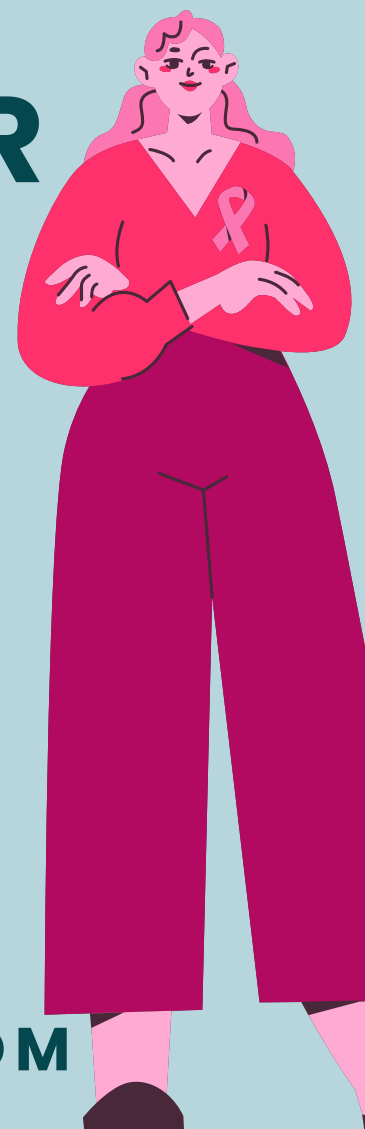




WELCOME

UNDERSTANDING CERVICAL CANCER

IF YOU OR SOMEONE YOU KNOW HAS QUESTIONS ABOUT CERVICAL CANCER, HPV, CERVICAL SCREENING OR CELL CHANGES, THIS INFORMATION BOOKLET WE HOPE WILL HELP.



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The Story Behind Ambers Legacy	Page 3
The cervix	Page 4
Human papillomavirus (HPV)	Page 6
About the HPV vaccine	Page 13
Having the HPV vaccine in school	Page 14
Having the HPV vaccine privately	Page 17
Cervical screening (smear test)	Page 18
What happens at cervical screening?	Page 20
HPV primary screening	Page 22
Cervical screening results	Page 24
About colposcopy	Page 25
What happens at a colposcopy	Page 27
Cervical Cancer	Page 30
What are the symptoms of cervical cancer	Page 32
Tests for cervical cancer	Page 35

CONTENTS

The story behind

Amber's Legacy

THEN, NOW, FOREVER



Amber Rose Cliff tragically passed away on January 8th, 2017, as a result of cervical cancer which spread to her lungs and throat after a four-year battle.

Amber had repeatedly asked her GP for a smear and this request was denied many times for several reasons, the main one being that at 22 she wasn't old enough, as the policy in England states women and people with a cervix must be 24 years and six months before receiving their first invitation.

Amber then went private and was diagnosed with stage 2 cancer and underwent gruelling chemotherapy, radiotherapy and many surgical operations during this time.

Ambers Legacy's main focus is on educating people about the causes of cervical cancer and emphasizing the importance of vaccination and routine screenings.

Knowledge and early detection play a crucial role in preventing cervical cancer.

We aim to empower those affected by cervical cancer. Educate and motivate individuals to raise awareness, end stigma, and influence decisions related to cervical cancer.

Ambers Legacy is a nonprofit organization that supports women with, or at risk of, cervical cancer and HPV disease.

THE CERVIX

The cervix is inside the body as a part of the female reproductive system. It joins the top of the vagina to the lower part of the womb

WHO HAS A CERVIX

Women are usually born with a cervix.

You may have a cervix if you are:

- a trans man and/or non-binary person who was assigned female at birth
- a man who has a difference in sex development (DSD) or is intersex.

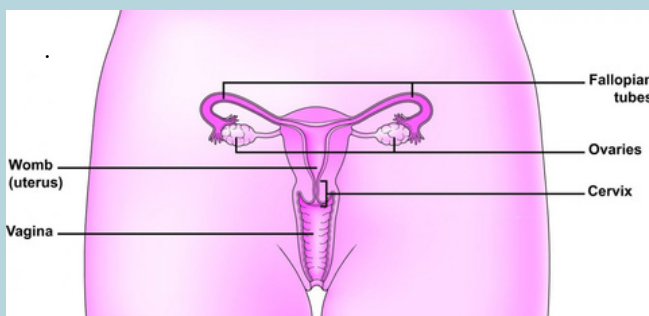
In rare cases, women with DSD or who are intersex may be born without a cervix. If you have had surgery, such as a hysterectomy, you may have had your cervix removed.

If you are not sure whether you have a cervix, it is best to speak with your GP.

Where is the cervix?

The cervix is part of the female reproductive system. The female reproductive system is made up of the:

- vagina
- womb (uterus)
- cervix
- ovaries
- fallopian tubes.

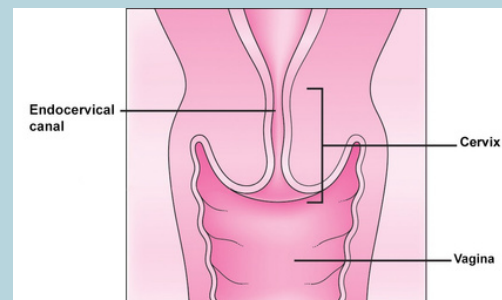


What is the structure of the cervix?

The cervix is a small round organ, with an opening called the os.

The cervix forms a canal, which joins the top of the vagina to the lower part of the womb. This is called the endocervical canal.

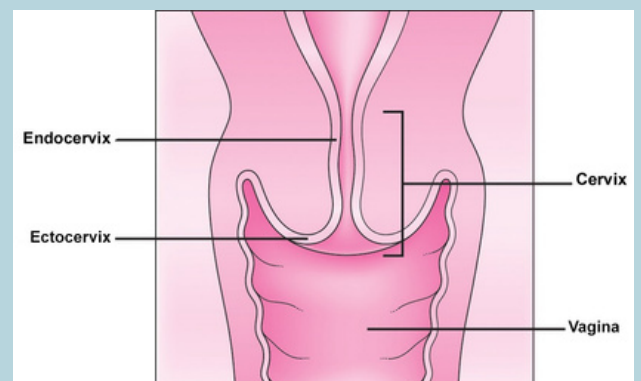
The cervix



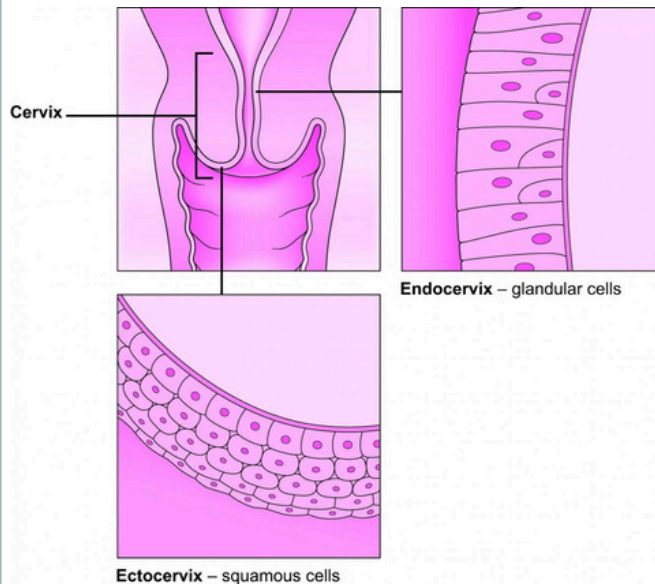
The cervix is divided into the:

- ectocervix – the outer surface of the cervix.
- endocervix – the inside of the cervix.

Ectocervix and endocervix



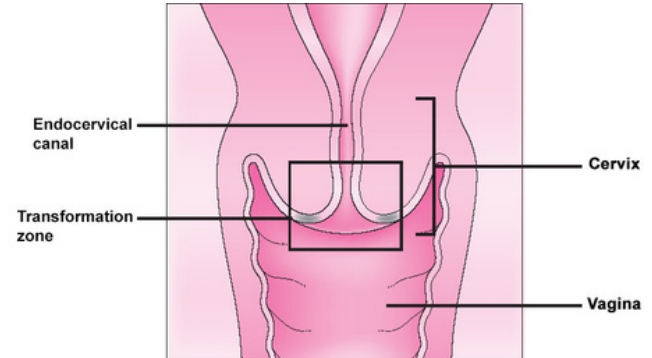
TYPES OF CELLS



The types of cells that form the cervix are:

- squamous cells – flat, thin cells that look like skin and cover the outer surface of the cervix
- glandular cells – cells shaped like columns that make a fluid called mucus and cover the inside of the cervix.

TRANSFORMATION ZONE



The transformation zone is the area where glandular cells and squamous cells meet. It is found around the opening of the cervix.

The transformation zone is where the nurse or doctor will take a sample of cervical cells from during cervical screening (a smear test).

What does the cervix do?

The cervix has an important role in the female reproductive system.

Menstrual cycle (periods)

If you have a regular period, the lining of the womb sheds as blood each month. The cervix opens to allow the blood to flow out of the vagina. This is an important part of the menstrual cycle because, if the cervix didn't open, blood would build up in the womb.

Protecting against infection

Glandular cells in the cervix make a fluid called mucus. The mucus is usually clear or white and there may be more of it at different times in the menstrual cycle. It is sometimes called cervical discharge. This mucus keeps the cervix, womb, ovaries and fallopian tubes healthy by helping protect them from bacteria that could cause infection.

Pregnancy and giving birth

During a part of the menstrual cycle called ovulation, the mucus made by the cervix becomes thinner. This allows sperm to travel up the fallopian tube to fertilise an egg. During pregnancy, the cervix closes to help protect and keep the baby inside the womb until it is ready to be born. Without this barrier, the baby could be born before it is ready (prematurely) or lost (miscarriage). When the baby is ready to be born, the cervix stretches and softens to allow the baby to move from the womb to the vagina.

HUMAN PAPILLOMAVI RUS (HPV)

Understand what HPV is and how it is linked to cell changes and cervical cancer.

WHAT IS HPV?

