

A practical guide to understanding cancer

**WE ARE  
MACMILLAN.  
CANCER SUPPORT**

# **ARE YOU WORRIED ABOUT OVARIAN CANCER?**



# About this leaflet

People worry about cancer for many different reasons. Perhaps you have a family member or friend who has been diagnosed. Or maybe you have symptoms you think might be cancer.

Some people feel anxious about something they have watched on television, or have read in the newspapers or online.

This leaflet explains:

- what we know about the main causes of ovarian cancer
- what you can do to reduce your risk of developing cancer.

We hope it gives you the information you need or helps you find more support.

In this leaflet, we have included quotes from people who have been worried about ovarian cancer, which you may find helpful. These are from people who have chosen to share their story with us.

To share your experience, visit [macmillan.org.uk/shareyourstory](https://www.macmillan.org.uk/shareyourstory)

We have also listed some other useful organisations at the end of this leaflet (see pages 28 to 29).

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## What causes cancer?

Your body is made up of tiny building blocks called cells. Inside every cell is a set of genes. These genes are the instructions your cells need to work properly. Sometimes the structure inside a gene is permanently changed, so the gene no longer gives the correct instructions. This change is called a **gene mutation**.

Eventually, gene mutations in a cell may mean the cell stops working normally. Cancer develops when cells like this can multiply in an abnormal way and grow out of control.

Some cells in your body develop gene mutations during your lifetime. This happens by chance as a cell divides or does its job in the body. But it can also be caused by your lifestyle or the environment around you.

It is also possible for a gene mutation to run through a family, passing from parent to child. This is called an **inherited mutation**. Some inherited mutations make a person more likely to develop certain types of cancer. We have more information about inherited genes and cancer risk on pages 21 to 23.

It takes a long time for mutations to build up and cause cancer. This is why cancer is more likely to affect older people. People of any age can get cancer, but it is most common in people over the age of 50.

# Understanding your risk of cancer

Most of the time, we do not know exactly why a cancer develops in one person and not another. Often, we do not know exactly what caused that cancer to start.

We do know some of the things that cause the damage that makes cancer more likely to develop. These are called **risk factors**. We have more information about risk factors and ways to reduce your cancer risk on pages 5 to 20.

Having one or more risk factors does not mean you will definitely get cancer. Some factors only slightly increase your risk. Others are much more likely to cause cancer. Smoking is a good example. Not everyone who smokes will develop cancer. But smoking greatly increases your risk. About 9 out of 10 people who develop lung cancer (90%) are smokers.

# Risk factors for ovarian cancer

In the UK, around 7,000 women are diagnosed with ovarian cancer each year. It is the sixth most common cancer in women in the UK.

## Age

Ovarian cancer is rare under the age of 30. The risk increases with age. More than half of people diagnosed with ovarian cancer (over 50%) are over the age of 65.

## Hormonal factors

Doctors think the number of times an ovary releases an egg (ovulates) may be linked to ovarian cancer risk. Ovarian cancer is more common in women who have ovulated more times. For example, women who:

- have never given birth
- gave birth for the first time after the age of 35
- started their periods young
- have a later menopause.

## Hormone replacement therapy (HRT)

Taking HRT after the menopause slightly increases the risk of developing ovarian cancer. About 1 in 100 cases (1%) may be linked to taking HRT.

## Medical conditions

### Breast cancer

Women who have had breast cancer may be more likely to develop ovarian cancer. This may be because these cancers have some risk factors in common.

### Endometriosis

Endometriosis is a condition where the lining of the womb grows outside the womb. Having this condition slightly increases the risk of ovarian cancer.

### Diabetes

Having diabetes may slightly increase the risk of developing ovarian cancer.

## Lifestyle factors

### Smoking

Smoking cigarettes increases your risk of a less common type of ovarian cancer called mucinous cancer. But it does not affect your risk of the most common type of ovarian cancer.

### Weight and height

There is limited evidence that being overweight (obese) or taller may increase the risk of ovarian cancer.

## Factors that reduce risk

Factors that reduce ovulation may help lower the risk of ovarian cancer. These may include the following:

- Taking the contraceptive pill – This lowers your risk of ovarian cancer. But it has been linked to a slightly higher risk of breast cancer. The small increased breast cancer risk is reversible and goes back to normal around 5 years after stopping the pill. The much bigger protective effect against ovarian cancer seems to be long term. Your GP can explain more about the risks and benefits for you.
- Having more pregnancies.
- Breastfeeding – The risk seems to be lower for women who breastfeed for longer.

# Choose a healthy lifestyle

Around 1 in 3 cases of the most common cancers (about 33%) could be prevented by eating a healthy diet, keeping to a healthy weight and being more active.

