

Breast and cervical cancer screening

Screening programmes for cervical cancer and breast cancer (including more focused screening for familial breast cancer) vary worldwide, with different recommendations regarding the age at which screening is started and stopped and regarding the screening interval.

Breast cancer screening

- This is usually undertaken with mammography.
- The frequency varies, from annually to every 3 years.
- It is offered to women aged 40–74 years.
- More frequent mammography is not recommended for users of menopausal hormone therapy (MHT).
- There is no need to stop MHT before mammography to reduce recall rates.

Cervical cancer screening

- This involves human papillomavirus virus (HPV) testing and cytology (Pap smear).
- The frequency varies between every 3 to 5 years.
- It is offered to women aged 21–65 years.
- More frequent screening is not recommended for users of menopausal hormone therapy (MHT).
- Clinical practice guidelines and screening programs may be modified by HPV vaccination.
- Current screening programs include both vaccinated and unvaccinated women.

Familial breast cancer American Cancer Society recommendations

The recommendation is for a magnetic resonance scan and a mammogram every year, typically starting at the age of 30 years, for women who:

- have a lifetime risk of breast cancer of about 20% to 25% or greater, according to risk assessment tools that are based mainly on family history
- have a known *BRCA1* or *BRCA2* gene mutation (based on having had genetic testing)
- have a first-degree relative (parent, brother, sister or child) with a *BRCA1* or *BRCA2* gene mutation, and have not had genetic testing themselves
- had radiation therapy to the chest when they were between the ages of 10 and 30 years
- have Li–Fraumeni syndrome, Cowden syndrome or Bannayan–Riley–Ruvalcaba syndrome, or have first-degree relatives with one of these syndromes

UK National Institute for Health and Care Excellence (NICE) recommendations

The recommendation is for referral from primary to secondary care for mammography, magnetic resonance scan or specialist genetic assessment for women who have:

- one first-degree female relative diagnosed with breast cancer before 40 years of age or
- one first-degree male relative diagnosed with breast cancer at any age or
- one first-degree relative with bilateral breast cancer where the primary was diagnosed before 50 years of age or
- two first-degree relatives, or one first-degree and one second-degree relative, diagnosed with breast cancer at any age or
- one first-degree or second-degree relative diagnosed with breast cancer at any age and one first-degree or second-degree relative diagnosed with ovarian cancer at any age (one of these should be a first-degree relative) or
- three first-degree or second-degree relatives diagnosed with breast cancer at any age.

Further information

American Cancer Society. Recommendations for the early detection of breast cancer <https://www.cancer.org/cancer/breast-cancer/screening-tests-and-early-detection/american-cancer-society-recommendations-for-the-early-detection-of-breast-cancer.html>

National Institute for Health and Care Excellence. Familial breast cancer: classification, care and managing breast cancer and related risks in people with a family history of breast cancer <http://www.nice.org.uk/guidance/cg164>

NHS. Breast screening (mammogram) <https://www.nhs.uk/conditions/breast-screening-mammogram/>

CDC. What is breast cancer screening? https://www.cdc.gov/cancer/breast/basic_info/screening.htm

NHS. Cervical screening <https://www.nhs.uk/conditions/cervical-screening/>

CDC. What should I know about cervical cancer screening? https://www.cdc.gov/cancer/cervical/basic_info/screening.htm