Human papillomavirus (HPV) is the name of a common virus. It infects the skin and any moist membrane (mucosa). This includes the:

- cervix
- vagina
- vulva (the skin of the lips surrounding the vagina and the clitoris)
- anus or 'back passage'
- lining of your mouth and throat.

Most people will get HPV at some point in their lives, and it usually goes away without causing any problems.

IS IT EASY TO GET HPV?

Because HPV lives on our skin, it is easy to get and difficult to completely protect against. HPV is passed on through sexual contact. This makes some people feel worried or embarrassed. 8 in 10 of us get HPV at some point in our lives. In most cases, our immune system gets rid of HPV within 2 years without it causing any problems.

TYPES OF HPV

We know of over 200 types of HPV. Each type has a number and different types affect different parts of the body.

Some HPV types can be split into 2 groups depending on whether they are linked to a risk of cancer. These groups are called:

- low-risk HPV
- high-risk HPV

Most of the HPV types that can be split like this are in the low-risk group. Low-risk HPV types may not cause any problems. Sometimes they might lead to conditions like warts on your hands and feet, and genital warts.

Certain cancers are linked to infection with high-risk types of HPV that do not go away. This is called 'persistent infection'.

It is important to remember that if you have HPV, including high-risk types, your body usually gets rid of it without it causing any issues. Having HPV does not mean you will get cancer.

GENITAL HPV



About 40 HPV types affect the genital area and the skin around it. This includes the:

- vagina
- vulva
- cervix
- anus or 'back passage'
- penis
- scrotum (the skin that covers the testicles)
- perineal skin (the area between the anus and the scrotum or vulva)

HPV AND CANCER

About 14 HPV types are linked to cancer. They are called high-risk HPV.

Having high-risk HPV does not mean you will get cancer. In most people, HPV will go away without causing any problems. However, we understand that thinking about cancer can be upsetting.



HPV SYMPTOMS

HPV itself has no symptoms, so many people may have HPV without knowing it.

This can be worrying. But it might be helpful to remember that HPV usually goes away without causing any problems. In 9 in 10 cases, HPV is cleared within 2 years.

In the UK, cervical screening (previously called a 'smear test') looks for high-risk HPV first. This is called HPV primary screening.

HPV TREATMENT

There is no treatment for HPV itself. But there are treatments for conditions caused by HPV.

These conditions include genital warts, cervical cell changes and cancer.

How people get HPV

Try to have safe sex

Barrier protection such as condoms and dental dams help lower your risk of getting HPV. However, they do not completely protect against it. This is because HPV lives on the skin in and around the whole genital area. Condoms and dental dams only cover some of your genitals.

How do I get rid of HPV?

There is no treatment for HPV. But your immune system will usually get rid of it without it causing any problems. In 9 in 10 people, this happens within 2 years.

If you have HIV, it might be hard for your body to get rid of HPV. This means you will be invited to cervical screening once a year.

Who did I get HPV from?

You can have HPV for a long time without knowing about it. This means it is difficult to know when you got HPV or who you got it from.

HPV in long-term relationships

Having HPV does not mean that your partner has been unfaithful. Your immune system usually gets rid of HPV. But the virus can sometimes stay in your body without causing any problems or being detected with a test. This is called 'dormant' or 'clinically insignificant' HPV.

Sometimes dormant HPV can become active again. We don't know exactly why this happens yet, but it might be affected by changes in your immune system.

Active HPV may cause cervical cells to change. HPV that becomes active again can be found with a test. Because HPV can stay dormant in your body without being detected, it is possible that you got it many years – even decades – ago but never knew you had it.



Testing for HPV

IS THERE A TEST FOR HPV?

Yes. HPV tests are done as part of the NHS Cervical Screening Programme for women and people with a cervix that are between 25–64 years old. They are:

- HPV primary screening
- test of cure.

HPV primary screening happens at the start of the programme. Test of cure is done if someone has had treatment for cell changes.

HPV primary screening

In all four UK countries, HPV primary screening is used at cervical screening (previously called a 'smear test'). This means that cells from your cervix are tested for high-risk HPV first. If high-risk HPV is found, the same cells are looked at under a microscope to see if they have changed.

In the past, HPV testing was done as a 'triage' in cervical screening. This meant your cervical cells were looked at with a microscope first. If your cells showed changes, they were then tested for high-risk HPV.

HPV primary screening is a more effective test than HPV triage. It helps us find who is at higher risk of developing cell changes or cervical cancer earlier.

Test of cure

In the UK, an HPV test is also used to show that treatment for cervical cell changes has been successful. This is called 'test of cure'. It's usually done 6 months after treatment.

If test of cure shows you don't have high-risk HPV, you'll be invited back for cervical screening every 3 years.

If high-risk HPV is found, you'll be invited to colposcopy again.

"When I realised how common HPV was, my guilt did subside. There wasn't much else I could have done to protect myself from HPV — the vaccine wasn't available when I was at school. It was just that my body didn't clear the HPV."

Laura, a service user and Jo's volunteer



HPV and genital warts

What are genital warts?

Genital warts are small growths or bumps on the skin. They are caused by human papillomavirus (HPV). Genital warts are common and can be treated.

They may appear as:

- single warts
- little groups of several warts, which look like a small cauliflower
- the same or different colour to nearby skin.

Men, women and people with a cervix can get genital warts. They affect the skin of the:

- area around the genitals
- vagina
- vulva (the lips surrounding the vagina and the clitoris)
- cervix
- anus or 'back passage' – includes around the opening and inside
- penis – includes outside and inside the urethra (where wee comes out)
- scrotum (the skin covering the testicles).

Genital warts should not cause pain or serious problems. But they can be unpleasant and may upset or worry some people. They can sometimes bleed or feel itchy. They might also be uncomfortable during sex. Warts in the urethra can change the normal flow of wee (for example, it begins to flow sideways).

How do people get genital warts?

Genital warts are caused by HPV. HPV is a common virus. About 8 in 10 people get it at some point in their lives. It is passed on through skin-to-skin contact, including:

- vaginal sex
- anal sex
- oral sex
- touching in the genital area.

You can also get it through:

- sharing sex toys.

The HPV types that cause genital warts are called low-risk HPV. Low-risk means they are not thought to be linked to cancer.

I think I have genital warts. What should I do?

It is important to visit your GP or local sexual health clinic. These can be called genitourinary medicine (GUM) clinics, or sexual and reproductive health (SRH) services. They will be able to tell you if you have genital warts and treat them.

Treating genital warts

Genital warts are usually treated in two different ways:

Creams and liquids

A cream or liquid can be used directly on warts to help get rid of them. This is called 'topical' treatment. It can be given to you to put onto the warts yourself. Sometimes a doctor or nurse may need to apply it.

Topical treatments destroy the wart cells or help your immune system to recognise and attack the warts. Topical treatments are normally used for softer warts.

Removing the warts

Warts can be destroyed or removed by:

- freezing them (cryotherapy)
- surgery.

These treatments are sometimes called 'ablative methods'. They are done by a doctor or a nurse. You may need the treatment more than once to get rid of genital warts completely.

Pregnancy and genital warts

If you are pregnant and have had genital warts before, it is important to tell your midwife. During pregnancy, warts may get bigger or there may be more of them. Any warts can be treated safely. Your doctor or midwife will discuss which options are best with you.

There is a risk of passing on genital warts during a vaginal birth, but this is rare. If the infection is passed on, the warts usually appear on the baby's skin.

It is possible for some babies who have warts in their throat to get something called 'recurrent respiratory papillomatosis', which can make breathing difficult. However, this is very rare and can be treated. Your doctor or midwife can give you more information.

Most people who are pregnant and have genital warts will give birth safely by vaginal delivery. Very rarely, large genital warts may appear on the cervix or block the birth canal. If this happens, your doctor might suggest a C-section (caesarean delivery).

HPV and cervical cancer

WHAT IS HPV?

HPV is a common virus. It is spread by skin-to-skin contact. There are more than 200 types of HPV and about 8 in 10 people will get HPV during their lifetime.

Around 40 types of HPV affect the anus (back passage) and genitals. 14 of these are known as high-risk HPV. This is because they are linked to some cancers.

Nearly all cervical cancer (99.7%) is thought to be caused by high-risk HPV. Over 7 in 10 of these are caused by high-risk types 16 and 18.

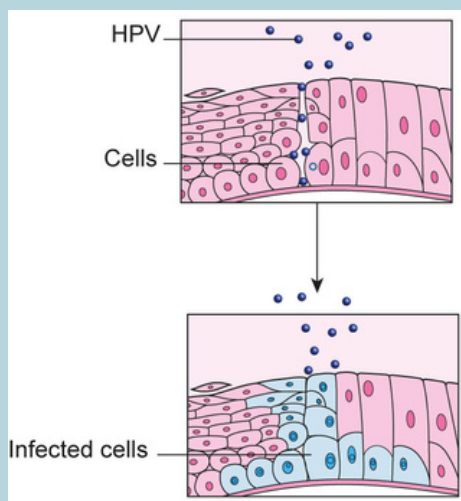
Will everyone with high-risk HPV get cervical cancer?

No, having high-risk HPV does not mean you will get cervical cancer.

During our lives, 8 in 10 of us will get some type of HPV. It usually goes away without any problems. Most of us will never know we had it. Around 9 in 10 HPV infections clear within 2 years.

For a small number of women and people with a cervix, HPV will remain in their body. This is called a 'persistent HPV infection' and it can lead to cell changes in the cervix.

WHAT HAPPENS IF YOU GET HIGH-RISK HPV?



