Chlamydia

Chlamydia 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 chlamydia. And ‘safe sex’ habits will help you to avoid getting it.

We’ve brought together the best research about chlamydia 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 chlamydia?

Chlamydia is an infection that you can get when you have sex. If you have chlamydia, you probably won't feel ill and may not know you've got it. That's why it's often called the 'silent disease'.
Chlamydia

Chlamydia is an infection caused by bacteria (germs) called Chlamydia trachomatis. The bacteria can be passed from person to person during sex.

• If you're a man, it can affect the tube that carries urine down from your bladder to the outside (the urethra).

• If you're a woman, it can affect the neck of your womb (cervix) or your urethra, or both.

• The infection can be passed on by oral sex or anal sex as well as vaginal sex. So it can also affect your throat and your back passage (rectum).

• If you touch your eyes after touching infected fluid from your genitals you can get eye infection. [1]

Newborn babies can also be affected by chlamydia. This is because women who have the infection can pass it on during childbirth. If you're pregnant and you have chlamydia, your baby may be born with eye infections or pneumonia. But both of these problems can be treated with antibiotics. [2]

Here we've looked at treatments for uncomplicated chlamydia. This is when the infection hasn't spread beyond your urethra if you're a man or the neck of your womb if you're a woman. [3]

You're most likely to get chlamydia if: [2]

• You're younger than 25

• You have a new sex partner or more than one sex partner

• You don't use condoms during sex.

If you're a woman, you are also more likely to get chlamydia if you're taking the contraceptive pill.

Chlamydia is sometimes called the 'silent disease' because you can have it without knowing it. Up to 8 in 10 women with chlamydia and 5 in 10 men don't have any obvious signs of infection. [2] This is a problem for two reasons.

• People who don't know they are infected can carry on infecting other people.

• If chlamydia isn't diagnosed and treated, it can cause more serious health problems, such as pelvic inflammatory disease. (See What will happen to me?)
What are the symptoms of chlamydia?

Chlamydia is sometimes called the 'silent disease' because you can have it without knowing it. As many as 8 in 10 women and 5 in 10 men who have chlamydia don't have any obvious signs of infection. [2]

If you do get symptoms, they will usually start one week to three weeks after you've been infected. [2]

The most common symptoms in women are: [2]

• Unusual discharge from the vagina
• Bleeding between periods
• Pain when passing urine
• Pain in the lower abdomen.

The most common symptoms in men are: [2]

• Discharge from the penis
• Burning and itching around the genitals
• Pain when passing urine.

In men or women who have anal sex, chlamydia can cause inflammation in their back passage (rectum). [4] This is called proctitis. Proctitis can cause pain, discomfort, bleeding, constipation, or an unusual discharge.

Symptoms of chlamydia may carry on, but sometimes they disappear after a few days.

If you're at risk of chlamydia and have one or more symptoms, you should see your doctor or visit your local sexual health clinic (also known as a genitourinary medicine, or GUM, clinic). You'll be offered a simple test that will show whether or not you have the infection.

The NHS is trying to make testing more widely available, especially for younger people. It's aimed at under 25s. In England, if you'd rather not see your GP or go to a GUM clinic, you can get testing from some pharmacies, drop-in centres, universities, and family planning clinics. You can find out more at the NHS website (http://www.chlamydiascreening.nhs.uk) or by calling 0800 567123.

The test for chlamydia usually involves giving a urine sample. It can also be done with a swab. A swab is a twist of cotton at the end of a thin stick. Your nurse or doctor uses
the swab to take a sample of fluid. The fluid can then be tested for the bacteria that cause chlamydia.

• If you're a woman, your doctor or nurse will usually take the swab sample from the neck of your womb (cervix).

• For men, the swab is put into the tip of the penis, a short way up the tube that carries urine (the urethra). Men usually prefer to give a urine sample, as taking a swab can be uncomfortable. [5] [6]

If you might have an infection in your throat or your rectum, you'll probably also have a throat swab or a rectal swab taken.

You can also get home test kits for chlamydia. These usually come with a bottle that you fill with urine and send off to a lab to be tested. You get the results by post. Some services can also send you the results by email or text. [7]

Some test kits offer a result at home straight away, a bit like a home pregnancy test. But for the most reliable results, you'll need a test where you send a sample away to a lab. [7]

**What if the test shows I have chlamydia?**

If your test shows you have chlamydia, you'll need treatment with antibiotics. It's also important that your last sex partner, and any other partners you've had within the past few months, are tested too. [2] Contacting previous partners can be difficult, but your doctor or the staff at a GUM clinic will be able to help.

Your recent partners need to have a test even if they don't have any signs of infection. And they may be offered treatment even without a test, just in case. Making sure your current partner gets tested will stop you getting infected again.

