

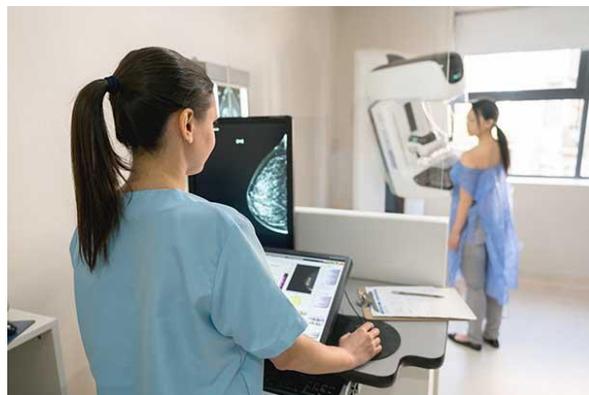


## Screening Tests

### Effective Cancer Screening Tests

Cancer screening tests aim to find cancer early, before it causes symptoms and when it may be easier to treat successfully. Effective screening tests are those that:

- Find cancer early
- Reduce the chance that someone who is screened regularly will die from the cancer
- Have more potential benefits than harms. (Possible harms of screening tests include bleeding or other physical damage, inaccurate test results, and overdiagnosis—the diagnosis of cancers that would not have caused problems and did not need treatment.)



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### Colonoscopy, sigmoidoscopy, and stool tests (high-sensitivity fecal occult blood tests and stool DNA tests)

Several screening tests have been shown to reduce the risk of dying from colorectal cancer. Colonoscopy and sigmoidoscopy not only detect colorectal cancer early but also help prevent the disease in the first place. That's because these tests can find abnormal colon growths (polyps) that can be removed before they become cancer. Expert groups generally recommend that people who are at average risk for colorectal cancer have screening with one of these tests at ages 50 through 75. For more information, see the [Tests to Detect Colorectal Cancer and Polyps](#) fact sheet and the [PDQ® Colorectal Cancer Screening summary](#).



#### What Cancer Screening Statistics Really Tell Us

Learn to interpret the statistical results of cancer screening studies.

### Low-dose helical computed tomography

This test to screen for lung cancer has been shown to reduce lung cancer deaths among heavy smokers ages 55 to 74. For more information, see the [National Lung Screening Trial](#) page and the [PDQ® Lung Cancer Screening summary](#).

### Mammography

This method to screen for breast cancer has been shown to reduce deaths from the disease among women ages 40 to 74, especially those over age 50. For more information, see the [Mammograms](#) fact sheet and the [PDQ® Breast Cancer Screening summary](#).

### Pap test and human papillomavirus (HPV) testing

These tests, which can be used both alone and in combination, can lead to both early detection and prevention of cervical cancer. They prevent the disease because they allow abnormal cells to be found and treated before they become cancer. Testing is generally recommended to begin at age 21 and to end at age 65 in women who have had adequate prior screening and are not otherwise at high risk for cervical cancer. For more information, see the [Pap and HPV Testing](#) fact sheet and the [PDQ® Cervical Cancer Screening summary](#).

## Other Screening Tests

Screening tests that have not been shown to be effective may still be offered, especially to people who are known to be at increased risk of cancer.

### Alpha-fetoprotein blood test

This test is sometimes used, along with ultrasound of the liver, to try to detect liver cancer early in people at high risk of the disease. For more information, see the [PDQ® Liver \(Hepatocellular\) Cancer Screening summary](#).

### Breast MRI

This imaging test is often used for women who carry a harmful mutation in the *BRCA1* gene or the *BRCA2* gene; women with these mutations have a high risk of breast cancer, as well as increased risk for other cancers. For more information, see the [BRCA Mutations: Cancer Risk and Genetic Testing](#) fact sheet and the [PDQ® Breast Cancer Screening summary](#).

### CA-125 test

This blood test, which is often done together with a transvaginal ultrasound, may be used to try to detect ovarian cancer early, especially in women with an increased risk of the disease. Although this test can help to diagnose ovarian cancer in women who have symptoms and can be used to evaluate the recurrence of cancer in women previously diagnosed with the disease, it has not been shown to be an effective ovarian cancer screening test. For more information, see the [PDQ® Ovarian Cancer Screening summary](#).

### Clinical breast exams and regular breast self-exams

Routine examination of the breasts by health care providers or by women themselves has not been shown to reduce deaths from breast cancer. However, if a woman or her health care provider notices a lump or other unusual change in the breast, it is important to get it checked out. For more information, see the [PDQ® Breast Cancer Screening summary](#).

### PSA test

This blood test, which is often done along with a digital rectal exam, can detect prostate cancer at an early stage. However, expert groups no longer recommend routine PSA testing for most men because many prostate cancers detected with PSA testing are not deadly, and early detection and treatment of PSA-detected cancers has not been shown to reduce the chance of dying from prostate cancer. For more information, see the [Prostate-Specific Antigen \(PSA\) Test](#) fact sheet and the [PDQ® Prostate Cancer Screening summary](#).

### Skin exams

Doctors often recommend that people who are at risk for skin cancer examine their skin regularly or have a health care provider do so. Such exams have not been shown to decrease the risk of dying from skin cancer, and they may lead to overtreatment. However, people should be aware of changes in their skin, such as a new mole

or a change to an existing mole, and report these to their doctor promptly. For more information, see the [Common Moles, Dysplastic Nevi, and Risk of Melanoma](#) fact sheet and the [PDQ® Skin Cancer Screening summary](#).

## Transvaginal ultrasound

This imaging test, which can create pictures of a woman's ovaries and uterus, is sometimes used in women who are at increased risk of ovarian cancer (because they carry a harmful *BRCA1* or *BRCA2* mutation) or of endometrial cancer (because they have a condition called Lynch syndrome). But it has not been shown to reduce deaths from either cancer. For more information, see the [PDQ® Ovarian Cancer Screening summary](#) and the [PDQ® Endometrial Cancer Screening summary](#).

## Virtual colonoscopy

This test allows the colon and rectum to be examined from outside the body. Although it has not been shown to reduce deaths from colorectal cancer and may reveal possible problems outside the colon that then need to be investigated further, this test may be recommended if it is the only colorectal cancer screening test a person finds acceptable. For more information, see the [Tests to Detect Colorectal Cancer and Polyps](#) fact sheet and the [PDQ® Colorectal Cancer Screening summary](#).

## More Information

For complete information about screening tests by cancer type, including tests that are being developed and tests that were used in the past, see the [PDQ® Cancer Information Summaries: Screening/Detection \(Testing for Cancer\)](#)

## Related Resources

[In an Era of Precision Medicine, Testing New Approaches to Breast Cancer Screening](#)

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