It is not clear whether these changes affect your risk of ovarian cancer, or by how much. You cannot reduce your risk of cancer completely. But there are some ways you can lower your risk, and improve your general health.



## Give up smoking

If you smoke, giving up is the single most important thing you can do for your health.

In the UK, more than 1 in 4 cancer deaths (over 25%) are caused by smoking. Smoking increases the risk of the following cancers:

- mouth cancer
- throat cancer
- lung cancer
- bladder cancer
- kidney cancer
- pancreatic cancer
- bowel cancer
- stomach cancer
- cervical cancer.

Chewing or sucking tobacco is not a safe alternative to smoking cigarettes. If you chew or suck tobacco, you have a higher risk of developing mouth and oral cancers.

Breathing in other people's smoke (passive smoking) also increases your risk of developing cancer. Keep your home smoke-free to protect your and your family's health.

The long-term effects of e-cigarettes are not yet fully known. They are thought to be around 95% safer than smoking tobacco cigarettes.

If you want to give up smoking, it is never too late to stop. Ask your GP for advice, or contact the stop-smoking service in your area:

### **Smokefree (England)**

**0300 123 1044** (Monday to Friday, 9am to 8pm, Saturday and Sunday, 11am to 4pm).

**nhs.uk/smokefree**

### **Smokeline (Scotland)**

**0800 84 84 84** (Monday to Friday, 8am to 10pm, Saturday and Sunday, 9am to 5pm).

**canstopsmoking.com**

### **Stop Smoking Wales**

**0800 085 2219** (Monday to Thursday, 8am to 8pm, Friday, 8am to 5pm, Saturday, 9am to 4pm).

**stopsmokingwales.com**

### **Want2stop (Northern Ireland)**

**want2stop.info**

## **Keep to a healthy weight**

Being overweight increases the risk of many types of cancer, including cancers of the bowel, kidney, womb and gullet (oesophagus).

Women who are overweight and have been through the menopause also have a higher risk of breast cancer.

Keeping to a healthy body weight reduces your risk of cancer and other health problems, such as heart disease and diabetes.

Here are some tips to help you keep to a healthy weight:

- Eat a healthy diet with lots of fruit and vegetables, and less fat and less sugar.
- Only eat as much food as you need according to how active you are.
- Be more physically active.

If you are worried about your weight or need more information, talk to your GP or a dietitian.

## Eat a healthy diet

There is no single food that causes or prevents cancer. Eating a balanced diet is good for your overall health and helps reduce your risk of some cancers. It can also help you keep to a healthy weight.

For most people, a daily balanced diet includes:

- lots of fruit and vegetables
- starchy foods (carbohydrates), such as bread, rice, pasta, noodles, couscous and potatoes
- some protein-rich foods, such as meat, poultry, fish, nuts, eggs and pulses (beans and lentils)
- some milk and dairy foods, such as cheese, yoghurt and cream
- a small amount of food high in fat, salt and sugar.

Drinks should mainly be water, tea and coffee (without sugar), or sugar-free drinks.

Eating plenty of high-fibre foods helps reduce the risk of bowel cancer. High-fibre foods include:

- wholegrain bread
- brown rice
- oats
- beans
- peas
- lentils
- grains
- seeds
- fruit and vegetables.

Potatoes with their skins on are also a good source of fibre.

Try to limit how much red and processed meat you eat. These are linked to a higher risk of bowel cancer. Red meat is beef, pork, lamb and veal. Processed meats include sausages, bacon, salami, tinned meats, and packet meats like sandwich ham.

You can find more detailed information about diet and cancer risk on the World Cancer Research Fund website ([wcrf-uk.org](http://wcrf-uk.org)).



**'I eat lots of fruit and vegetables. I try to have 5 a day, and starchy foods like wholegrain bread.'**

**Robin**

## **Be physically active**

Many studies have found that regular physical activity can reduce the risk of cancer. You should try to do at least 30 minutes of activity every day. Your cancer risk is reduced further if you are active for more than 30 minutes a day and if you exercise harder (vigorous activity).

You do not have to go to the gym to be active. Some people enjoy regular walking, cycling or swimming instead. During your regular activity, you should feel you are breathing faster but are still able to talk. Your pulse should be slightly faster than normal. You can increase the amount of activity you do as you get used to exercising.

If you are not used to doing exercise, ask your GP for advice about getting started. You can find more information about keeping active on these websites:

- England – **[nhs.uk](https://www.nhs.uk)**
- Scotland – **[nhsinform.scot](https://www.nhsinform.scot)**
- Wales – **[nhsdirect.wales.nhs.uk](https://www.nhsdirect.wales.nhs.uk)**
- Northern Ireland – **[nidirect.gov.uk](https://www.nidirect.gov.uk)**

## Limit how much alcohol you drink

Drinking alcohol increases your risk of mouth and throat cancers. It is also linked to the following cancers:

- oesophageal (gullet) cancer
- bowel cancer
- liver cancer
- breast cancer.