**Who should have a test for chlamydia?**

Most people with chlamydia don't know they've got it, so it's important for people who are at risk to have regular screening tests.

In the UK, doctors recommend testing for chlamydia for some groups of people who are at more risk of getting the infection. [8] You should have a test for chlamydia if you: [9]

• Are younger than 25 and have had a new sexual partner in the past 12 months

• Have a sex partner with chlamydia or suspected chlamydia

• Are attending a sexual health (genitourinary medicine) clinic

• Already have another sexually transmitted infection
Chlamydia

- Have a baby with signs of chlamydial eye or lung infection
- Are donating your eggs or sperm.

If you're a woman, doctors recommend you also have a test if you're:
- Younger than 25 and having your first cervical smear test
- Having a termination of a pregnancy (abortion)
- Having anything inserted into your womb, including an IUD (coil), and you're at risk of chlamydia.

How common is chlamydia?

Most people with chlamydia don't know they have it. That's why we can't say exactly how many people are affected.

We do know that in the UK chlamydia is the most common infection to be passed on during sex. There were around 207,000 new cases diagnosed during 2012. We also know that chlamydia is getting more common.

A UK screening programme offers chlamydia testing to people between 15 and 24. About 7 in 100 people tested have chlamydia.

What treatments work for chlamydia?

If you have chlamydia, treatment with antibiotics will get rid of the infection. You won't need any other treatment.

Key messages about treatment for chlamydia

- **Antibiotics** are medicines that kill bacteria. They can get rid of chlamydia in most people.

- The antibiotics usually used are called azithromycin and doxycycline. Research shows they work well.

- You take azithromycin as a single dose. So you may find this medicine is the most convenient to use.

- Some antibiotics may affect a baby in the womb. If you're a woman and you're pregnant, there are other antibiotics you can take.

- It's important not to have sex until you and your partner have both been treated for chlamydia. That includes having oral sex and having sex using a condom. Otherwise you could pass the infection on again.
If you have chlamydia, anyone you've had sex with recently may also have it. Your doctor or nurse will want to make sure that your recent partner or partners also get treatment. You may be asked to contact your last partner and anyone else you've had sex with in the past few months. Or you can ask the staff at your sexual health clinic to do it for you.

We've looked closely at the research and ranked the treatments into categories according to whether they work.

We've looked separately at which treatments are best for pregnant women and which are best for women who aren't pregnant and for men.

- Treatments for men, and for women who aren't pregnant.
- Treatments for women who are pregnant.

Treatment Group 1

Treatments for men and for women who aren't pregnant

Treatments that work
- Azithromycin, doxycycline, or tetracycline

Treatments that are likely to work
- Erythromycin

Treatments that need further study
- Other antibiotics

Treatment Group 2

Treatments for women who are pregnant

There has been much less research on chlamydia treatment for pregnant women than for other groups of people. And it isn't always clear whether taking antibiotics will prevent infection in your baby, even if taking these drugs seem to clear up your infection.\(^{[19]}\)

If you're pregnant, you shouldn't take doxycycline or tetracycline because they can damage your baby's teeth and bones before birth.

Although azithromycin is available over the counter to treat chlamydia, if you're pregnant, it's important that you see your doctor.
Chlamydia

Treatments that are likely to work

- Azithromycin, erythromycin, or amoxicillin for pregnant women

Treatments that need further study

- Clindamycin for pregnant women

What will happen to me?

Chlamydia is easy to treat and cure. But if it's not recognised and treated, chlamydia can spread. This can have serious effects on your health. If you're a woman you may find it hard to get pregnant.

If you don't have treatment

If you're a woman and you have chlamydia that isn't treated, it can spread to your ovaries, your womb, or the tubes that lead from your ovaries to your womb (fallopian tubes). When this happens it's called pelvic inflammatory disease (also called PID). Between 1 in 10 and 4 in 10 women who have chlamydia that hasn't been treated get pelvic inflammatory disease. [2]

If you have pelvic inflammatory disease, you can have other problems such as:

- Blocked tubes: If your tubes are blocked, you may not be able to get pregnant

- Ectopic pregnancy: This is a dangerous condition. It happens when a fertilised egg can't move to your womb because of a blocked tube. And so your pregnancy starts growing in your fallopian tube.

About 1 in 10 women who've had just one attack of pelvic inflammatory disease get fertility problems because of their blocked tubes. [12] And the risk of ectopic pregnancy goes up six or seven times. [12]

If your tubes are damaged, they can sometimes be unblocked by having an operation.

