

Patient information from the BMJ Group

Gonorrhoea

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Gonorrhoea

Gonorrhoea is an infection that is passed from person to person during sex. It affects both men and women, and can cause serious health problems. But there are good treatments for gonorrhoea. And practising safe sex will protect you from getting it.

We've brought together the best research about gonorrhoea and weighed up the evidence about how to treat it. You can use our information to talk to your doctor and decide which treatments are best for you.

What is gonorrhoea?

Gonorrhoea is an infection you can get when you have sex. It can cause serious health problems if it is not treated. If you are pregnant and don't get treatment, you can pass gonorrhoea to your baby.

Gonorrhoea is an **infection** caused by **bacteria** called *Neisseria gonorrhoeae*. Some people call it 'the clap'.

The bacteria can pass from person to person during sex.^[1]

- In women gonorrhoea usually affects the neck of the womb (the **cervix**) or the tube (the **urethra**) that carries urine from the bladder to the outside, or both.
- In men it most often affects the tube that carries urine from the bladder to the outside (the urethra).
- The infection can be passed on by oral sex and anal sex as well as by vaginal sex. So it can also affect the throat and back passage (**rectum**).
- Touching your eyes after touching infected fluid from your genitals can lead to an eye infection.

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Anyone who has sex can get gonorrhoea.

Newborn babies also can be affected by gonorrhoea.^[1] This is because pregnant women who have the infection can pass it on during childbirth. Their babies may be born with eye infections. This can cause blindness if it's not treated with **antibiotics**.

Sometimes gonorrhoea can spread inside the body. For example, it can spread to the blood or the joints.^[1] In women gonorrhoea can spread to the womb and the **fallopian tubes**. This can lead to infertility. To learn more, see [What will happen to me?](#)

We have looked at treatments for **uncomplicated gonorrhoea**. This is when the infection has not spread from the place where it started, usually the urethra, vagina, or rectum. We've also looked at treatments for gonorrhoea that has spread inside the body. This is called **disseminated gonorrhoea**.

Who gets gonorrhoea?

Anyone who has sex can get gonorrhoea. You are more likely to get it if you:^[3]

- Have had gonorrhoea before
- Have other sexually transmitted infections, such as **chlamydia**
- Have a lot of sexual partners
- Have a new sexual partner, especially if this person has other sexual partners or has had lots of sexual partners in the past
- Don't always use a condom, or don't use condoms properly (to read more, see [Using a condom properly](#))
- Use illegal or recreational drugs, which may affect your judgement and make you less likely to use a condom

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- Are a man who has sex with men.

Gonorrhoea is most common in men and women who are aged 20 to 24.^[4] But teenagers are at high risk too. About 1 in 3 women who get gonorrhoea are under age 20.

If you have gonorrhoea, there is a good chance you could also have chlamydia, which is another infection that you can get through sex. Among people who have gonorrhoea, half of women and a third of men have chlamydia too.^{[5] [6] [7] [8] [9]} To learn more, see our information on [chlamydia](#) .

What are the symptoms of gonorrhoea?

You might have been infected with gonorrhoea without knowing it.

About half of all women who get gonorrhoea have no symptoms.^[10] But men usually get some signs that they have been infected.^[10] If you do get symptoms, they will probably start one to 14 days after you've been infected.^[11]

Here are the most common ones.

If you're a woman you might get:^[10]

- A yellow or greenish discharge from your vagina
- Burning pain when you urinate
- Pain in your lower abdomen
- Bleeding between your periods (this is rare).

If you're a man you might get:^[10]

- A burning pain when you urinate
- A need to urinate often
- Fluid or pus coming out of your penis (often leaving a yellow or yellow-green spot on your underwear)
- Sore testicles
- Redness or soreness at the tip of your penis.

Men and women:^[10]

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- Can get a sore throat if they have gonorrhoea in their throat. But most people don't get any symptoms from a gonorrhoea infection in their throat
- Might have pain, itching, or discharge around their **rectum** if the infection is there. But infections in the rectum don't usually cause symptoms.