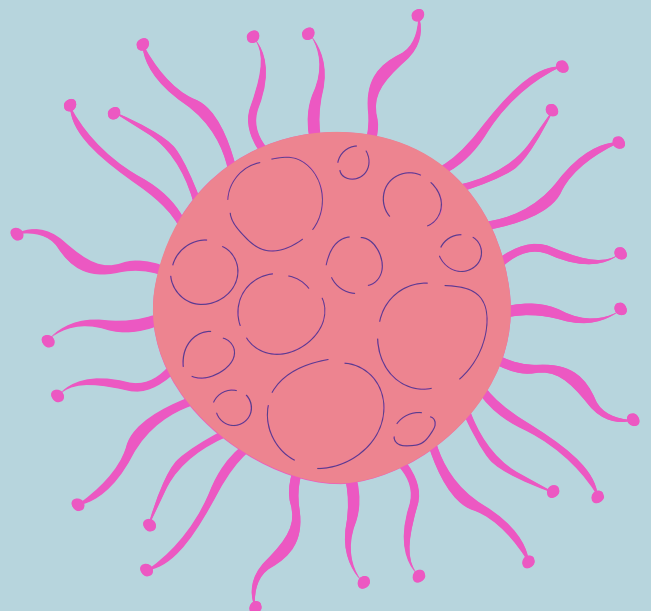
You get high-risk HPV through skin-to-skin sexual contact, or by sharing sex toys

High-risk HPV infects epithelial cells in your cervix.

These are the cells that are taken at cervical screening (previously called a 'smear test') and sent to a laboratory.

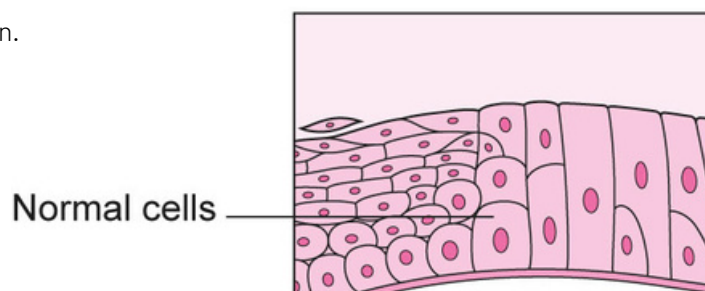
Epithelial cells are always making copies of themselves. High-risk HPV might cause epithelial cells to change (become abnormal), so they don't look like normal cells. When these changed cells copy themselves, the new cells won't look normal either.

In the UK, your cervical epithelial cells that are taken at cervical screening are tested for high-risk HPV first. If high-risk HPV is found, your cells are then looked at under a microscope to see if they have changed



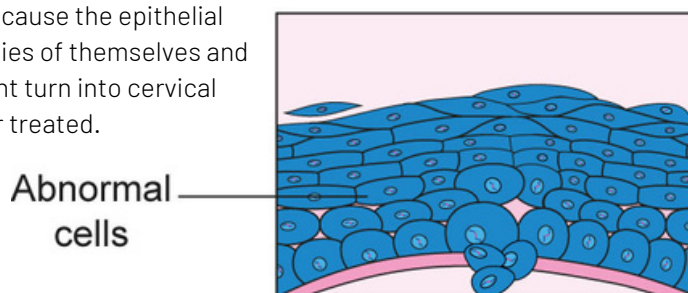
WHAT HAPPENS WHEN HPV IS CLEARED FROM YOUR BODY? (9 IN 10 PEOPLE)

Your immune system fights the HPV infection. It is usually gone within 2 years.



WHAT HAPPENS WHEN HPV IS NOT CLEARED FROM YOUR BODY? (1 IN 10 PEOPLE)

Your immune system cannot get rid of the HPV. This is called a persistent HPV infection. The HPV may then cause the epithelial cells to change. Changed cells can make copies of themselves and the new cells will also be different. They might turn into cervical cancer over time if they are not monitored or treated.



Going for cervical screening means HPV and cell changes can be found early, so most changed cells will not turn into cervical cancer.

WHY CAN'T EVERYONE GET RID OF HPV?

We don't know exactly why. Scientists think it might be to do with the type of high-risk HPV that someone has. It might be affected by your immune system — some people's bodies find it easier to fight HPV than others. They also think some lifestyle habits, like smoking, can make it hard for your body to clear HPV. It is important to remember that cervical screening can help find high-risk HPV and cell changes early.

HOW DO I REDUCE THE RISK OF HIGH-RISK HPV TURNING INTO CERVICAL CANCER?

Going for cervical screening when invited is the best way to find cell changes early. They can then be monitored or treated.

Although cervical cancer is rare, it is important to be aware of the symptoms. These include:

- vaginal bleeding that is unusual for you — including after the menopause, after sex, or between regular periods
- changes to vaginal discharge — it may start to smell bad or have blood in it
- pain or discomfort during sex
- unexplained pain in your lower back or between your hip bones (pelvis).

These symptoms can be caused by a lot of things. They do not mean you have cervical cancer. But you know your body best — it is important to contact your GP if you have any of these symptoms or notice anything unusual for you.

About the HPV vaccine

THE HPV VACCINE (JAB OR JAG) PROTECTS AGAINST SOME TYPES OF HUMAN PAPILOMAVIRUS (HPV) THAT CAN CAUSE CANCER AND OTHER CONDITIONS LIKE GENITAL WARTS. IT IS OFFERED FREE IN SCHOOLS AND IS ALSO AVAILABLE PRIVATELY.

Key facts about the HPV vaccine

The HPV vaccine protects against some types of HPV that can cause cancer, including cervical cancer.

The HPV vaccine called Gardasil is offered free in schools. If you are eligible, you may also be able to have it free at your GP surgery.

You can also pay to have the HPV vaccine.

Cervical screening is an important test even if you have had the HPV vaccine.

What is HPV?

HPV is a common virus that most people will have at some point in their life. There are over 200 types that can be split into low risk and high risk.

Low-risk HPV either causes no problems or conditions that are not serious, such as genital warts. High-risk HPV is linked to about 0.5 in 10 (5%) of all cancers, including almost all cervical cancers.

This may sound worrying, but it's important to remember that 9 in 10 (90%) people will get rid of any type of HPV within 2 years.

Which HPV vaccines are available?

There are 3 HPV vaccines used in the UK.

Gardasil
Gardasil 9
Cervarix

How does the HPV vaccine work?

The HPV vaccine contains individual viral-like proteins that copy (imitate) different types of HPV.

These are not a live HPV virus, but still produce an immune response (antibodies) when injected into the body. This means that, if you were to get these types of HPV in future, these antibodies would bind to the virus and stop it infecting cells

What does the HPV vaccine protect against?

The HPV vaccine called Gardasil is used in schools. It protects against HPV types:

16 and 18 – high-risk types that are linked to 7 in 10 (70%) cervical cancers

6 and 11 – low-risk types that are linked to 9 in 10 (90%) cases of genital warts.

How effective is the HPV vaccine?

The HPV vaccine is effective at protecting against some types of HPV, reducing cervical cell changes (abnormal cells), and reducing some cancers including cervical cancer.

Does the HPV vaccine prevent cervical cell changes?

A study in Scotland found diagnoses of cervical cell changes decreased by 89% in people who have had the HPV vaccine. This includes the cell changes called CIN1, CIN2 and CIN3. This research looked at girls and women aged 15 to 26.

Another study in England found that, for women who had the vaccine in their teens, there were about 17,200 fewer diagnoses of high-grade cervical cell changes (CIN3) in their 20s.

Does the HPV vaccine prevent cervical cancer?

We still need more, long-term research to fully understand the impact of the HPV vaccine on cervical cancer. However, a study in England has looked at the first HPV vaccine called Cervarix, which was used between 2008 and 2012. It protects against 2 types of HPV that, together, are thought to cause around 7 in 10 (70%) cervical cancers.

The study found that women who were vaccinated in their teens have had about 450 fewer diagnoses of cervical cancer. This means the incidence of cervical cancer has decreased by 87% in women in their 20s.

Cross-protection with other HPV types

Research suggests that the HPV vaccine provides cross-protection against other types of HPV. Cross-protection means it protects against more HPV types than the ones included in the vaccine.

How long does the HPV vaccine last?

Research has proven that the HPV vaccine lasts for at least 11 years. We have only been able to measure this far because, in the UK, the HPV vaccine started to be offered in 2008. It is expected that the protection will last even longer and there is research happening to find this out.

That research will help us understand whether people need to have extra doses (boosters) of the HPV vaccine in future.

Having the HPV vaccine in school

The HPV vaccine is offered to girls and boys aged 11 to 13 as part of the NHS vaccination programme. It is given as an injection (jab or jag) into the upper arm.

The information on this page is for young people and their parents and guardians. It may be useful to use this to start a conversation about the HPV vaccine and ask any questions you have. We have another page about having the HPV vaccine privately as an adult.

Key facts about the HPV vaccine in schools

The HPV vaccines offered free in schools are Gardasil and Gardasil 9.

The HPV vaccine is offered to girls and boys between age 11 and 13.

Gardasil protects against HPV types 16, 18, 6 and 11 which are linked to some cancers and other conditions like genital warts.

Gardasil 9 also protects against HPV types 31, 33, 45, 52 and 58.

You have the vaccine as an injection (jab or jag) in your upper arm.

WHICH HPV VACCINE IS OFFERED IN SCHOOL?

There are two vaccines used in schools in the UK at the moment:

- Gardasil
- Gardasil 9

Gardasil 9 is a new vaccine and will soon be used across the whole of the UK. In England it is being used from the 2022-23 school year. It protects against HPV types:

- 16 and 18 – high-risk types that are thought to be linked to about 7 in 10 (70%) cervical cancers
- 31, 33, 45, 52 and 58 – high risk types that are thought to be linked to around 2 in 10 (20%) of cervical cancers
- 6 and 11 – low-risk types that are thought to be linked to about 9 in 10 (90%) cases of genital warts.

To minimise wastage, Gardasil may still be used until stocks have run out. Gardasil protects against high risk HPV 16 and 18 and low risk HPV 6 and 11.

As Gardasil 9 is rolled out some children who have had Gardasil for their first dose may be offered Gardasil 9 for their second dose. The two vaccines are considered interchangeable.

Who can have the HPV vaccine in school?

The HPV vaccine is offered free to girls and boys in schools.

It has been offered to girls since September 2008. It has been offered to both girls and boys since September 2019. This is because the evidence shows that the HPV vaccine helps protect both girls and boys from HPV-related conditions and cancers.

What age is the HPV vaccine offered in school?

In schools, the HPV vaccine is offered to:

girls and boys aged 11 to 12 in Scotland

girls and boys aged 12 to 13 in England, Wales and Northern Ireland.