In general, the more you drink, the higher your risk. Your risk is even higher if you also smoke.

The current guidelines say that if you drink alcohol:

- do not regularly drink more than 14 units of alcohol in a week
- spread the amount you drink in a week over three or more days
- try to have several alcohol-free days every week.

Remember, the number of units you are drinking depends on the size and strength of your drink:

- Half a pint of lower-strength (3 to 4%) beer, lager or cider contains 1 unit.
- Half a pint of higher-strength (5%) beer, lager or cider contains 1½ units.
- A standard glass of wine (175ml), often called a small glass in pubs and bars, contains around 2 units.
- A large glass of wine (250ml) contains 3 units.
- A single measure (25ml) of 40% spirits contains 1 unit.

You can find more information about alcohol and drinking guidelines at **[drinkaware.co.uk](http://drinkaware.co.uk)**

# Know the signs of ovarian cancer

Ovarian cancer can be treated more successfully if it is found early. It is important to know the signs and symptoms of ovarian cancer.

Your GP should offer cancer tests if you have any of these symptoms for no reason, or you get these symptoms regularly (especially if it is more than 12 times a month):

- A long-lasting bloated or swollen tummy.
- Feeling full quickly when you eat, or loss of appetite.
- Pain in the lower tummy or back.
- Peeing (passing urine) more often than usual or more urgently (feeling like you cannot hold on).

Other symptoms may include the following:

- A change in your normal bowel habit (diarrhoea or constipation).
- Weight gain or weight loss.
- Unexplained or extreme tiredness (fatigue).
- Vaginal bleeding after the menopause.

If you are aged 50 or older and develop symptoms of irritable bowel syndrome (IBS) for the first time, you should also have tests. IBS can cause bloating and changes in bowel habit, but it does not usually start after 50.

Most women with these symptoms do not have ovarian cancer, but it is important to get them checked.

'If you are worried about any ache or pain, see your GP. It may be nothing, but it's always good to get it checked rather than live with the worry.'

**Christine**

# Screening for ovarian cancer

In the UK, screening tests are offered for some types of cancer. The aim is to:

- find cancer early, when treatment will be most successful
- prevent cancer developing.

Currently, screening is not offered for ovarian cancer in the UK. This is because current screening tests cannot find ovarian cancer early enough to make it more treatable.

Researchers are still trying to find the most effective way to screen for ovarian cancer. Some women are offered screening as part of a research trial. Your doctor can explain if this is available and the possible risks and benefits of taking part in a research trial.

## When cancer runs in families

Most gene mutations that lead to cancer happen during a person's lifetime are caused by lifestyle and environmental factors. These types of mutation build up with age. This is why most types of cancer are more common in older people.

But it is also possible for a gene mutation to run through a family passing from parent to child. This is called an inherited mutation.

Some inherited mutations make a person more likely to develop certain types of cancer. They may make cancer more likely at a younger age. Having a gene mutation like this does not mean you have cancer. Instead, it means you have a higher risk of developing some types of cancer.

It is important to remember that cancer is very common and most of us have relatives who have had cancer. This does not always mean there is an inherited gene mutation in your family, or that you have a higher risk of cancer.

Less than 5 in 100 cases of cancer (5%) are linked to an inherited gene mutation.

# Understanding your family history

Families affected by an inherited gene mutation linked to ovarian cancer may have a pattern of cancers in the family. These are examples of patterns:

- A number of family members have been diagnosed with ovarian cancer or related cancers, such as breast cancer.
- The family members are closely related.
- The family members were diagnosed at a younger age.
- You have a family history of certain cancers and you are from an Eastern European or Ashkenazi Jewish (Eastern European Jewish) background. Some gene mutations linked to ovarian cancer are more common in these ethnic groups.

# If you are worried about cancer in your family

If you are worried about the pattern of cancer in your family, talk to your GP. They may be able to reassure you, or they can refer you to a genetics specialist.

If you meet a genetics specialist, they will talk to you about your family's history of cancer. They will explain if you are likely to have a higher risk of cancer because of the pattern of cancer in your family.

If they think you may carry an inherited gene mutation, you may be offered a blood test to check. This is called **genetic testing**. You might have this test if:

- you are diagnosed with a cancer that is likely to be linked to an inherited mutation
- a close blood relative (such as a parent, brother or sister) has already had a test that found an inherited mutation.

If you have an inherited mutation, or your family history shows you have a higher risk of cancer, you may be offered:

- treatments to reduce the risk
- extra cancer screening.

We have more information for people with an inherited risk of cancer (see page 25).

# Further information and support

We provide expert, up-to-date information about cancer. And all our information is free for everyone.