If you're pregnant and have chlamydia that hasn't been treated, you can pass the infection on to your baby during birth. About one-third of babies born to mothers with untreated chlamydia have an infection of their eyes or their lungs at birth. [13] But these infections can be cured with antibiotics.

If you're a man and you have chlamydia that isn't treated you're less likely to get serious health problems than a woman who has the infection. But sometimes chlamydia causes an inflammation, either in the tubes leading to your testicles or in your testicles. This inflammation may make you less fertile (you may have problems getting a woman pregnant), but researchers don't know for certain. [14]
It’s also possible to get a form of arthritis called Reiter’s syndrome (also known as reactive arthritis) if you haven’t had treatment for chlamydia. This is more common in men, although it can happen in women too. [2]

If you have treatment

Having treatment with antibiotics (medicines that kill bacteria) cures chlamydia. But it doesn’t stop you from getting infected again.

If you’re a woman your risk of getting pelvic inflammatory disease goes up with each attack of chlamydia. [15] And if you get pelvic inflammatory disease more than once, you’re more likely to have fertility problems. [16] (To read more see our information on Pelvic inflammatory disease.)

In the long term, the best way to protect yourself against chlamydia is to prevent the infection being passed between sex partners. Here’s what doctors advise for men and women at risk of getting chlamydia. [17]

• Keep sex partners to a minimum.

• Use condoms correctly and regularly during sex.

• Get tested for chlamydia regularly. If you’re under 24, get a test every year until you are 24.

• Get a chlamydia test every time you have sex with someone new.

• Some people choose to be tested when starting a new relationship. They may also ask their partner to be tested. (To read more about testing, see What are the symptoms of chlamydia?)

It’s important that your last sexual partner or anyone you’ve had sex with in the past 60 days is also tested and treated for chlamydia. [18] Because many people don’t get symptoms, they may not know they’re infected without being told. And if they don’t get treatment, it could cause health problems for them in the long term. They might also carry on infecting other people.

You might find it difficult or embarrassing to tell partners or former partners that you’ve got chlamydia. Your doctor or nurse can advise you about how to do it. If you’re being treated at a sexual health clinic, the staff there can contact people, without using your name, to let them know that they should get checked. [18]

Treatments:

Azithromycin, doxycycline, or tetracycline
For men and for women who aren't pregnant, the three antibiotics azithromycin, doxycycline, and tetracycline work just as well as each other to get rid of chlamydia. Antibiotics are drugs that kill bacteria (germs). There are many types of antibiotics.

You can take azithromycin (brand name Zithromax) as a single dose. If you're taking doxycycline or tetracycline, you'll need to take them for seven days.

Doctors usually prescribe doxycycline or azithromycin for treating chlamydia.

You can buy azithromycin over the counter, without a prescription, if you're over 16, and if you have tested positive for chlamydia and you don't have any symptoms. If you have symptoms, like discharge or itchiness, you should get them checked by a doctor. The medicine you can buy from pharmacists is called Clamelle. You'll need to buy a test kit first, also branded Clamelle, to check whether you have chlamydia.

Although you may find it convenient to buy treatment yourself from a pharmacist, it's likely to be more expensive than seeing your GP or going to a GUM clinic. You can expect to pay around £25 for the test kit and £20 for the medicine. If you go thorough the NHS, chlamydia testing and treatment is often free, although if you go to your GP you'll probably have to pay the standard prescription charge. Prescription charges vary depending on where in the UK you live.

The NHS screening programme is trying to make chlamydia testing and treatment more widely available, especially for younger people. It's aimed at people under 25. In England, if you'd rather not see your GP or go to a GUM clinic, you can get testing from some pharmacies, drop-in centres, universities, and family planning clinics. You can find out more at the NHS website (http://www.chlamydiascreening.nhs.uk) or by calling 0800 567123.

There's good evidence that antibiotics work for chlamydia. One summary of the research (a systematic review) included 12 good-quality studies (randomised controlled trials) that looked at taking antibiotics for chlamydia. The summary included a total of 1,543 people. It showed that about 8 in 10 to 9 in 10 people with chlamydia were cured after taking either azithromycin or doxycycline. Other research has shown that tetracycline works just as well.

The advantage of azithromycin is that it works after taking a single dose. But you'll need to wait seven days after having treatment before having sex again. That's to be sure the treatment has had time to work. With the other medicines, you need to wait until you've finished taking the tablets.

The side effects of these antibiotics are usually mild. The most common ones are:

- Getting an upset stomach
- Getting stomach pain
- Having diarrhoea
Feeling sick.

Occasionally, people taking doxycycline or tetracycline get a skin rash when they are outside in sunlight. Doctors call this **photosensitivity**.

---

**Erythromycin**

In this section

Another **antibiotic** that’s likely to work for chlamydia is erythromycin (brand names Erymax and Erythrocin). You need to take erythromycin for 14 days.