This is usually school year 8 in England and Wales, S1 in Scotland, and school year 9 in Northern Ireland.

How many doses of the HPV vaccine will I have?

A dose is a measured amount of something – in this case, the HPV vaccine. The number of HPV vaccine doses you have depends on your age.

The HPV vaccine works best before you are exposed to HPV. As you get older, your response to the vaccine is not as good, so you have more doses to make sure it works as well as possible.

In England, Northern Ireland and Wales

You should have 2 doses in total. You will be able to have your second dose after 6 months. Normally you will complete your doses within 24 months of the first dose.

In Scotland

Most people be offered 2 doses in total. The first dose is offered to all pupils in S1 at secondary school. The second dose is usually offered in S2. You will be able to have your second dose after 6 months. Normally you will complete your doses within 24 months of the first dose.

IF YOU STARTED A THREE DOSE COURSE OF THE HPV VACCINE WHEN YOU WERE AGE 15 OR OVER, YOU MAY STILL BE OFFERED 3 DOSES IN TOTAL. YOU'LL BE OFFERED THESE DOSES WITHIN 6 MONTHS OF EACH OTHER.

You usually have:

the second dose at least 1 month after the first dose
the third dose at least 3 months after the second dose.

Who shouldn't have the HPV vaccine?

Most people will be able to have the HPV vaccine. You should not have the HPV vaccine if:

you had a severe allergic reaction to a previous dose of the HPV vaccine
you had a severe allergic reaction to any ingredient of the vaccine
you are pregnant.

If you feel unwell or have a high temperature on the day you are having the HPV vaccine, you should have it on another day instead. This is to avoid confusing the illness with any side effects of the vaccine.

If you are unsure about whether you or a child should have the HPV vaccine, it is best to speak with the school nurse, or a nurse or doctor at your GP surgery.



What happens if I miss the HPV vaccine in school?

If you miss the vaccination day, talk to your school. They may be able to invite you to the next vaccination day.

If you are no longer able to have the HPV vaccine in school, you can have it free at your GP surgery up to age 25 in England, Scotland and Wales.

This applies to:

girls who were in year 8 (England and Wales), S1 (Scotland), or year 9 (Northern Ireland) in September 2008.

boys who were in year 8 (England and Wales), S1 (Scotland), or year 9 (Northern Ireland) in September 2019.

You can contact your GP surgery directly about having the HPV vaccine.

Paying for the HPV vaccine

If you are not eligible to have the HPV vaccine for free, you can pay to have it privately.

The HPV vaccine and coronavirus (COVID-19)

COVID-19 has meant many schools have been closed for different amounts of time. This means the school vaccination programme, which the HPV vaccine is part of, has been disrupted. You may not have been offered the HPV vaccine yet or only had the first dose.

The UK government's Joint Committee on Vaccination and Immunisation have said that the priority is for every eligible girl and boy to have the first dose of the HPV vaccine.

Having the HPV vaccine privately

IF YOU ARE NOT ELIGIBLE TO HAVE THE HPV VACCINE FOR FREE, YOU MAY CHOOSE TO PAY FOR IT.

THE INFORMATION ON THIS PAGE IS FOR ADULTS WHO ARE DECIDING WHETHER TO HAVE THE HPV VACCINE.

Key facts about having the HPV vaccine privately

You can pay to have the HPV vaccine at some high street pharmacies, travel clinics and, sometimes, your GP surgery.

Most clinics only offer the HPV vaccine up to and including age 45.

You will need 2 or 3 doses of the HPV vaccine at age 15 or over.

Each dose of the HPV vaccine costs about £160 to £180.

Where can I get the HPV vaccine privately?

You can usually get the HPV vaccine in:

pharmacies
travel clinics
other health centres.

You may also be able to pay for the HPV vaccine at your GP surgery.

How much does the HPV vaccine cost?

Each dose of the HPV vaccine usually costs between £160 and £180. From 1 April 2022, if you are over 15 years old you are recommended to have 2 doses 6 - 24 months apart. If you have HIV, are on antiretroviral therapy, or are immunocompromised you will need to have 3 doses within 6 months.

Some GP surgeries ask you to pay an extra administration fee, so ask for the full cost before you book an appointment.

Is there an age limit for having the HPV vaccine?

Most clinics only offer the HPV vaccine to people up to and including age 45. This is because the vaccine license has been approved in the UK based on research showing it has benefit in people up to this age.

You can check whether there is an age limit before you book an appointment.

Can adults have the HPV vaccine for free?

If you are under the age of 25 and were offered the HPV vaccine in school, you may be able to have it for free.

Some other people may be able to have the HPV vaccine for free, including:

men who have sex with men – usually up to and including age 45
women and men with HIV
sex workers
transgender people.

This is because the risk of having high-risk HPV that may develop into cell changes or cancer is usually higher for these people.

These free HPV vaccines may be given in sexual health centres, HIV services, or another healthcare setting. If you think you are eligible for a free HPV vaccine, you can speak to your nurse or doctor about it.

Cervical screening (smear test)

ABOUT CERVICAL SCREENING

Cervical screening is a free health test that helps prevent cervical cancer. It checks for a virus called high-risk human papillomavirus (HPV) and, if you have HPV, cervical cell changes (abnormal cells).

What is cervical screening?

Cervical screening is a free health test available on the NHS as part of the national cervical screening programme. It helps prevent cervical cancer by checking for a virus called high-risk HPV and cervical cell changes. It is not a test for cancer.

It is your choice whether to go for cervical screening. We hope this information helps you make the best decision for you and your health.

If you have symptoms, contact your GP surgery about having an examination. Cervical screening is not for people who have symptoms.

Who is invited for cervical screening?

You should be invited for cervical screening if you have a cervix. Women are usually born with a cervix. Trans men, non-binary and intersex people may also have one.

In the UK, you are automatically invited for cervical screening if you are:

between the ages of 25 to 64
registered as female with a GP surgery.

You may get your first invite up to 6 months before you turn 25. You can book an appointment as soon as you get the invite.

How often will I be invited for cervical screening?

Your cervical screening result will help decide when you are next invited for cervical screening.

You may be invited:
every year
every 3 years
every 5 years
straight to colposcopy for more tests.

Cervical screening invites and coronavirus

Across the UK, cervical screening invites are being sent. If you had your test cancelled because of coronavirus, you are now able to book an appointment.

What are the benefits and risks of cervical screening?

You are invited for cervical screening because evidence shows that the benefits of the test outweigh any risks. Along with the HPV vaccine, cervical screening is the best way to protect against cervical cancer and prevents over 7 in 10 diagnoses. However, like any screening test, cervical screening is not perfect and there are some risks.

Benefits of cervical screening

Cervical screening aims to identify whether you are at higher risk of developing cervical cell changes or cervical cancer. This means you can get any care or treatment you need early. England, Scotland and Wales now use HPV primary screening, which is even better as it is based on your individual risk.

This means how frequently you are invited for cervical screening is based on your last result and within a timeframe that is safe for you.

Possible risks of cervical screening

In a few cases, cervical screening will give an incorrect result.

This means it may say someone does not have HPV or cell changes when they do (a false negative). Going for cervical screening when invited can help reduce this risk, as it is likely HPV or cell changes that were missed would be picked up by the next test.

It also means a result may say someone does have HPV or cell changes when they don't (a false positive), which could mean they are invited for tests or treatment they don't need.

Sometimes cell changes go back to normal without needing treatment. At the moment, we can't tell which cell changes will go back to normal, so treating means we can be sure we are preventing them from developing into cervical cancer.

This means some people may have unnecessary treatment, which is called overdiagnosis or overtreatment. Using HPV primary screening should help prevent this.

It is hard to know exactly how many people are affected by these risks. But we do know, for those aged 25 to 64, the benefits of cervical screening outweigh the risks and most results will be clear.

Opting out of cervical screening

If you decide not have cervical screening, ask your GP to be taken off their invite list. If you change your mind, you can ask your GP to add you back to the list at any time.



What happens at cervical screening?

AT YOUR CERVICAL SCREENING (SMEAR TEST) APPOINTMENT, A NURSE TAKES A SAMPLE OF CELLS FROM YOUR CERVIX USING A SMALL, SOFT BRUSH. THE TEST ONLY TAKES A FEW MINUTES.

IF YOU FEEL WORRIED ABOUT GOING FOR CERVICAL SCREENING, YOU ARE NOT ALONE. IT MAY HELP TO KNOW AS MUCH AS POSSIBLE ABOUT WHAT GOING FOR CERVICAL SCREENING IS LIKE. YOU COULD ASK SOMEONE YOU TRUST ABOUT THEIR EXPERIENCE OR SPEAK WITH YOUR NURSE OR DOCTOR.

Booking your cervical screening appointment

If you are registered with a GP, you will get a letter telling you it is time for your cervical screening appointment. You have to contact your GP to book an appointment. You can usually do this online or over the phone.

In some areas, sexual health clinics offer cervical screening. You may choose to contact your local clinic if you aren't able to access, or don't feel comfortable at, your GP surgery.

Appointment times

Many GP surgeries offer cervical screening appointments on set days or at set times. If you can't attend any of the available appointments, speak to your GP surgery to see if they can be flexible for you.

Things to think about before booking

Write down any questions you want to ask, such as what safety measures they have in place or if your GP surgery any specific instructions for you.

It is best not to book a cervical screening when you have your period because it can make it harder to get a result. You should try not to use spermicide or oil-based lubricant (lube) for 24 hours before the test, as they can affect the results.

What happens at the GP surgery?

Plan to spend at least 30 minutes at your GP surgery, which may include waiting for your appointment or being directed to the room. The test itself, where your nurse takes a sample of cells from your cervix, will only take a few minutes.

Arriving at your GP surgery

Your GP surgery will give you details about what to do once you arrive.

Your cervical screening appointment

A nurse, sometimes called a sample taker, will invite you into a treatment room. They will explain what cervical screening is and check if you have any questions.

