in the age distributions of the populations being compared.

^{* (}some cases of non-melanoma skin cancer are not reported).

What is gynaecological cancer?

Gynaecological cancers are cancers of the female reproductive system and are named according to the organ or part of the body where they first develop including the ovary, uterus, cervix, vagina and vulva. While the causes of many gynaecological cancers are not fully understood, there are a number of risk factors associated with development of one or more types of gynaecological cancer. These factors relate to family history of cancer, identified gene mutations, reproductive history, exposure to hormones (produced by the body or taken as medication), viral infection (such as HPV) and a number of lifestyle factors, such as those leading to excess body weight.



The female reproductive system

Source: Reproduced with permission by Cancer Council Victoria. Illustration by Con Stamatis.

Incidence

In 2008 in Australia:

- An average of 12 women were diagnosed per day with a gynaecological cancer.
- A total of 4,534 gynaecological cancers were diagnosed, accounting for 9.4% of all reported cancer cases* in women.
- The average age of first diagnosis with a gynaecological cancer was 62 years.
- There is a 1 in 23 chance that a woman will be diagnosed with a gynaecological cancer by age 85.

^{* (}some cases of non-melanoma skin cancer are not reported).



Most commonly diagnosed cancers in women in Australia in 2008.

How common were gynaecological cancers in women in Australia in 2008?

Type of cancer	Number of cases	Order (most common cancers in women)	Risk by age 85 years	Average age at diagnosis	
Uterine	2,016	6th	1 in 49	64	
Ovarian	1,272	10th	1 in 79	64	
Cervical	778	13th	1 in 157	51	
Vulval	282	20th		67	
Other **	116	31st			
Vaginal	70	38th		70	
All gynaecological cancers	4,534		1 in 23	62	
**cancers of other female genital organs and placenta; () = Data not reported					

Has the incidence of gynaecological cancers changed over time?

Between 1982 and 2008:

- New cases of all gynaecological cancers combined increased by 54%.
- The incidence rate for all gynaecological cancers fell by 12%.
- The incidence rates also fell for ovarian (by 15%) and cervical cancers (by 51%).
- The incidence rate for uterine cancer increased by 22%.



Incidence of gynaecological cancers in women in Australia, by year.

Does the incidence of gynaecological cancers vary by age group?

In 2008:

- The incidence rate for all gynaecological cancers combined increased with age.
- Most of the ovarian (61%) and uterine cancers (63%) were diagnosed in women aged 60 years and over.
- For cervical cancers, about 70% of cases were diagnosed in women under the age of 60.



Incidence of gynaecological cancers in women in Australia in 2008, by age group.

Mortality

In 2007 in Australia:

- Gynaecological cancers accounted for 2% of all deaths, and 8.7% of all cancer deaths in women.
- 1,502 women died from a gynaecological cancer, an average of 4 deaths per day.
- The average age at death from all gynaecological cancers combined was 70 years.
- The chance of a woman in the general population dying from gynaecological cancer before age 85 was 1 in 63.

Type of cancer	Number of deaths	Order (of all cancer deaths in women)	Risk of dying by age 85	Average age at death	
Ovarian	848	7th	1 in 106	69	
Uterine	338	14th	1 in 275	73	
Cervical	208	18th	1 in 502	63	
Vulval	65	36th		81	
Other **	17				
Vaginal	26	25th		71	
All gynaecological cancers	1,502		1 in 63	70	
**cancers of other female genital organs and placenta: $() = Data not reported$					

How common was mortality from gynaecological cancers in women in Australia in 2007?

Has mortality from gynaecological cancer changed over time?

Between 1982 and 2007:

- The annual number of deaths from all gynaecological cancers combined increased by 22%, while the mortality rate fell by 34%.
- The mortality rate for ovarian cancer fell by 21%.
- The mortality rate for cervical cancer fell by 62% between 1982 and 2002, after which time it was • stable.
- The mortality rates each year for this time period for uterine cancer remained relatively stable.

Does gynaecological cancer mortality vary by age group?

In 2007:

- Seventy-seven percent of women who died from any type of gynaecological cancer were 60 years and over. Most of the deaths from the three most common individual gynaecological cancers, were also found in this age group ovarian (77%), uterine (84%) and cervical (57%) cancers.
- Across all age groups, ovarian cancer was the most common cause of gynaecological cancer death, accounting for at least half of the deaths from ovarian, uterine and cervical cancers combined.
- After ovarian cancer, cervical cancer was the 2nd most common cause of gynaecological cancer death for younger women (less than 55 years of age). However, for women in the older age groups (aged 55 years and over), more deaths were due to uterine cancer than cervical cancer.