If you think you might have gonorrhoea, you should see your doctor or go to your local sexual health clinic. These clinics are also sometimes called sexually transmitted infection (STI) clinics, and genitourinary medicine (GUM) clinics.

The doctor or nurse will examine you. They will also ask questions about your sex life. They are not being personal. They just need this information to give you the best treatment.

They will take samples to test whether you have gonorrhoea. Sometimes these tests can be done on the spot. Sometimes the samples have to be sent to a laboratory. It can take a few days for the results to come back.

The test for gonorrhoea can be done on either a urine sample or a swab sample. A swab is a twist of cotton at the end of a thin stick. The nurse or doctor uses it to take a sample of fluid. The fluid can then be tested for the **bacteria** that cause gonorrhoea.

In women, the sample is usually taken from the neck of the womb (the **cervix**). In men, it is taken from the tube that carries urine down from the bladder (the **urethra**).^[10] Sometimes doctors need to take a swab sample from the throat or rectum.

If you have gonorrhoea, you may also have other infections passed on by having sex. One of these is called **chlamydia**. (To learn more, see our information on [chlamydia](#).) So the doctor or nurse may suggest you have tests for other infections too.

It's very important for your sexual partner or partners to get treatment too. They could have health problems from gonorrhoea, pass it on to other people, or even give it back to you. The clinic can contact partners for you and tell them they need a test. They can do this without telling your partners your name.

It is important that you use a condom during sex until you and your partner or partners have finished treatment for gonorrhoea. If you don't use a condom, you could get infected again.^[10] To read more about using condoms, see [Using a condom properly](#).

You should also use a condom after treatment, unless you are in a monogamous relationship with someone who doesn't have an infection that can be passed on during sex.

How common is gonorrhoea?

Gonorrhoea is very common.

It is the second most frequently diagnosed sexually transmitted infection (STI) after **chlamydia**.

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In 2012, there were 25,525 gonorrhoea infections diagnosed in sexual health clinics, which are also called sexually transmitted infection (STI) clinics, and genitourinary medicine (GUM) clinics.^[12] But the actual number of people with gonorrhoea is higher. This is because some people with gonorrhoea go to their GP for treatment, so they aren't included in this number. Also, many women don't get symptoms. This can mean they don't go for treatment, so they don't get counted.

Gonorrhoea is most common in men and women who are aged 20 to 24.^[4]

What treatments work for gonorrhoea?

If you have gonorrhoea, treatment with antibiotics will get rid of the infection. No other treatment is needed.

- Antibiotics are medicines that kill bacteria. You'll probably need just one tablet to get rid of gonorrhoea. Or you may need an injection.
- But if gonorrhoea has spread to other parts of your body, you may need to take antibiotics for longer.
- Certain antibiotics may affect babies in the womb. If you are pregnant, some types of antibiotics may be safer for your baby than others.
- It's important to make sure that anyone you have had sex with is tested and treated too. Otherwise you could become infected again.
- Guidelines for doctors recommend that you should be tested again for gonorrhoea about three days after treatment, to make sure that the treatment has worked.^[10] It's important that you return for repeat testing if you are asked to do so.

Antibiotics don't usually cause serious side effects.^[16] If you do get any problems from treatment, these will probably be mild. The most common ones include:

- Diarrhoea
- Feeling sick
- Vomiting
- Headache
- Stomach pain
- Dizziness.

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Some people have an **allergic reaction**, which can be dangerous. The first sign of this could be a rash. If you are worried you're having a reaction, you should see your doctor or go back to the clinic that gave you the antibiotics.

Treatment Group 1

Treatments for gonorrhoea

We've looked closely at the research into what treatments work for gonorrhoea. Antibiotics get rid of gonorrhoea for most people. What antibiotics you need and how long you need to take them depends on how far the infection has spread and whether you have any other infections.