Personal protective equipment (PPE)

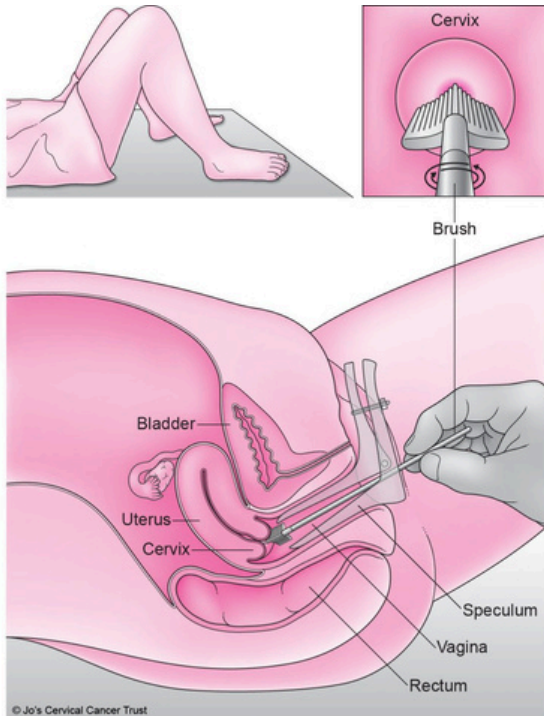
Your GP surgery will follow local guidance about wearing PPE. If your nurse is wearing PPE, this may include a mask, gloves and apron.

Your cervical screening test

Your nurse will give you a private space to undress from the waist down, usually behind a curtain. If you are wearing a dress or skirt, you can leave this on and just take off your underwear.

SOMEONE HAVING CERVICAL SCREENING

Your nurse will ask you to lie on an examination bed and give you a new, clean paper sheet to cover the lower half of your body. You can lie:



on your back with your legs bent up, your ankles together and your knees apart

on your left side with your knees bent.

Your nurse will let you know when the test is about to start. First, they gently put a new, clean speculum into your vagina. A speculum is usually a plastic cylinder with a round end – sometimes a metal speculum is used. The speculum is the part that some people find uncomfortable.

Once the speculum is inside your vagina, the nurse will gently open it so they can see your cervix.

Then the nurse will use a small, soft brush to quickly take a sample of cells from your cervix. This may feel a bit strange, but should not be painful.

The nurse will put your sample of cells into a small plastic container (vial) of liquid. The liquid preserves the cells so they can be sent to a lab for testing.

And that's it! The nurse will take the speculum out of your vagina and give you a private space to dress again. They will explain how and when you should get your results.

A SPECULUM AND BRUSH



After your cervical screening appointment

Most people can continue their day as usual after the appointment.

You may have some light bleeding (spotting) for a day after the test, so it can help to wear a sanitary pad or panty-liner.

Your cervical screening results should arrive by post within 4 weeks.

HPV primary screening

HPV primary screening is a way of testing the sample of cells taken at your cervical screening (smear test) appointment. It tests for a virus called high-risk human papillomavirus (HPV) that can cause cervical cell changes to develop into cervical cancer.

Where is HPV primary screening used?

HPV primary screening is used in England, Scotland and Wales. In the future, it will be used in Northern Ireland but the start date is to be confirmed.

What is HPV primary screening?

HPV primary screening is a way of testing the sample of cells taken during cervical screening. A lab tests your sample for a virus called high-risk HPV. High-risk HPV can cause cervical cell changes to develop into cervical cancer over time. If you have high-risk HPV, that same sample will be tested for cell changes.

The next steps are based on your result and tailored to your individual risk. You may:

- be invited back for cervical screening in 1 year
- be invited back for cervical screening in 3 years
- be invited back for cervical screening in 5 years
- be invited for further tests at colposcopy.

[Read about cervical screening results >](#)

What happens if I do not have HPV?

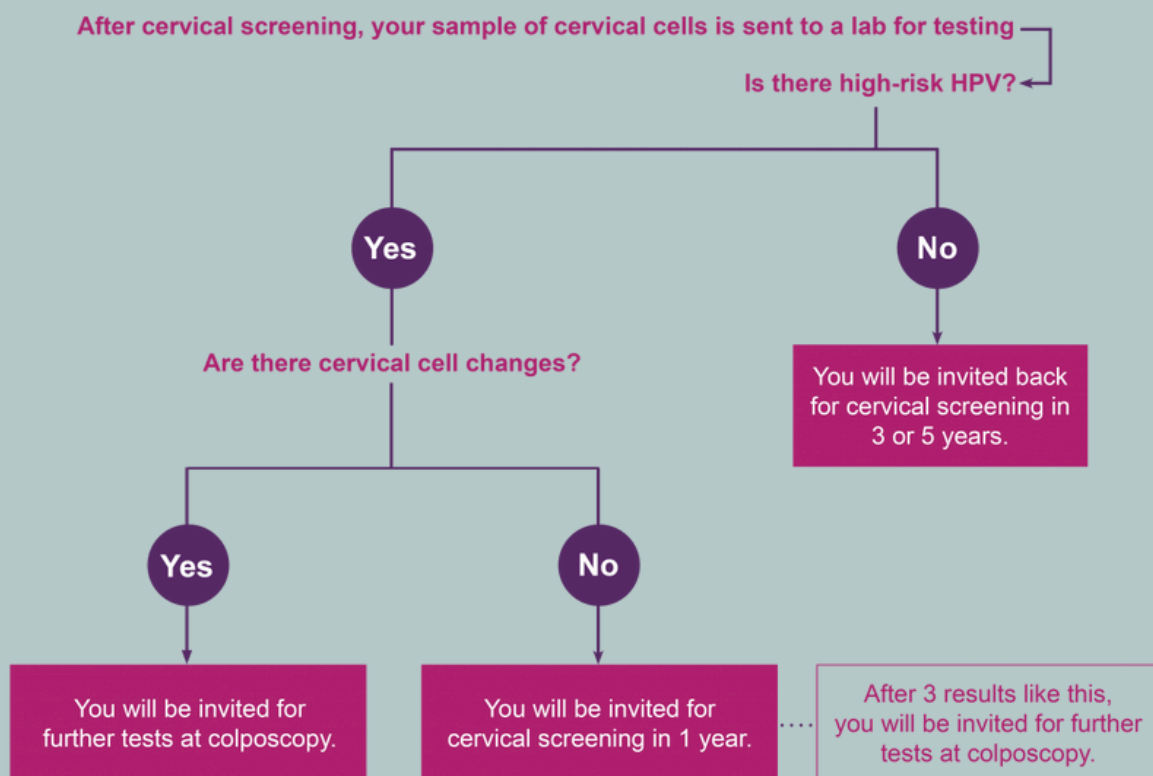
If you do not have high-risk HPV, your sample will not be looked at for cell changes. It is very unlikely you will develop cell changes or cervical cancer without having high-risk HPV.

You will be invited for cervical screening in 3 or 5 years, depending on your age and where in the UK you live.

What happens if I have HPV?

If high-risk HPV is found, your sample will be looked at for cell changes. If there are no cell changes, you will be invited back for cervical screening in 1 year. This is to make sure the HPV has cleared.

If high-risk HPV and cell changes are found, you will be invited for further tests at colposcopy. Not all cell changes develop into cervical cancer, but it is important that they are monitored and treated if needed.



What are the benefits and risks of HPV primary screening?

The National Screening Committee, which oversees all screening programmes in the UK, recommended the move to HPV primary screening because evidence shows it is a better test:

HPV primary screening is the best way to find out who is at higher risk of developing cervical cell changes or cervical cancer. Almost all cervical cancers are linked to high-risk HPV. By knowing who has high-risk HPV, we can make sure that we monitor the virus and find any cell changes early, before they potentially develop into cervical cancer.

HPV primary screening is a more accurate test than cytology. This means it is better at detecting cell changes overall, as well as detecting them earlier.

HPV primary screening could be done with a self-sample kit in the future. This would mean you could take a swab from your vagina, in the privacy of your home. There is ongoing research to find out whether self-sampling could be offered as part of the NHS national screening programme.

All tests have some risks:

Like all screening tests, HPV primary screening isn't completely accurate. There is a small chance that your result could be wrong.

What is cytology?

Cytology is now only used in Northern Ireland. It is the study of individual cells in the body. In cervical screening, this means that the cells taken during your appointment are looked at under a microscope for changes.

No cell changes

If you do not have cell changes, your risk of developing cervical cancer is low. You will be invited back for cervical screening in 3 or 5 years, depending on your age.

Borderline or low-grade cell changes

If you have borderline or low-grade cell changes, the same sample is tested for high-risk HPV. This is called HPV triage.

If you also have high-risk HPV, you will be invited for more tests at colposcopy.

High-grade cell changes

If you have high-grade cell changes, you will be invited for more tests at colposcopy.

Cervical screening results

You should get your cervical screening (smear test) results by post within 4 weeks after your test. Most results will be clear.

WHAT DO MY CERVICAL SCREENING RESULTS MEAN?

England, Scotland and Wales use a test called HPV primary screening during cervical screening. Northern Ireland currently uses a test called cytology, but will use HPV primary screening in future.

The results you get will depend on how your sample is tested.

Depending on your result and where you live, you may be asked to:

come back for cervical screening in 1 year
come back for cervical screening in 3 years
come back for cervical screening in 5 years
have some more tests at colposcopy.

NO HPV FOUND

What it means

You don't have high-risk HPV.

Next steps

If you live in England, you will be invited for cervical screening in:

3 years if you are age 25 to 49

5 years if you are age 50 to 64.

If you live in Scotland or Wales, you will be invited for cervical screening in 5 years, whatever your age.

HPV FOUND – NO CELL CHANGES FOUND

What it means

You have high-risk HPV, but you do not have changes to your cervical cells.

Next steps

You will be invited for cervical screening in 1 year, to check the HPV is gone. If you get this result 3 times in a row, you will be invited to colposcopy for more tests

HPV FOUND – CELL CHANGES FOUND

What it means

You have high-risk HPV and cervical cell changes.

Next steps

You will be invited to colposcopy for further tests.

INADEQUATE

What it means

You sometimes get this result if the sample could not be tested properly, does not have enough cells or if the cells cannot be seen properly under a microscope.