Mortality from gynaecological cancers in women in Australia in 2007, by age at death.

Survival

Relative survival compares the survival of a group of people diagnosed with cancer to the survival expected for people of a similar age in the general population. Survival rates provide information on the likelihood that a person will still be alive at a specified point in time (usually five years) following a diagnosis of cancer.

For the period 2006-2010*:

- The five-year relative survival rate for all gynaecological cancers combined was 67%.
- The five-year relative survival rates for the individual cancers were:
 - uterine 82%,
 - cervical 72%
 - ovarian 43%,
 - vaginal 45%,
 - vulval 71%, and
 - cancers of other female genital organs & placenta 55%.
- The five-year relative survival rates for all gynaecological cancers combined decreased with increasing age (from 88-39%).

Has survival from gynaecological cancer changed over time?

Survival for many of the gynaecological cancers increased between the five-year periods 1982–1987 and 2006–2010. This included improvements for all gynaecological cancers combined (7%), ovarian cancer (11%) and uterine cancer (7%). Survival from cervical cancer increased up to 1993 and has remained stable since then.

* The data has been derived from the 2008 Australian Cancer database (ACD)

Does survival from gynaecological cancer vary by age group?

- For all gynaecological cancers combined, survival decreased with increasing age.
- Survival rates generally decreased with increasing age for ovarian and cervical cancers.
- For uterine cancer, survival rates were similar for women under 60 years of age, but decreased for women in the older age groups.

Survival from gynaecological cancers in women in Australia in 2006-2010, by age group.



Burden of disease

One way to measure how much of an impact a disease has on a population is to use *burden of disease*. Burden of disease combines information about people who die earlier than would be expected (the number of years of life lost due to disease) and the number of healthy years of life lost due to disability or injury from the disease.

In 2012 in Australia it is estimated:

- Most of the burden of disease from gynaecological cancers will be due to premature death.
- The burden of disease due to ovarian cancer will be about 2-3 times that due to either uterine or cervical cancer.

Hospitalisations

In 2009-10:

- Three percent of all cancer-related hospitalisations in women were due to a gynaecological cancer.
- Most of these hospitalisations were for women aged 50 years and over.
- For ovarian (50%), uterine (54%) and cervical cancers (75%) most hospitalisations were in public hospitals.

Between 2000-01 and 2009-10, the number of hospitalisations increased by 13% for ovarian cancer and by 39% for uterine cancer, although the corresponding hospitalisation rates decreased by 9% for ovarian cancer and increased by 10% for uterine cancer. The numbers of hospitalisations and overall rates for cervical cancer have decreased by 6% and 16%.



Hospitalisations for gynaecological cancers in women in Australia in 2009-10.

Expenditure

- In the 2004-05 financial year in Australia, the total expenditure on all gynaecological cancers combined was \$182 million; 57% on cervical cancer screening, 35% on hospital admitted patient services, 7% on out-of hospital medical services and 1% on prescription medication.
- A total of \$63 million was spent on services for patients admitted to hospital for a gynaecological cancer, including \$25m for ovarian, \$22m for uterine and \$11m for cervical cancers.

Differences across groups

Do cancer rates differ by Aboriginal and Torres Strait Islander status?

- The incidence and mortality rates for all gynaecological cancers combined, as well as for uterine and cervical cancers, were higher for Aboriginal and Torres Strait Islander women than non-Indigenous women. No statistically significant differences in these rates were observed for ovarian cancer between the groups.
- Aboriginal and Torres Strait Islander women were, on average, younger than non-Indigenous
 women when first diagnosed with ovarian, uterine or cervical cancers or any gynaecological
 cancer.
- Between 2000–2010, survivals[#] for Aboriginal and for Torres Strait Islander women who were diagnosed with cervical cancer was lower than for non-Indigenous women. Survivals did not differ for ovarian, uterine, and all gynaecological cancers combined between these groups.

Incidence and mortality for gynaecological cancers in women in Australia, by Aboriginal and Torres Strait Islander Status (for NSW, Qld, WA and NT).



Reliable data on the incidence and mortality for gynaecological cancers for Indigenous Australians are available for some states/ territories but are not available nationally. Incidence and mortality by Indigenous status is based on data from four states and territories – New South Wales, Queensland, Western Australia and the Northern Territory. Graphs for remoteness and socioeconomic status show relative survival and the graph for Indigenous status shows crude survival.