## If you are still worried

Most people worry about their health at some point in their lives.

For some, thinking about their risk of a health condition such as cancer helps them make positive lifestyle changes.

Sometimes, health worries are more complicated.

If you have more questions, or you cannot stop worrying about your health, it can help to talk to someone:

- Your GP may be able to help or give you information about counselling services in your area.
- Call our cancer support specialists on **0808 808 00 00** (Monday to Friday, 9am to 8pm).

## Order our information

We have a wide range of cancer information available to order for free at [be.macmillan.org.uk](https://be.macmillan.org.uk). You can also order our information by calling us on **0808 808 00 00**.

### Deaf or hard of hearing?

Use NGT (Text Relay) on **18001 0808 808 00 00**

### Non-English speaker?

Interpreters are available. Alternatively, visit [macmillan.org.uk](https://macmillan.org.uk)

All of our information is also available at [macmillan.org.uk/information-and-support](https://macmillan.org.uk/information-and-support)

## Related resources

We have more information about cancer risk and cancer genetics in the following resources:

- **Cancer genetics: how cancer sometimes runs in families**
- **Are you worried about cancer?**
- **Are you worried about bowel cancer?**
- **Are you worried about breast cancer?**





# Other useful organisations

There are lots of other organisations that can give you information or support.

## Ovarian cancer support organisations

### **Ovacome**

**Helpline** 0800 008 7054  
(Mon to Fri, 10am to 5pm)

**Email** support@  
ovacome.org.uk

**www.ovacome.org.uk**

A national support group for everyone affected by ovarian cancer, including patients, families, friends, carers and health professionals.

### **Ovarian Cancer Action**

**Tel** 0207 380 1730

**Email** info@  
ovarian.org.uk

**www.ovarian.org.uk**

Raises awareness of ovarian cancer and funds research into ovarian cancer. Offers a helpline for women who are concerned they have symptoms that might be caused by ovarian cancer.

### **Target Ovarian Cancer**

**Helpline** 0207 923 5475

**Email** support@target  
ovariancancer.org.uk

**www.target  
ovarian.org.uk**

Dedicated to improving the survival and quality of life for women with ovarian cancer.

## **General health information**

### **Health and Social Care in Northern Ireland**

**[www.hscni.net](http://www.hscni.net)**

Provides information about health and social care services in Northern Ireland.

### **NHS.UK**

**[www.nhs.uk](http://www.nhs.uk)**

The UK's biggest health information website. Has service information for England.

### **NHS Direct Wales**

**[www.nhsdirect.wales.nhs.uk](http://www.nhsdirect.wales.nhs.uk)**

NHS health information site for Wales.

### **NHS Inform**

**Helpline 0800 22 44 88**

(Mon to Fri, 8am to 10pm, Sat and Sun, 9am to 5pm)

**[www.nhsinform.scot](http://www.nhsinform.scot)**

NHS health information site for Scotland.

## Disclaimer

We make every effort to ensure that the information we provide is accurate and up to date but it should not be relied upon as a substitute for specialist professional advice tailored to your situation. So far as is permitted by law, Macmillan does not accept liability in relation to the use of any information contained in this publication, or third-party information or websites included or referred to in it. Some photos are of models.

## Thanks

This booklet has been written, revised and edited by Macmillan Cancer Support's Cancer Information Development team. It has been approved by our Senior Medical Editor, Dr Marc Tischkowitz, Reader and Honorary Consultant Physician in Medical Genetics.

With thanks to: Lisa Jeffers, Genetic Counsellor; and Dr Tracie Miles, Gynaecology Oncology Nurse Specialist.

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We welcome feedback on our information. If you have any, please contact **[cancerinformationteam@macmillan.org.uk](mailto:cancerinformationteam@macmillan.org.uk)**

## Sources

If you would like information about the sources we use, please contact us at **[cancerinformationteam@macmillan.org.uk](mailto:cancerinformationteam@macmillan.org.uk)**

People worry about cancer for many different reasons. Perhaps you have a family member or friend who has been diagnosed. Or maybe you have symptoms you think might be cancer.

This leaflet explains what we know about the main causes of ovarian cancer. It also explains what you can do to reduce your risk of developing cancer.

If you have more questions or would like to talk to someone, call the Macmillan Support Line free on **0808 808 00 00**, Monday to Friday, 9am to 8pm, or visit **macmillan.org.uk**

Would you prefer to speak to us in another language? Interpreters are available. Please tell us in English the language you would like to use. Are you deaf or hard of hearing? Call us using NGT (Text Relay) on **18001 0808 808 00 00**, or use the NGT Lite app.

Need information in different languages or formats? We produce information in audio, eBooks, easy read, Braille, large print and translations. To order these, visit **macmillan.org.uk/otherformats** or call our support line.

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