Next steps

Repeat cervical screening after 3 months.

CYTOLOGY RESULTS (IF YOU LIVE IN NORTHERN IRELAND)

Cytology is currently used in Northern Ireland.

NORMAL

What it means

You do not have cervical cell changes.

Next steps

You will be invited for cervical screening in 3 or 5 years.

ABNORMAL

What it means

You have cervical cell changes. Your results letter will tell you if the changes are borderline, low grade or high grade.

Next steps

You will only be invited for colposcopy if you have high grade cell changes or low grade cell changes and HPV.

INADEQUATE

What it means

The sample of cells could not be looked at for changes. This sometimes happens if the sample does not have enough cells or if the cells cannot be seen properly.

Next steps

Repeat cervical screening after 3 months.

When will I get my cervical screening results?

You should get your cervical screening results within 4 weeks after your test, but your results may be delayed – this may be because your lab is processing a lot of cervical screening tests. At your appointment, you can ask your nurse how long it will take to get your results and how you will get them.

How will I get my cervical screening results?

You should always get your cervical screening results letter in the post. If you don't get a letter within the timeframe your GP surgery gave you, you may want to ring them.

About colposcopy

What is colposcopy?

Colposcopy is an examination to take a closer look at your cervix. It checks to see if there are cell changes and is done by a specially trained nurse or doctor called a 'colposcopist'.

Colposcopy normally happens in a hospital or local clinic. A colposcopy appointment usually takes 10–20 minutes. It might be longer depending on what happens during your appointment.

Many cell changes go away on their own, but some may turn into cervical cancer. Colposcopy helps find out whether changed cells need to be removed to stop cervical cancer from happening.

What happens during a colposcopy appointment?

At colposcopy, the colposcopist looks at your cervix using a special microscope on a stand with a light. This is a 'colposcope'. It stays outside your body.

Your colposcopist will place a speculum into your vagina to see your cervix clearly – just like at cervical screening (previously called a 'smear test'). They will then put some liquids onto your cervix. These liquids help to show areas where cells might have changed.

Taking a biopsy

Your colposcopist may do a tissue test called a 'biopsy'. This is where a sample of tissue is taken from your cervix. The sample is smaller than a grain of rice. It is then looked at in a laboratory to see if there are cell changes.

Some people find a biopsy uncomfortable, but it shouldn't be painful. You're in control and if it hurts, you can ask your colposcopist to stop. It's possible to have the area numbed before a biopsy. If this would make you feel more comfortable, contact your hospital or clinic before your appointment.

Treatment

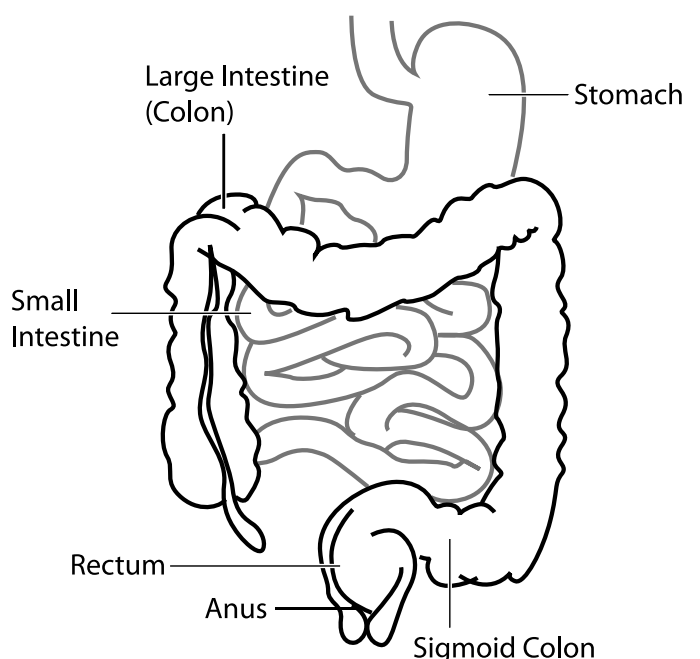
Sometimes, cell changes can be seen during your appointment. You might be offered treatment to remove the changed cells and for it to happen on the same day as your colposcopy. You may be invited for another appointment on a different day. This decision will be made by you and your colposcopist. Any treatment offered will be explained to you before and only done if you agree to have it.

If treatment is offered to you on the same day as your colposcopy, it's okay to ask for time to think and to ask for it to happen at another appointment.

Why have I been invited to colposcopy?

If this is your first colposcopy appointment
You're usually invited for colposcopy after cervical screening for one of these reasons:

- your cervical screening result shows both high-risk HPV and that there are cell changes
- you don't have cell changes, but you've had 3 cervical screening results in a row that show high-risk HPV
- you've had several cervical screening tests which all gave an unclear result
- the nurse or doctor who did your cervical screening wanted a colposcopist to have a closer look at your cervix for a second opinion.



YOU MAY ALSO BE REFERRED FOR COLPOSCOPY BECAUSE:

you've had unusual bleeding from your vagina that isn't your period (such as bleeding after sex or after menopause)
If this is your second or follow-up colposcopy appointment

YOU COULD BE GOING TO A SECOND OR FOLLOW-UP COLPOSCOPY APPOINTMENT IF:

a biopsy from your cervix was done during your first colposcopy appointment and it shows you need treatment
you've been invited back for a further check-up after your first colposcopy appointment
you have CIN2 cell changes and these are being checked.

WHAT SHOULD I DO BEFORE COLPOSCOPY?

Contact the hospital or clinic when you get your appointment if:

you think you'll be on your period on the day of your appointment – you may still be able to have colposcopy, but sometimes it will need to be rearranged

you're pregnant or think you might be pregnant – it's advised that you still go to colposcopy if you're pregnant, but any biopsies or treatment may happen a few months after you give birth

you would like a doctor or nurse of a particular gender to do the colposcopy – your hospital or clinic will tell you if this can be done

you would like to bring a friend, partner or relative with you to make you feel comfortable – the hospital or clinic will let you know if this is possible

Some hospitals and clinics may advise not to have penetrative vaginal sex or use vaginal medications, creams, lubricants, tampons or menstrual cups for 48 hours before your appointment. If you're unsure about what you can or can't do before colposcopy, it is best to contact the hospital or clinic

You may want to bring a sanitary pad or pantyliner with you. It's common to have some discharge (a liquid that comes out of your body) or light bleeding (spotting) from your vagina after colposcopy.

If you have a specific question about your colposcopy appointment, it's best to ring the hospital or clinic where your appointment is happening. They can talk you through everything you need to know. There will also be time during your appointment for you to ask questions.



What happens at a colposcopy appointment

Colposcopy is an examination to take a closer look at your cervix. It is done by a specially trained nurse or doctor called a 'colposcopist' at a hospital or local clinic. It usually takes between 10–20 minutes. It may be longer depending on what happens during your appointment.

You may feel nervous about going to colposcopy, especially if you're not sure what to expect. Here, we explain each step of the appointment.

If you feel you need support, we're here before and after your appointment. Whether you just want to talk things through or have a specific question, one of our support services may be able to help.

Can I take someone with me?

You may be able to bring a friend, partner or relative with you if it makes you feel comfortable. If you contact the hospital or clinic when you get your appointment, they will let you know if this is possible.

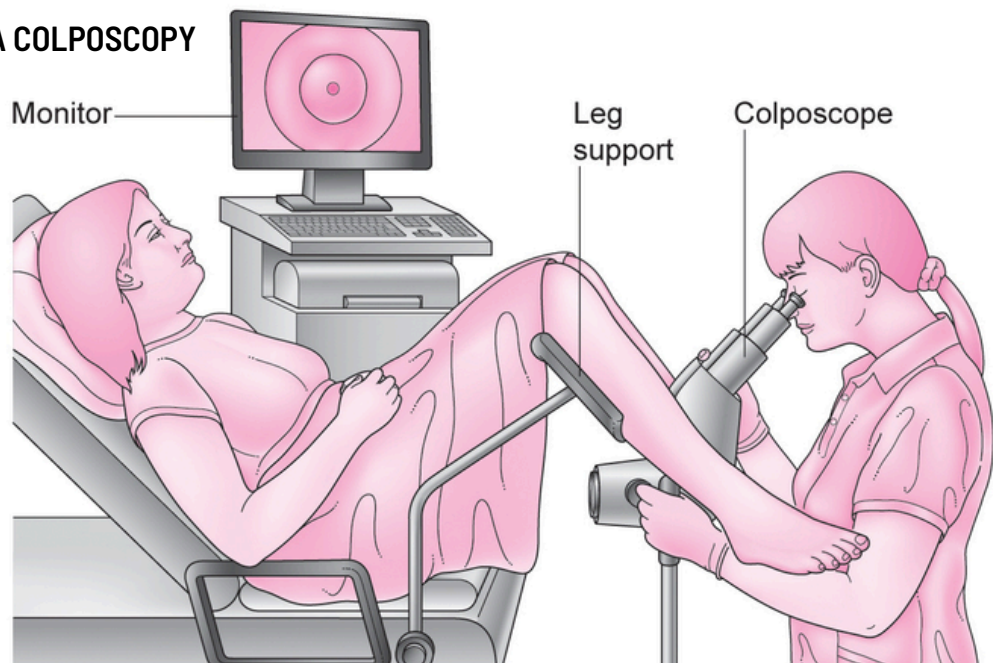
What happens at a colposcopy appointment?

Your colposcopist will invite you into an examination room. They will explain why you've been invited and what will happen. They may also ask some questions about your medical history. This is to help with the examination. You can use this time to ask questions and talk through anything that will make the examination better for you.

There will be a private space for you to undress from the waist down. You'll also be given a paper sheet or towel to cover yourself with. Your colposcopist will ask you to lie on an examination bed. It will have some padded supports for you to put your legs or feet onto. In some clinics, there might be a screen next to the bed in case you want to watch the examination.

When you're ready, your colposcopist will put a new, clean speculum into your vagina. A speculum is a plastic or metal tube which opens. It's used so your colposcopist can have a clear view of your cervix. Your colposcopist will then use a microscope on a stand with a light to have a closer look at your cervix. This is called a 'colposcope'. It stays outside your body.