But there hasn't been as much research on erythromycin as for azithromycin, doxycycline, and tetracycline. Three small studies (randomised controlled trials) found that taking erythromycin cured between 7 in 10 and 10 in 10 people with chlamydia. [22] [23] [24]

Common side effects of erythromycin include feeling sick, vomiting, and having diarrhoea. Some people find the side effects of erythromycin worse than those of other antibiotics. [19]

---

**Other antibiotics**

In this section

There are many other **antibiotics**, but they haven't been studied enough for us to say whether they work for chlamydia. These include amoxicillin, ampicillin, clarithromycin, lymecycline, minocycline, ofloxacin, pivampicillin, and rifampicin.

---

**Azithromycin, erythromycin, or amoxicillin for pregnant women**

In this section

There's some good evidence that azithromycin, erythromycin, and amoxicillin are likely to work for pregnant women who have chlamydia. [19] [25]

Researchers haven't fully tested whether azithromycin is safe if you're pregnant or breastfeeding. However, the research that has been done suggests it is safe. [2] Doctors often recommend it for pregnant women. [26]

You're likely to be offered: [26]

- A single, one-off dose of azithromycin
- Amoxicillin for seven days
- Erythromycin for seven days.
Chlamydia

You're more likely to get bad side effects with erythromycin than with amoxicillin. Common side effects of both drugs are:

- Feeling sick
- Vomiting
- Having diarrhoea.

Amoxicillin belongs to a group of antibiotics called penicillins. Some people have an allergic reaction to these medicines and can't take them. Often the first sign of an allergic reaction is a rash. Occasionally this allergic reaction can be dangerous and make the person having the reaction go into shock.

You're more likely to have an allergic reaction if you have eczema, asthma, or another condition related to allergies. You should see a doctor at once if you are think you're having a reaction to penicillin drugs.

Researchers aren't sure whether amoxicillin stops newborn babies getting infected, even though their mothers seem to be cured of chlamydia.

If you are pregnant, you'll need to have another test for chlamydia three to five weeks after treatment. That's because the drugs that are safe in pregnancy don't always work as well as the ones you can use when you're not pregnant. So your doctor will do a test to be certain that the drugs have worked.

Clindamycin for pregnant women

In this section

One good-quality study (called a randomised controlled trial) looked at how well an antibiotic called clindamycin worked for pregnant women with chlamydia. It found that clindamycin worked better than a dummy treatment (a placebo) at curing chlamydia in pregnant women. But there hasn't been enough research for us to say that clindamycin is likely to work.

Further informations:

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.

**bladder**
Your bladder is the hollow organ at the top of your pelvis that stores urine. It is similar to a balloon, only with stronger walls. It fills up with urine until you go to the toilet.

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.

cervix
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.

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).

pneumonia
Pneumonia is an infection in your lungs. Anything that causes infections (bacteria, viruses or fungi, for example) can give you pneumonia.

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.

inflammation
Inflammation is when your skin or some other part of your body becomes red, swollen, hot, and sore. Inflammation happens because your body is trying to protect you from germs, from something that's in your body and could harm you (like a splinter) or from things that cause allergies (these things are called allergens). Inflammation is one of the ways in which your body heals an infection or an injury.

constipated
When you're constipated, you have difficulty passing stools (faeces). Your bowel movements may be dry and hard. You may have fewer bowel movements than usual, and it may be a strain when you try to go.

sexually transmitted infection
An infection that is spread by people having sex is called a sexually transmitted infection (STI) or a sexually transmitted disease (STD). Examples are HIV, gonorrhoea and syphilis.

intrauterine device (IUD)
An intrauterine device (IUD) is a type of contraceptive. It is a small device made of copper or plastic, with threads at the end. These threads can be left in your vagina while the rest of the device sits in your womb (cervix). IUDs stop eggs sticking to your womb and growing.

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.

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.

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.

randomised controlled trials
Randomised controlled trials are medical studies designed to test whether a treatment works. Patients are split into groups. One group is given the treatment being tested (for example, an antidepressant drug) while another group (called the comparison or control group) is given an alternative treatment. This could be a different type of drug or a dummy treatment (a placebo). Researchers then compare the effects of the different treatments.

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.

eczema
Eczema is a very itchy rash. It may be dark and bumpy and release fluid. Scratching makes it worse. You can get eczema anywhere on your body, but it is most common on the wrists, the insides of the elbows and the backs of the knees. If you have asthma or allergies you are more likely to get eczema than someone who doesn’t have these conditions.

**Asthma**
Asthma is a disease of the lungs. It makes you wheeze, cough and feel short of breath. