

Screening for Colorectal (Bowel) Cancer

Colorectal cancer (bowel cancer) is common. The prognosis (outlook) and chance of cure are much better if this cancer is detected at an early stage rather than at a later stage. A screening programme operates in the UK for all older people. The aim is to offer an easy screening test to detect colorectal cancer when it is at an early stage and before symptoms start. Some younger people with increased risk of developing colorectal cancer are also offered screening.

What is colorectal cancer?

Colorectal cancer is a cancer of the colon or rectum. When the cancer first starts to develop, there are typically no symptoms for several weeks or months. Then, as the cancer progresses, the common initial symptoms include bleeding from the rectum (back passage), alteration in your bowel habit (for example, having prolonged episodes of diarrhoea) and anaemia which can lead to tiredness. (See separate leaflet called [Colorectal \(bowel\) cancer](#) for more details.)

What is colorectal cancer screening?

Screening means looking for early signs of a particular disease in otherwise healthy people who do not have any symptoms and when treatment is likely to be curative. Colorectal cancer screening aims to detect colorectal cancer at an early stage when there is a good chance that treatment will cure the cancer. There are two methods of screening for colorectal cancer:

- A test to detect traces of blood in your faeces - the faecal occult blood (FOB) test.
- An examination of the inside of the bowel by a test called flexible sigmoidoscopy.

The first test is now offered routinely in the UK to those in the appropriate age range. The second test may well become routinely offered in the near future. Each is now discussed in more detail.

Screening with the faecal occult blood test

What does the FOB screening test involve?

Small (unnoticeable) amounts of blood in the faeces are common in people with colorectal cancer. The test involves testing the faeces (stools or motions) for occult (hidden) blood. This test involves testing three samples of your faeces for traces of blood.

If you are in the relevant age group (see below) then you will automatically be sent an invitation and an FOB screening kit to do the test at home. After your first screening test, you will then be sent another invitation and screening kit every two years until you reach the maximum age.

The testing kit is a very simple way for you to collect small samples of your faeces in your own home. Although it sounds embarrassing and unpleasant, it is surprisingly easy and quick to actually do. There are clear instructions sent with the kit. You obtain a sample by using a small scraper to scrape some faeces off toilet tissue which you have just used after going to the toilet. You will then need to wipe very small samples of three different bowel motions on a special card. You then send the card in an hygienically sealed, prepaid envelope to a laboratory for testing. You will be sent the results of your test by post within two weeks.

The FOB test can confirm the presence of blood in faeces. However, it is unable to show where the blood is coming from or what the cause of the blood is. Colorectal cancer is just one cause of blood in faeces.

Who is invited to do the FOB screening test?

Most cases of colorectal cancer develop in older people. Therefore, the decision has been made for people of a certain age to be invited to participate in the colorectal cancer screening programme. The NHS Bowel Cancer Screening Programme has been introduced in the UK as follows:

- In England, people aged 60 to 69 are routinely offered screening every two years. If you are aged 70 or over and screening has started in your area, you can phone the helpline on 0800 707 60 60 to request the kit, if you would like to have screening. From 2014, screening will be extended to cover people up to age 74 as standard.
- In Scotland, people aged 50 to 74 are routinely offered screening every two years.
- In Wales, people aged 60 to 74 are routinely offered screening every two years.
- In Northern Ireland, people aged 60 to 71 are routinely offered screening every two years.

The first test kit should automatically arrive by post within a few weeks after you reach the age in which screening starts. You can call the relevant helpline (details below) and ask for one if one does not come. If you are older than the set ages for routine testing, you may still be able to request a kit to test yourself. Ring the relevant helpline for details.

What are the possible results of the screening test?

The results of the FOB test can be either:

- **Negative.** That is, no blood present. This is the result for around 98 in 100 people. Routine screening will then be offered to you every two years until you reach the age when screening stops.
- **Unclear.** This is the result for around 2 in 100 people. The FOB test then needs repeating.
- **Positive.** That is, blood is found to be present. This is the result for around 2 in 100 people. You will then be referred for further investigation which is usually a colonoscopy. A colonoscopy is a test in which a long, thin, flexible telescope (a colonoscope) is passed through your rectum into your colon (large bowel) in order for the whole of your colon and rectum to be looked at in detail.

There are various reasons other than colorectal cancer for having a positive test. For example, some medical conditions including haemorrhoids (piles) can lead to a positive test.

Colorectal cancer screening can also detect polyps (growths) on the inner lining of the bowel. These are not cancers, but may develop into cancers over time. They can easily be removed, which reduces the risk of colorectal cancer developing.

Following a colonoscopy after screening, about 5 in 10 people who have a colonoscopy will have a normal result, about 4 in 10 will be found to have a polyp, which if removed may prevent cancer from developing, and about 1 in 10 people will be found to have cancer.