SOMEONE HAVING A COLPOSCOPY



LIQUID TESTS

Your colposcopist will usually put some liquid on your cervix. This helps to show any areas where there might be cell changes.

They may use a combination of liquids. These are:
Acetic acid (sometimes called dilute vinegar) – your colposcopist will put a small amount on your cervix using a cotton wool ball or with a spray. It can show cell changes by turning them white. You may feel some stinging.

Iodine – your colposcopist might put a liquid called iodine solution on your cervix. It stains normal cervical tissue dark brown. Cell changes may not stain, so the colposcopist can see them. This is sometimes called 'Schiller's iodine test'.

TAKING A BIOPSY

Your colposcopist may take a sample of tissue from your cervix. This sample is smaller than a grain of rice and is called a 'punch biopsy'. Sometimes it's just called a 'biopsy'.

If you need a biopsy, your colposcopist will explain this to you before you have one. Some people find it uncomfortable, but it shouldn't be painful. Remember, you're in control and if it hurts you can ask your colposcopist to stop.

If you're nervous about having a biopsy, it's sometimes possible to have the area numbed (local anaesthetic). It may also be possible to be asleep (general anaesthetic). If this would make you feel more comfortable, it's best to contact your hospital or clinic before your appointment. They will talk through the options with you.

Your colposcopist might take more than one biopsy. This is to make sure they have enough tissue from different areas of your cervix. They then send the tissue to a laboratory for testing.

If you have treatment at your first colposcopy appointment. Sometimes, your colposcopist can see that cell changes need treatment during your first colposcopy appointment. This is called 'see and treat'.

Any treatment will be explained to you before it happens. Treatment is only given if you agree to have it. It's okay to ask as many questions as you need to before. It's also okay to ask for time to think about the treatment and to ask to have it done at another appointment.

The most common treatment is called large loop excision of the transformation zone (LLETZ). This removes a small area of the cervix where the cell changes are. It's usually done with a local anaesthetic which numbs just the area being treated.

At the end of your colposcopy appointment

After the examination, your colposcopist will check you feel okay and whether you have any questions. They will also give you information about what to expect after your appointment. This should include contact numbers for the hospital or clinic, in case you have any questions afterwards.

Sometimes, your colposcopist can tell you if they found anything straight away. But they might need to wait to see what your biopsy shows in a laboratory. They can let you know when to expect your results.

After your colposcopy appointment

You can leave the hospital or clinic as soon as you feel ready. After colposcopy, you can go to work or do any other activities as usual. But you may prefer to rest, particularly if you had treatment during your appointment. It's important you listen to your body and do what feels right for you.

How you might feel after colposcopy

Afterwards, you may have:
cramps, like period pains
light bleeding (spotting)
discharge (a liquid that comes out of your body) from your vagina that is brown or has blood in it.
Some of us may find these effects worrying. It might help to know that they're common after colposcopy. You can have them even if you didn't have a biopsy. They usually stop after a few days.

How you might feel after treatment

You may have effects after treatment to remove cell changes. These can be scary if you aren't sure what to expect.

After treatment to remove cell changes, it's common to have:
cramps, like period pains
bleeding or discharge that is brown or has blood in it – the flow is usually like a moderate period
These effects will stop for most people after 4 weeks. During this time after treatment, it's best not to:
have vaginal sex
use tampons or menstrual cups
go swimming
have baths – it is okay to shower
put water or other liquids inside your vagina (vaginal douching)
use vaginal medications, lubricants or creams.
If you get a bad-smelling discharge or very heavy bleeding (soaking a sanitary pad in 1–2 hours), it's important to contact the hospital or clinic where you had treatment

Colposcopy results

Your colposcopy results tell you what the colposcopist saw during your colposcopy appointment, and your laboratory results if you had tissue removed (biopsy) from your cervix.

When will I get my colposcopy results?

Sometimes, your colposcopist will tell you what they have found straight away during your colposcopy appointment. You might also have a biopsy, which is looked at in a laboratory. This means it may take around 4–8 weeks to get your results. You'll get them in the post. If you don't get your results within this time, it's best to call the hospital or clinic where you had your colposcopy appointment.

Rarely, colposcopy results may show cervical cancer. If this happens, you should be referred to a team of specialists within two weeks.

What do my colposcopy results mean?

Your colposcopy results are different to the ones you got for cervical screening (previously known as a 'smear test'). This can be confusing. If you have any questions, your colposcopist or GP will be able to explain what your results mean. We also have information here which might be helpful.

Normal result

About 4 in 10 colposcopy results are normal. This means no cell changes (abnormal cells) were found in your cervix.

You can have a normal colposcopy result even if you had an abnormal cervical screening result. This is because cervical screening looks to see if there are cell changes. But it doesn't tell us everything about those cells. Colposcopy is a more detailed look at your cervix and shows if cell changes need to be monitored or treated. This is why the results can be different.

If you have a normal result, you don't need treatment and are at low risk of developing cervical cancer. You'll be advised to continue going to cervical screening when invited. This is in case cell changes appear in the future. How often you're invited will depend on your age and where you live.

Abnormal result

About 6 in 10 colposcopy results are abnormal. This means the tests done during colposcopy or biopsy have found there are cell changes in your cervix. Abnormal results may tell you that you have the following:

cervical intraepithelial neoplasia (CIN)

cervical glandular intraepithelial neoplasia (CGIN)

stratified mucin producing intraepithelial lesion of the cervix (SMILE).

We understand that some words in your results might be confusing or scary. We have more information about them here:

Rarely, a colposcopy result will show cervical cancer. If this happens, you'll be referred to a team of specialists to discuss treatment.

Other words you might see in your results

'Koilocytosis' or 'koilocytotic atypia' – these words describe how cells look when they have HPV present

'Dyskaryosis' – this name is given to small changes that can be seen in cells.

Cervical cancer

Cervical cancer starts in the cells in the cervix. The cervix joins the top of the vagina to the lower part of the womb.

Cells are the tiny parts that make up your body. Your body makes new cells to replace old ones when they are hurt or die. This happens in a controlled way – for example, if you cut your hand, your body sends a message that new skin cells should be made to heal the cut. If cells change and grow in an uncontrolled way, they can form a lump. This is sometimes called a tumour.

Cervical cancer can develop on the outer surface of the cervix and inside the cervix in the cervical canal. Most cervical cancers develop where these parts of the cervix meet – an area called the transformation zone.

RISKS AND CAUSES OF CERVICAL CANCER

The main cause of cervical cancer is a virus called high-risk human papillomavirus (HPV). High-risk HPV sometimes causes changes in the cells of the cervix, which can develop into cervical cancer. On average this happens slowly, between about 5 and 20 years.

Knowing about risks can be helpful, as it can help you understand more about what you can and can't control. But it is important to remember that having any or all of the risks we talk about on this page does not mean you will definitely develop cervical cancer.



LIFETIME RISK OF CERVICAL CANCER

Your exact lifetime risk of cervical cancer will depend on your individual life and situation.

In the UK, less than 1 in 100 (less than 1%) women and people with a cervix will develop cervical cancer in their lifetime. That means that more than 99 in 100 (more than 99%) women and people with a cervix will not develop cervical cancer. This takes into account advances in healthcare, including cervical screening (smear tests) and treatment for cervical cell changes (abnormal cells).

Research predicts that someone who did not have the HPV vaccine and never went to cervical screening would have a lifetime risk of about 2 in 100 (about 2%).

High-risk HPV and cervical cancer

Cervical cancer is usually caused by a virus called high-risk HPV.

What is high-risk HPV?

There are over 200 types of HPV that can be broadly split into:

low-risk types – may cause either harmless conditions, such as warts, or no problems that we know about.

high-risk types – may cause cancer to develop.

14 HPV types are considered high-risk. High-risk HPV is linked to almost all (99.7%) cervical cancers.

HPV is common – about 8 in 10 (80%) people will have it at some point in their lives. But cervical cancer itself is not common, which means that having high-risk HPV does not mean you will definitely develop cervical cancer.

The risks for getting high-risk HPV and for developing cervical cancer are similar. Most researchers believe that the risks can be considered the same, as high-risk HPV causes almost all cervical cancers.

Cervical cancers that are not caused by HPV

Fewer than 1 in 10 (0.3%) cervical cancers cannot be linked to high-risk HPV. You may hear these called HPV-negative cervical cancers.

We need more research to understand why some cervical cancers are not linked to high-risk HPV.

Risks that are not related to high-risk HPV

Research states that having high-risk HPV alone is not enough for cervical cancer to develop – there are usually other risks working in combination with high-risk HPV. We talk through these risks in this section.

Having an increased risk does not mean you will definitely develop cervical cancer. But they can be helpful to know, because you may decide to take action to lower your risk.

Smoking

Weakened immune system

Taking the oral contraceptive pill ('the pill')

Diethylstilbestrol (DES)

Risks that are related to high-risk HPV

There are some things that mean you have a greater chance of getting high-risk HPV and, as a result, have an increased risk of developing cervical cancer. This is sometimes called an indirect risk.

The risks we talk through in this section aren't yet fully understood by experts. But the current research suggests they are probably linked to high-risk HPV.

Age

Sex

Pregnancy and childbirth

Family history and cervical cancer

Ways to lower your risk of cervical cancer

Although the average lifetime risk of cervical cancer is already low, there are things you can do that may lower it even more.

Cervical screening (a smear test)

The HPV vaccine

Try to stop smoking

Have safer sex

WHAT ARE THE SYMPTOMS OF CERVICAL CANCER?

Cervical cancer may not cause any symptoms or the symptoms may not be obvious. The most common symptoms of cervical cancer include:

vaginal bleeding that is unusual for you, including after the menopause, after sex, or between regular periods
changes to vaginal discharge
pain or discomfort during sex
unexplained pain in your lower back or between your hip bones (pelvis).

It is important to remember that these symptoms usually happen for reasons other than cervical cancer. But it is also important to contact your GP straight away, so they can give you reassurance and support.

Vaginal bleeding that is unusual for you

If you have regular periods, unusual vaginal bleeding happens any time outside of your regular period. It may happen:
between periods
during or after sex
after the menopause.

