

BREAST CANCER

**Recommendation: Level A
(Good evidence)**

In Australia, mammography is recommended every two years for average risk women between the ages of 50 and 69.

Mammographic screening is available to women aged 40-49 years who have decided that they wish to attend but the evidence is insufficient to actively encourage women in this age group to have screening.

Method of screening

The screening test with the strongest level of evidence considered for the early detection of breast cancer mammography.

Frequency of screening

Every two years

State of evidence

Randomised controlled trials have demonstrated benefit of mammography for women at average risk age 50-69 years. Mammography for average risk women aged 40-49 years is still controversial.

Special groups

Women at moderately increased risk of breast cancer comprise 4 per cent of the population. They should attend for second yearly mammographic screening from the age of 50 years. Additional surveillance should be considered on an individual basis.

Women at potentially higher risk of breast cancer comprise a very small proportion of women (<1 per cent). The precise protocols for women at high risk remain controversial and they should be advised to attend a specialist cancer or genetic service for advice.

Prevention

BreastScreen WA is the State's free breast x-ray screening service. Phone 13 20 50 for appointments.

BreastScreen WA
9th Floor
East Point Plaza
233 Adelaide Terrace
PERTH WA 6000
breastscreenwa@health.wa.gov.au

CERVICAL CANCER

**Recommendation: Level A
(Good evidence)**

Cancer of the cervix is one of the most preventable and curable of all cancers.

The current Australian recommendation is for all women who have been sexually active at any stage in their lives to have a Pap smear every two years until age 70 years.

Women should commence having Pap smears between the ages of 18-20 years or within two years after first sexual intercourse, whichever is later. In some cases it would be appropriate to start screening before 18 years of age.

Pap smears may cease at the age of 70 years for women who have had two normal smears within the last five years. Women over 70 years who have never had a Pap smear or who request a Pap smear should be screened.

Women who have had a hysterectomy for benign (non-cancer) reasons, and who have never had an abnormal smear, do not require further Pap smears. If, however, the hysterectomy was performed for a pre-cancerous CIN II/ III lesions, they will require annual vaginal vault smears for 5 years and then may revert to two-yearly Pap smears for the rest of their life. Women who had a hysterectomy for gynaecological cancer warrant Pap smears at the discretion of their gynaecologist.

Method of screening

Pap smear

Frequency of screening

Every two years

State of evidence

Good evidence from multiple observational studies indicates that up to 90 per cent of the most common form of cervical cancer can be prevented by having regular two-yearly Pap smears.

Special groups

All women who have ever had sexual intercourse are at risk of cervical cancer. Women at increased risk include those with high-risk strains of genital Human Papilloma Virus (HPV), early age of first intercourse (<16 years), multiple partners or partners who have had multiple partners, and those who smoke, are taking the contraceptive pill, or have been exposed to Diethylstilbestrol (DES).

For further information

WA Cervical Cancer Prevention Program
Telephone: 13 15 16

COLORECTAL CANCER (CRC)

**Recommendation: Level A
(Good evidence)**

The recommendations for screening for CRC vary according to the patient's personal and family history (see special groups section below).

Category 1 – Asymptomatic individuals with no family history

The recommendation is that FOBT be performed from the age of 50. The minimum effective program is the performance of FOBT on three serial stools at least every second year, but preferably annually. In addition, it is acceptable to offer screening flexible sigmoidoscopy on a five-yearly basis.

Methods of screening

- Faecal Occult Blood Screening (FOBT) yearly or two-yearly
- Flexible sigmoidoscopy every 5 years
- Colonoscopy every 10 years
- Double contrast barium enema every 5 years

Frequency of screening

As stated above

State of evidence

There is good evidence that periodic FOBT reduces mortality from CRC and fair evidence that sigmoidoscopy alone or in combination with FOBT reduces mortality. Efficacy of colonoscopy is supported by indirect evidence. There is no direct evidence as yet that screening colonoscopy, double contrast barium enema or the newer technologies (such as virtual colonoscopy) are effective in improving health outcomes.

Special groups**Category 2 – Asymptomatic individuals at moderate risk**

People without the high-risk features described below and with either:

- One first-degree relative with CRC diagnosed before the age of 55 years or
- Two first or second-degree relatives on the same side of the family with CRC diagnosed at any age.

It is recommended that these individuals be referred for colonoscopy at five-yearly intervals from age 50, or 10 years younger than the age of the earliest diagnosis of CRC in the family, whichever comes first. If colonoscopy is unavailable, then it is appropriate to offer flexible sigmoidoscopy or double contrast barium enema. It is worth considering annual FOBT in the intervening years.

LUNG CANCER

**Recommendation: Level I
(Insufficient Evidence)**

No organisations currently recommend screening for lung cancer.

Methods of screening

Chest x-ray; sputum cytology; spiral CT scanning.

Frequency of screening

Unknown

State of evidence

Randomised controlled trials have not demonstrated a reduction in lung cancer mortality resulting from screening with chest x-ray, spiral CT scanning or sputum cytology.

Special groups

Heavy smokers and people with asbestos exposure.

Category 3 – Asymptomatic high risk individuals

High risk features are:

- Three or more first or second degree relatives on the same side of the family diagnosed with CRC
- Two or more first-degree or second degree relatives on the same side of the family diagnosed with CRC, including any of the following high risk features:
 - Multiple CRC in one person
 - CRC before the age of 50 years
 - At least one relative with endometrial or ovarian cancer.
- At least one first-degree or second-degree relative with CRC, with a large number of adenomas throughout the large bowel
- Someone in the family with a high-risk gene mutation in the adenomatous polyposis coli or one of the mismatch repair genes.