Treatments that are likely to work

- [Antibiotics for gonorrhoea that hasn't spread](#)
- [Antibiotics for gonorrhoea that has spread](#)
- [Antibiotics for gonorrhoea if you are pregnant](#)
- [Antibiotics for people with gonorrhoea and chlamydia](#)

What will happen to me?

Gonorrhoea is easy to treat and cure. If it's not treated, gonorrhoea can spread to other parts of the body and cause serious health problems. Without treatment, you can also pass on the infection to your sexual partners. And if you are pregnant, you can pass the infection to your baby.

Women

If gonorrhoea isn't treated, the infection can spread to your **ovaries**, your womb, or the tubes that lead from your ovaries to your womb (your **fallopian tubes**).^[13] When this happens, you have a condition called **pelvic inflammatory disease (PID)**.

About 15 in 100 women who get gonorrhoea get PID.^[13] It can cause pain in the abdomen and sometimes a fever. The symptoms are most likely to happen around the time of your period.^[13]

The biggest problem is that PID can damage your womb and fallopian tubes and make it difficult for you to get pregnant.^[13] And if you do get pregnant, there's a chance that the fertilised egg will start to grow in one of your fallopian tubes instead of in your womb. When this happens, it is called an **ectopic pregnancy**. It is very serious and causes internal bleeding and severe pain. It needs emergency treatment to end the pregnancy. To learn more, read [Pelvic inflammatory disease](#).

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Babies

Babies can get infected with gonorrhoea as they pass through the birth canal.^[14] This can lead to a serious eye infection that sometimes causes blindness if it's not treated. That's why it's important to get treated if you're pregnant and have gonorrhoea. If your baby does get infected, **antibiotics** can clear the infection.

Men

If you don't get treatment for gonorrhoea, the infection can spread to other parts of your reproductive system, such as your testicles and your **prostate**. This can be painful. You can also get scar tissue in your **urethra**, blocking the flow of urine. This can lead to further infections and possible **kidney** damage. But these problems are rare these days, as most men who get gonorrhoea get symptoms and are treated before the infection spreads.^[13]

If gonorrhoea spreads around the body

Gonorrhoea can spread to other parts of your body, such as your bloodstream or joints. When this happens, it's called **disseminated gonorrhoea**.^[13] About 1 in 100 people with gonorrhoea get this serious infection.^[13] Most of them are women who did not get any symptoms when they were first infected. Because they didn't know they had the infection, they didn't get treatment and the infection spread.

You might get painful joints, a rash, and a high temperature if gonorrhoea spreads into your bloodstream. Tests will show whether gonorrhoea is causing these symptoms. You may need to be treated in hospital with antibiotics to clear the infection.

If a newborn baby catches gonorrhoea from their mother, the infection can spread to different parts of the baby's body. Preventing this is one of the reasons why it's very important to get treatment for gonorrhoea if you are pregnant.^[14]

What can I do to stop myself getting gonorrhoea again?

Getting treatment with antibiotics (medicines that kill **bacteria**) cures gonorrhoea. But it doesn't stop people getting infected again.

The best way to protect yourself against gonorrhoea is to prevent the infection being passed between you and your sexual partners.

Here's what doctors advise:^[15]

- Always use condoms during sex and use them correctly
- Have sex with fewer people, or stay with just one partner.

Condoms may not protect you if you don't use them correctly. To read more, see [Using a condom properly](#).

Treatments:

Antibiotics for gonorrhoea that hasn't spread

In this section

Taking just one dose of **antibiotics** will probably get rid of gonorrhoea that has not spread into your body (for example, you only have it in your vagina, your penis, your **rectum** , or your **urethra**). This works for more than 9 in 10 people. Antibiotics get rid of gonorrhoea in the throat for about 8 in 10 people. ^[17]

Many different types of antibiotics can get rid of gonorrhoea. ^[18] But, over time, bacteria can become **resistant** to an antibiotic. ^[19] That means bacteria aren't killed by that particular antibiotic any more. Your doctor will recommend the antibiotic that's most likely to kill the gonorrhoea bacteria you're infected with.