Note: a normal test result does not completely rule out colorectal cancer. It is therefore important to be aware of the symptoms of bowel cancer and to see your doctor if you are concerned.

Is the FOB screening test effective?

As this screening test has only recently been introduced, it is too early to know exactly how effective it will be. However, initial statistics indicate that it is saving many lives. One study has shown that around 2,500 lives could be saved every year in the UK by 2025 due to screening with the FOB screening test.

Also, figures published in 2009 from the National Cancer Intelligence Network showed that people with colorectal cancer who are diagnosed at an early stage (stage A) have more than a 9 in 10 chance of surviving the disease. Up until recently (prior to screening), only about 1 in 7 people with colorectal cancer were diagnosed at stage A, as the disease does not often cause symptoms at this early stage. Until recently, most cases of colorectal cancer were diagnosed when the disease was more advanced and causing symptoms. The disease is much less likely to be cured at these later stages. With the introduction of screening, many more cancers have been diagnosed at the early stage when a cure is much more likely to be possible.

So, these figures show just how important it is to diagnose the disease as early as possible for the best chance of a cure. This is exactly what colorectal cancer screening is all about - to diagnose the condition early to give the best chance of a cure.

Screening with flexible sigmoidoscopy

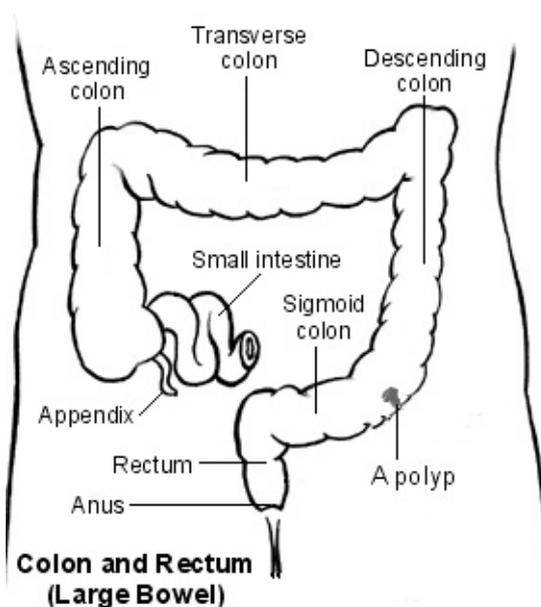
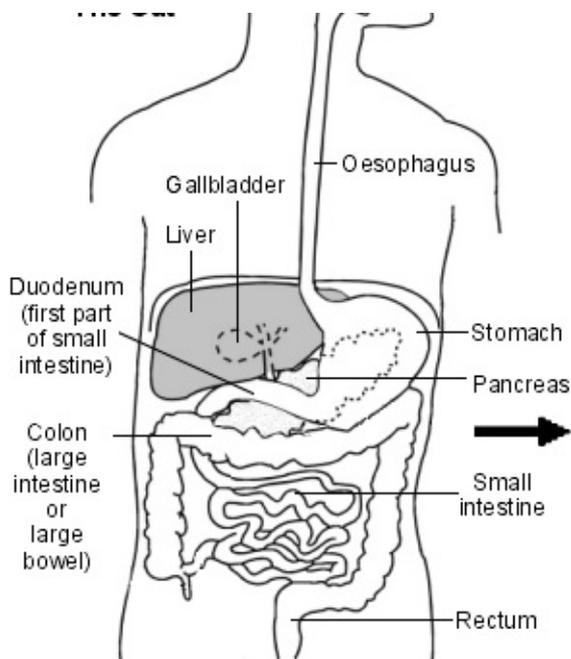
What is flexible sigmoidoscopy?

The sigmoid colon is the final portion of the colon that is joined to the rectum. A flexible sigmoidoscope is a small bendy tube with an attached light source, about the thickness of a pen. A doctor or nurse inserts the sigmoidoscope into the anus and pushes it slowly through the rectum to the sigmoid colon and the lower part of the descending colon. This allows the doctor or nurse to see the lining of the rectum, sigmoid colon and the lower part of the descending colon. The procedure is not usually painful but it may be a little uncomfortable. This test is similar to colonoscopy. However, colonoscopy is a more complex procedure involving a long flexible instrument that inspects the entire large bowel and usually requires sedation. Unlike colonoscopy, a flexible sigmoidoscopy can be done easily without the need for sedation.



The Gut

Enlarged image



What is screening with flexible sigmoidoscopy?

It has been proposed that a routine flexible sigmoidoscopy test should be offered to all older adults. This is because most bowel polyps and colorectal cancers develop in the rectum, sigmoid colon or lower descending colon. Colonic (bowel) polyps are small benign (non-cancerous) growths on the inside lining of the colon or rectum. They are common in older people. They usually cause no symptoms or problems. However, if a polyp is found, it is usually removed. This is because there is a small risk of a colonic polyp developing into a bowel cancer after several years.