Category 3 people should be managed with the support of clinical genetics and cancer genetic services underpinned by family registries. Referral to these services should be early (age 10-25 years).

For further information

For familial CRC contact:
Genetic Services of Western Australia
Familial Cancer Program
PO Box 134
SUBIACO WA 6904
Tel: (08) 9340 1603
Fax: (08) 9340 1678

MELANOMA

**Recommendation: Level I
(Insufficient Evidence)**

In Australia, mass screening of the general asymptomatic population for melanoma is not recommended.

Most organisations recommend annual screening for those at high risk, although no Australian national policies exist on this question.

Methods of screening

The two screening tests considered for the early detection of melanoma are physical examination of the skin by a general practitioner or specialist, and self-examination.

Frequency of screening

Unknown

State of evidence

The evidence is insufficient to recommend for or against routine screening for skin cancer using a total-body skin examination.

Special groups

People at moderately increased risk of melanoma are those with: fair skin; tendency to burn in sunlight; freckling; atypical moles; more than 50 moles on the body; family history of melanoma; past history of melanoma or non-melanoma skin cancer.

People at potentially high risk of melanoma comprise those with familial syndromes such as dysplastic naevus syndrome.

Prevention

Reduction of individual sun exposure is recommended as a preventive strategy for melanoma.

For more information

Western Australian Melanoma Advisory Service
St John of God Health Care Subiaco
Suite 302, McCourt Street
SUBIACO WA 6008
Tel: (08) 9382 9445
Fax: (08) 9382 9446
wamas@sjog.org.au

This card produced by the Western Australian Clinical Oncology Group
46 Ventnor Avenue, WEST PERTH WA 5005
Phone: (08) 9212 4333 or (08) 9212 4377, wacog@canerwa.asn.au
Information current as at March 2005 and will periodically be updated.



OVARIAN CANCER

**Recommendation: Level I
(Insufficient Evidence)**

Routine screening of asymptomatic women for ovarian cancer is not recommended by any official body.

Methods of screening

There are several methods of screening, but none of them is very accurate in asymptomatic women. They include: pelvic examination; Pap smear; transabdominal and transvaginal ultrasound; and the serum tumour marker CA-125. In addition, multimodality screening using both ultrasound and CA-125 is currently being trialed.

Frequency of screening

Unknown

State of evidence

Insufficient to recommend screening.

Special groups

Groups at high risk of ovarian cancer include women with a strong family history of breast and/or ovarian cancer (two or more first-degree relatives and/or a relative with cancer before menopause) or colon cancer (at least three affected family members in at least two successive generations, with one case below age 50 years).

For more information

Western Australian Gynaecologic Cancer Service
King Edward Memorial Hospital
374 Bagot Road
SUBIACO WA 6008
Tel: (08) 9340 1383
Fax: (08) 9340 1016

Strength of Recommendations

The US Preventive Services Task Force (USPSTF) grades its recommendations according to one of five classifications (A, B, C, D, I) reflecting the strength of evidence and magnitude of net benefit (benefits minus harms).

A - The USPSTF strongly recommends that clinicians routinely provide [the service] to eligible patients. The USPSTF found good evidence that [the service] improves important health outcomes and concludes that benefits substantially outweigh harms.

B - The USPSTF recommends that clinicians routinely provide [this service] to eligible patients. The USPSTF found at least fair evidence that [the service] improves important health outcomes and concludes that benefits outweigh harms.

C - The USPSTF makes no recommendation for or against routine provision of [the service]. The USPSTF found at least fair evidence that [the service] can improve health outcomes but concludes that the balance of benefits and harms is too close to justify a general recommendation.

D - The USPSTF recommends against routinely providing [the service] to asymptomatic patients. The USPSTF found at least fair evidence that [the service] is ineffective or that harms outweigh benefits.

I - The USPSTF concludes that the evidence is insufficient to recommend for or against routinely providing [the service]. Evidence that the [service] is effective is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined.

For more comprehensive information, refer to the WACOG booklet 'Recommendations for screening for specific cancers: a guide for general practitioners 2nd Edition, 2005'

PROSTATE CANCER

**Recommendation: Level I
(Insufficient Evidence)**

The issue of screening for prostate cancer is controversial at the moment. Currently, most organisations in Australia and overseas do not recommend the screening of asymptomatic men for prostate cancer. If testing is done, the health professional should discuss the potential benefits, side effects and questions regarding detection of early prostate cancer and treatment so that men can make informed decisions about testing.

Methods of screening

Digital rectal examination (DRE) and serum prostate specific antigen (PSA).

Frequency of screening

Unknown

State of evidence

This issue is controversial. The US Preventive Services Task Force found that while there is good evidence that PSA screening can detect early stage prostate cancer, there was mixed and inconclusive evidence that early detection improves health outcomes. Screening is associated with important harms, including frequent false-positive results and unnecessary anxiety, biopsies and potential complications of treatment of some cancers that may never have affected a patient's health. It concluded that evidence was insufficient to determine whether the benefits outweighed the harms for a screened population.

Special groups

Men with a strong family history of prostate cancer.

TESTICULAR CANCER

**Recommendation: Level I
(Insufficient Evidence)**

There is insufficient evidence to establish a clear recommendation for or against screening for testicular cancer in the general population.

Method of screening

Physician palpation of the testes and/or self-examination of the testes by the patient.

Frequency of screening

Unknown for physician palpation, monthly for self-examination.

State of evidence

No evidence exists on which to base a recommendation for or against screening for testicular cancer.

Special groups

Males with undescended testis, gonadal dysgenesis, Klinefelter's syndrome, father or identical twin with testicular cancer, or a history of testicular cancer in the contralateral testis.