To help prevent antibiotic resistance, doctors in the UK are advised to use an antibiotic called ceftriaxone (brand name Rocephin). It is given as an injection into a muscle. Your doctor may also recommend you take a single capsule of an antibiotic called azithromycin (Zithromax) as well. This is in case you also have an infection called chlamydia. Many people have gonorrhoea and chlamydia at the same time. ^[10] To learn more, see [Antibiotics for people with gonorrhoea and chlamydia](#) .

Other antibiotics sometimes used for gonorrhoea include: ^[10]

- Cefixime (Suprax), given as a single tablet.
- Cefotaxime (Claforan), given as an injection into a muscle or **vein** .

Antibiotics for gonorrhoea if you are pregnant

In this section

If you are pregnant and you have gonorrhoea, it is particularly important to get treatment, as this will protect your baby from **infection** . Antibiotics almost always get rid of the infection.

Some antibiotics may affect babies in the womb, so doctors are careful about which ones they prescribe. Make sure the doctor knows you are pregnant.

For example, doctors do not usually prescribe ciprofloxacin, ofloxacin, or similar antibiotics for pregnant women, even though other people with gonorrhoea may take them. ^[10] There is a chance that these medicines could harm a baby's developing joints, although we could not find any evidence that this has happened. In one study of 200 pregnant women taking ciprofloxacin, ofloxacin, or a related drug called norfloxacin, their babies were unharmed. ^[20] But most doctors want to be on the safe side.

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If you're pregnant you'll probably be given an antibiotic called ceftriaxone (brand name Rocephin). It is given as an injection into a muscle. Your doctor may also recommend you take a single capsule of an antibiotic called azithromycin (Zithromax) as well. This is in case you also have an infection called chlamydia. Many people have gonorrhoea and chlamydia at the same time. ^[10]

One summary of the evidence (a [systematic review](#)) found that ceftriaxone works well to get rid of gonorrhoea in pregnant women. ^[21]

Antibiotics for gonorrhoea that has spread

In this section

If gonorrhoea has spread from where it started (such as in your penis, vagina, rectum, or throat) to other parts of the body, you will need to take antibiotics for a week or possibly longer. Gonorrhoea that has spread is called **disseminated gonorrhoea**.

Doctors use the same types of antibiotics to treat gonorrhoea that has spread and gonorrhoea that has not spread. But they use bigger doses when the infection has spread and you are likely to need several doses. The drugs might be given through a drip (also called an [intravenous infusion](#) or IV). ^[10]

We could not find any recent, good-quality studies showing which treatments work best for disseminated gonorrhoea. But because antibiotics work so well for gonorrhoea that has not spread, it is likely that they also work for gonorrhoea that has spread.

Antibiotics for people with gonorrhoea and chlamydia

In this section

If you have gonorrhoea, you might also have chlamydia, which is another [infection](#) passed from person to person during sex. Among people who have gonorrhoea, half of women and a third of men have chlamydia too. ^{[22] [23] [24] [25] [26]} Because of this, your doctor might want to test and treat you for both infections. Or you might be treated for both, even if you haven't been tested. This is because the test costs more than the treatment, and also because it takes some time to get the test results. Doctors worry that some people might not come back to find out their results, so they treat them straight away without doing a test. ^[10]

We could not find any good-quality studies about the best treatment for people who have gonorrhoea and chlamydia at the same time. But doctors often prescribe two medicines: one for the gonorrhoea and a different one for the chlamydia. ^{[10] [27]} This should get rid of both infections.

You will probably have one of these antibiotics to get rid of gonorrhoea: ^[10]

- Ceftriaxone (Rocephin), given as an injection into a muscle

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- Cefixime (Suprax), given as a single tablet
- Cefotaxime (Claforan), given as an injection into a muscle or **vein**.

Plus you will probably take a single capsule of azithromycin (Zithromax) for chlamydia. Another option is an antibiotic called doxycycline, which you take twice a day for seven days.