Although this may be worrying, remember there are many different reasons for unusual bleeding that may not be related to cervical cancer. These include hormonal contraception (birth control) and cervical ectropion. Whatever type of unusual vaginal bleeding you have, it is important to contact your GP. They can examine you and make sure everything is okay.

Vaginal bleeding after the menopause (post-menopausal bleeding)

If you are over 45 and haven't had a period for more than a year, you may have gone through the menopause. After the menopause, any bleeding from the vagina needs to be checked by your GP, even if it is light or just happens once.

Changes to vaginal discharge

Vaginal discharge is a fluid (mucus) that cleans and protects the vagina. Most women have it, but it is good to be aware of any changes. Those changes may be:
looking different – for example, becoming much thicker or changing colour
smelling different – particularly if it smells unpleasant.
Vagina discharge can change for lots of reasons that aren't related to cervical cancer, such as an infection or changing hormones.

It is important to tell your GP about any changes so they can put your mind at ease and make sure you get the care you need.

Pain or discomfort during sex

You may find sex painful or uncomfortable. This is sometimes called dyspareunia.

Sex may be painful for lots of reasons, both physical and psychological, that aren't related to cervical cancer. There are things that may help, such as using more lubrication or seeing a counsellor that specialises in sex therapy. But to reassure you and so sex can become more comfortable, it is important to contact your GP and tell them about the pain.

Unexplained pain in your lower back or between your hipbones
Sometimes we feel pain in our lower back or between our hipbones (pelvis) for a reason, like pulling a muscle or having a period.

But it is a good idea to tell your GP about this pain if:
there is no obvious reason for it
it is affecting your day-to-day life
it lasts for 2 to 3 weeks or longer.

What to do if you have symptoms of cervical cancer

All of the symptoms we talk about on this page often happen for a reason other than cervical cancer. But if you have any of these symptoms or are worried about anything else, it is best to contact your GP as soon as possible.

Types of cervical cancer

THERE ARE DIFFERENT TYPES OF CERVICAL CANCER THAT AFFECT DIFFERENT TYPES OF CELLS IN THE CERVIX. THE MOST COMMON TYPES ARE SQUAMOUS CELL CERVICAL CANCER, ADENOCARCINOMA AND ADENOSQUAMOUS CARCINOMA.

YOUR HEALTHCARE TEAM WILL FIND OUT WHAT CERVICAL CANCER TYPE YOU HAVE BY DOING DIFFERENT TESTS.

Squamous cell cervical cancer

Squamous cell cervical cancer is the most common type of cervical cancer. About 7 to 8 in 10 (70% to 80%) cervical cancers are this type.

Squamous cells are thin, flat, skin-like cells that line the surface of the cervix. The cancer often develops where the outer surface of the cervix joins with the cervical canal. This is called the transformation zone.

Adenocarcinoma

Adenocarcinoma is less common than squamous cell cancer. About 2 out of 10 (20%) cervical cancers are adenocarcinomas.

Adenocarcinoma of the cervix starts in the gland cells inside the cervical canal. These cells produce mucus – a sticky fluid. It keeps the cervix, womb, ovaries and fallopian tubes healthy by protecting them from bacteria and infection.

There are gland cells scattered along the lining of the narrow passage that runs from the cervix up into the womb. This passage is called the cervical canal.

The 'adeno' part of adenocarcinoma refers to glands, and 'carcinoma' refers to cancer in the cells that line tissues.

This type of cancer can be more difficult to find through cervical screening because it develops inside the cervical canal.

It's important to be aware of any symptoms, so you can get them checked out.

Adenosquamous carcinoma

About 5 to 6 out of 100 (5 to 6%) cervical cancers are adenosquamous carcinomas.

Adenosquamous carcinoma includes cancer cells from squamous cell cervical cancer and adenocarcinoma – some squamous cells and some gland cells.

Small cell cervical cancer (small cell neuroendocrine carcinoma)

Small cell cervical cancer is rare. About 1 in 100 (1%) cervical cancers are this type.

Small cell cervical cancer develops in cells which form part of the neuroendocrine system – which is made up of nerves and glands which release hormones.

It is also called small cell neuroendocrine carcinoma. 'Neuro' refers to the nerves, and 'endocrine' refers to hormones and the glands that release them. It's called a 'small cell' cancer because the cancer cells look small under a microscope.

OTHER TYPES OF NEUROENDOCRINE CARCINOMAS

Mucinous tumours

Mucinous tumours are rare. They are treated in a similar way to squamous cell cervical cancer and adenocarcinoma.

Your team will check that it is not a tumour of the endometrium (the lining of the womb) which has extended down to the cervix.

Clear cell cervical cancer

Clear cell cervical cancer is rare. It is tested for in a similar way to other cervical cancers.

Clear cell cervical cancer is more common in women and people with a cervix whose mothers had a drug called diethylstilbestrol (DES) when pregnant.

Early stage cell clear cervical cancers are usually treated with a surgery called radical hysterectomy and lymph node dissection. Sometimes chemotherapy together with radiotherapy (chemoradiation) is given as well. This can help to reduce the risk of cervical cancer coming back.

If clear cell cervical cancer spreads outside of the cervix, chemotherapy may be given to control the cancer.

Lymphomas and sarcomas

Other types of cancer can occur in the cervix, including sarcomas and lymphomas. These are less common than the cervical cancer types we have already talked about on this page.

Sarcomas and lymphomas are treated in a different way to other types of cervical cancer.

Tests for cervical cancer

You may be referred for different tests if your healthcare professional – usually your GP – wants to find out the cause of any symptoms or you have had an abnormal cervical screening result.

These tests will be used to find out:

- whether you have cervical cancer
- what type of cervical cancer it is
- the stage of the cancer – how big it is and if it has spread
- the grade of the cancer – what the cells look like and how they might behave
- if treatment for cervical cancer has worked.

The test results will help your healthcare team understand what treatment and support you need.

COLPOSCOPY

Colposcopy is a test to take a close look at your cervix. You might be referred for a colposcopy if:

- you have been for cervical screening and the results showed cell changes (abnormal cells)
- your GP, practice nurse or another healthcare professional noticed changes in your cervix
- you have had symptoms and your doctor wants to find out what is causing them.

You will meet a specialist doctor or nurse called a colposcopist, colposcopy nurse or nurse colposcopist. All of these healthcare professionals have had the same training.

During a colposcopy, they will look at the surface of your cervix. They will use a type of microscope called a colposcope which allows them to see if the cells look healthy. They might also take a small sample of cells and tissue (a biopsy) to be looked at under a microscope.

If you have cervical cell changes, these may be:

- diagnosed and treated at the same appointment – this is sometimes called 'see and treat'
- treated at a separate appointment.

The treatments remove a small area of cells and tissue from your cervix, a bit like a biopsy. Those cells and tissue will be looked at under a microscope to confirm whether it is cervical cell changes or cervical cancer.

If your results show that you have cancer cells, you will need to have further tests that we talk about below.

BIOPSY

A biopsy is where a health professional takes a small sample of cells and tissue from your cervix. This might be done at a colposcopy appointment or a separate appointment.

An expert called a pathologist or histopathologist will look at this sample under a microscope. They can see how the cells look compared to normal healthy cells.

They will be able to see:

- if there are changes in the cells, but they are not cancer
- if there are cancer cells present
- the type of cervical cancer
- the grade of the cancer cells – which means how different they are to normal healthy cells.

There are different types of biopsy:

Punch biopsy

Large loop excision of the transformation zone (LLETZ)

Cone biopsy

SCANS

You will probably have scans if you are diagnosed with cervical cancer at stage 1A1 or higher. These allow your healthcare team to see the size and shape of the cervical cancer, as well as whether it has spread.

Magnetic resonance imaging (MRI) scan

Computerised tomography (CT) scan

PET/CT scan

Chest x-ray

PELVIC EXAMINATION

A pelvic examination will involve your healthcare professional looking and feeling for what is going on in your body. You will probably be offered a pelvic examination if:

you have symptoms of cervical cancer

cervical cancer has been diagnosed and you need further tests.

A pelvic examination is usually done by a trained:

GP or practice nurse – if you are having tests at your GP surgery

gynaecologist – a doctor who specialises in women's health.

They will wear new, clean gloves for the examination. The examination lasts for a few minutes. A pelvic examination involves your healthcare professional:

pressing on your stomach to feel for anything unusual
looking at the outside of your vagina for any changes, such as redness or swelling

feeling the inside of your vagina to check whether your womb or ovaries are tender or swollen

looking at your cervix for any changes by using a speculum to gently open your vagina – they may also take a sample of cells from your cervix.

Your healthcare professional should explain each step before they do it, to make sure you are comfortable and consent to the examination. If you are uncomfortable or want to stop at any time, tell them.

If you have a pelvic examination in hospital, it might be done under general anaesthetic. This means you will be asleep. It allows your healthcare professional to check what is going on without causing you any discomfort. They might check your bladder and bowel at the same time. Your healthcare professional will be able to explain more about this and talk through your options.

BLOOD TESTS

You will have blood tests:

when you are diagnosed with cervical cancer regularly throughout treatment.

Blood tests are used to check on your general health and your blood cell counts, including white and red blood cells.

HYSTEROSCOPY

Hysteroscopy is pronounced his-ter-oss-co-pee. It looks inside your womb (uterus) using a type of narrow telescope with a light and camera at the end. Your healthcare professional will be able to see inside your womb on a screen.

A hysteroscopy may be used:

to investigate symptoms, such as vaginal bleeding that is unusual for you

if you and your healthcare team are considering a type of surgery called a trachelectomy.

How long is the wait for results?

Your healthcare team will know how long your test results will take to come back. You can ask them at the time of the test or call the hospital number to find out.

If you have a colposcopy to look for cervical cancer, you will usually get your results within 4 to 8 weeks. You can ask the healthcare professional who does your colposcopy for a more exact time.

If you have had other tests, your healthcare team will talk about your results at a multidisciplinary (MDT) meeting. These meetings usually happen once a week. After this, they will contact you to talk about the results and next steps.