The results of a large UK research study were published in 2010. The study found that people who had one routine flexible sigmoidoscopy, between the ages of 55 and 64, had a reduced risk of developing colorectal cancer by about a third. This was because any polyps that were found during the test were removed. Also, the test can detect early colorectal cancers that have not yet caused symptoms.

In October 2010 the Government announced that £60 million would be spent to fund a new flexible sigmoidoscopy screening programme for people in England aged over 55 years. So, it is likely that this screening test will become available soon. It is thought that, combined with the existing FOB test, a one-off flexible sigmoidoscopy at around the age of 55-60 could dramatically increase the number of lives saved from colorectal cancer.

Screening tests for younger people with increased risk

Some people have a higher than normal risk of developing colorectal cancer. This is because some diseases cause an increased risk of developing colorectal cancer. Also, relatives of people with certain diseases have an increased risk of developing colorectal cancer. Therefore, some people are offered regular screening tests, often from a young age. These groups of people offered screening tests include:

- People with certain inherited conditions, which include familial adenomatous polyposis (FAP), hereditary non-polyposis colorectal cancer (HNPCC), and some other syndromes including Peutz-Jeghers syndrome and juvenile polyposis syndrome. These conditions are very rare.
- Close relatives of people with FAP or HNPCC.
- People with a strong family history of first-degree relatives (mother, father, brother, sister, child) who have had colorectal cancer. In particular, if the cancer developed in a close relative under the age of 45 years.
- People with ulcerative colitis or Crohn's disease affecting the colon or rectum.
- People with acromegaly.
- People who have had one or more colonic polyps removed.
- People who have had colorectal cancer in the past.

The age at which screening starts, the type of tests offered and the frequency of the tests depends on the level of increased risk. The different diseases and family associations mentioned above have varying levels of risk. The tests may include routine colonoscopy or some specialised scans. If you have a disease or family history that causes an increased risk of developing colorectal cancer, your doctor will advise on the type of tests recommended and their frequency. The guidelines (cited at the end) from the The British Society of Gastroenterology may also be of interest.

Further help and information

The NHS Bowel Cancer Screening Programme

England - Helpline: 0800 707 6060

Web: www.cancerscreening.nhs.uk/bowel/index.html

Scotland - Helpline: 0800 012 1833

Web: www.bowelscreening.scot.nhs.uk/

Wales - Helpline: 0800 294 3370

Web: www.wales.nhs.uk/sites3/home.cfm?orgid=747

Northern Ireland - Helpline: 0800 015 2514

Web: www.cancerscreening.hscni.net/1995.htm

Department of Health

Has information leaflets called [Bowel Cancer Screening - the facts](#) and [Bowel cancer screening the colonoscopy investigation](#) - available in many different languages.

Find them by searching on their website for 'bowel cancer screening' -

www.dh.gov.uk

Beating Bowel Cancer

Harlequin House, 7 High Street, Teddington TW11 8EE Tel: 08450 719 300 Web: www.beatingbowelcancer.org

Aims include to raise awareness of symptoms and promote early diagnosis of bowel cancer.

Bowel Cancer UK

7 Rickett Street, London, SW6 1RU

Tel: 0800 8 40 35 40 (Bowel Cancer Advisory Service) Web:

www.bowelcanceruk.org.uk

A charity dedicated to raising awareness of bowel cancer, improving the quality of life of those affected by the disease and, ultimately, reducing deaths from this disease.

Bowel Cancer Wales

Sherwood, Llandraw Woods, Maesycoed, Pontypridd RCT, CF37 1EX

Tel: 01443 408813 Web: www.bowelcancerwales.com

Aims to raise awareness of the disease and raise funds to research bowel cancer in Wales.

Further reading & references

- [Guidelines for colorectal cancer screening and surveillance in moderate and high risk groups](#), British Society of Gastroenterology (May 2010 update from 2002)
- [Atkin WS, Edwards R, Kralj-Hans I, et al](#); Once-only flexible sigmoidoscopy screening in prevention of colorectal cancer: a Lancet. 2010 May 8;375(9726):1624-33. Epub 2010 Apr 27.
- [Ballinger AB, Anggiansah C](#); Colorectal cancer. BMJ. 2007 Oct 6;335(7622):715-8.
- [Towler B, Irwig L, Glasziou P, et al](#); A Systematic Review of the Effects of Screening for Colorectal Cancer using the Faecal Occult Blood Test, Cochrane Review (2006)
- [Steele RJ, McClements PL, Libby G, et al](#); Results from the first three rounds of the Scottish demonstration pilot of FOBT Gut. 2009 Apr;58(4):530-5. Epub 2008 Nov 26.

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