* Incidence rates were calculated for the 5 year period 2004-2008. **Mortality rates are provided for the 5 year period 2003-2007.

Crude survival is the proportion of individuals alive at a specified point in time (e.g. 5 years) after a diagnosis of gynaecological cancer.

Do cancer rates differ by socioeconomic status (SES)?

- Incidence rates for uterine, cervical and all gynaecological cancers combined (but not ovarian cancer) were highest for women living in the most disadvantaged areas (group 1).
- For cervical cancer, the mortality rate was highest for women living in the most disadvantaged areas (group 1) compared to women in the highest advantaged areas (groups 4 and 5). Women in the highest advantaged areas also had higher five-year relative survivals than women in the two lowest groups (1 and 2).
- No differences in mortality or survival were observed between SES areas for uterine, ovarian and all gynaecological cancers combined.



Incidence and mortality for gynaecological cancers in women in Australia, by socioeconomic status.





* Incidence rates were calculated for the 5 year period 2004-2008. **Mortality rates are provided for the 5 year period 2003-2007. Graphs for remoteness and socioeconomic status show relative survival.

Do cancer rates differ by area of remoteness in which women live?

- The incidence rate for ovarian cancer tended to decrease with remoteness, while for cervical cancer, incidence rates tended to increase with remoteness of area. There were no significant differences in incidence rates in different remoteness areas for uterine cancer.
- No differences were seen for the mortality rates for ovarian cancer. However, both the uterine cancer and cervical cancer mortality rates tended to rise with remoteness.
- Between 2006-2010, five-year relative survival was:
 - lower for women in *Remote and very remote* areas compared to women in *Major cities* for cervical cancer, and
 - lower for women in *Outer regional* areas compared to women in *Major cities* for ovarian cancer.









* Incidence rates were calculated for the 5 year period 2004-2008. **Mortality rates are provided for the 5 year period 2003-2007. Graphs for remoteness and socioeconomic status show relative survival.

Cancer Australia gynaecological cancer initiatives

Cancer Australia will continue to work to improve cancer control in gynaecological cancers through:

- Leadership in health service delivery and clinical best practice by promoting clinical best practice to health professionals and the development of new approaches to the delivery of care and reviewing and updating clinical practice guidance materials to ensure that women in Australia diagnosed with gynaecological cancers receive evidence-based care.
- Funding priority research and promoting national data reporting through partnering with key non-government organisations to coordinate funding of cancer research in priority areas, promoting a nationally consistent approach to data collection for gynaecological cancers and providing comprehensive statistical overviews of cancer.
- Improving community access to cancer information through evidence-based information to help women with gynaecological cancers make informed decisions about their treatment and care.

Gynaecological cancer research and clinical trials

Cancer Australia

Cancer Australia provides support for a range of gynaecological cancer research and clinical trials activities:

- Cancer Australia supports gynaecological cancer research through its national project grant scheme, the Priority-driven Collaborative Cancer Research Scheme (PdCCRS). The PdCCRS brings together funding partners to fund cancer research in identified priority areas. Between 2007 and 2011, 17 grants in gynaecological cancer totalling \$8.15 million have been funded through the PdCCRS.
- Cancer Australia supports clinical trials in gynaecological cancer through its Support for Cancer Clinical Trials program. This program provides funding to Australia's Multi-site, Collaborative National Cancer Clinical Trials Groups, including the Australia New Zealand Gynaecological Oncology Group (ANZGOG). Cancer Australia funds ANZGOG to increase participation in clinical trials by people affected by gynaecological cancer, increase the number of gynaecological clinical trials conducted in Australia and increase the number of clinical sites actively participating in gynaecological cancer clinical trials.
- Australian Cancer Trials is a national website developed by Cancer Australia in partnership with the University of Sydney, the Australian New Zealand Clinical Trials Registry and Cancer Voices. The website provides easy access to information about cancer clinical trials, enabling consumers to make informed decisions about participating in relevant clinical trials. Australian Cancer Trials lists gynaecological cancer clinical trials available in Australia; further details of specific trials can be found at: <u>www.australiancancertrials.gov.au</u>

National Health and Medical Research Council

The National Health and Medical Research Council (NHMRC) is Australia's peak body for supporting health and medical research; for developing health advice for the Australian community, health professionals and governments; and for providing advice on ethical behaviour in healthcare and in the conduct of health and medical research. Between 2007 and 2011, the NHMRC provided over \$50 million supporting approximately 100 grants in the area of gynaecological cancer.