Further informations:

Using a condom properly

It's important to use condoms correctly. If you don't, they may not protect you against pregnancy or a sexually transmitted infection.

Here are some things to remember about using a condom. ^[2]

- Use a condom every time you have sex.
- Make sure you put the condom on before you start to have sex, not halfway through.
- If you change during sex from one kind of sex to another (for example, you change from vaginal to anal sex), use a new condom.
- Be careful not to tear condoms when you open the wrapper. And be careful not to tear them with your nails or your teeth.
- Lubricants with oil in them, like Vaseline or massage oils, can damage condoms. If you're using a lubricant, use a water-based one such as KY Jelly.
- Holding the condom against the base of the penis can stop it slipping off during withdrawal.
- It's best to withdraw while the penis is still erect.

Glossary:

infection

You get an infection when bacteria, a fungus, or a virus get into a part of your body where it shouldn't be. For example, an infection in your nose and airways causes the common cold. An infection in your skin can cause rashes such as athlete's foot. The organisms that cause infections are so tiny that you can't see them without a microscope.

bacteria

Bacteria are tiny organisms. There are lots of different types. Some are harmful and can cause disease. But some bacteria live in your body without causing any harm.

cervix

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The cervix is a piece of tissue that sits between a woman's womb and her vagina. It has a small opening in it that gets much bigger when a woman is having a baby.

urethra

Your urethra is the tube that carries urine from your bladder out of your body. In a man, the urethra runs through the inside of the penis. In a woman, the urethra is shorter and opens onto the top of the vagina.

rectum

The rectum is the last 15 to 20 centimetres (six to eight inches) of the large intestine, ending with the anus (where you empty your bowels from).

antibiotics

These medicines are used to help your immune system fight infection. There are a number of different types of antibiotics that work in different ways to get rid of bacteria, parasites, and other infectious agents. Antibiotics do not work against viruses.

fallopian tubes

Fallopian tubes are the two tubes that come out of the top of a woman's womb. They carry eggs from the ovaries to the womb.

chlamydia

Chlamydia is an infection you can get by having sex without a condom. It can cause pain or discomfort and discharge from your sexual organs. If you're a woman, it can also cause infertility or a painful infection inside your body.

ovaries

Women have two ovaries, one on each side of their womb. They are small glands that store eggs. Inside the ovaries are hundreds of thousands of pre-eggs, called follicles. Some of these grow into eggs.

prostate

The prostate is a small, solid gland that's about the size of a walnut. Only men have a prostate. The prostate makes the milky fluid that comes out of a man's penis when he has an orgasm. The fluid from the prostate helps keep sperm healthy and also helps them swim freely.

kidney

Your kidneys are organs that filter your blood to make urine. You have two kidneys, on either side of your body. They are underneath your ribcage, near your back.

diarrhoea

Diarrhoea is when you have loose, watery stools and you need to go to the toilet far more often than usual. Doctors say you have diarrhoea if you need to go to the toilet more than three times a day.

allergic reaction

You have an allergic reaction when your immune system overreacts to a substance that is normally harmless. You can be allergic to particles in the air you are breathing, like pollen (which causes hay fever) or to chemicals on your skin, like detergents (which can cause a rash). People can also have an allergic reaction to drugs, like penicillin.

veins

Veins are blood vessels that carry blood back to your heart after your blood has delivered oxygen and food to the tissues.

systematic reviews

A systematic review is a thorough look through published research on a particular topic. Only studies that have been carried out to a high standard are included. A systematic review may or may not include a meta-analysis, which is when the results from individual studies are put together.

intravenous infusion

When a medicine or a fluid, such as blood, is fed directly into a vein, it's called an intravenous infusion (or IV). To give you an intravenous infusion, a nurse, technician or a doctor places a narrow plastic tube into a vein (usually in your arm) using a needle. The needle is then removed and the fluid is infused (or dripped) through the tube into the vein.

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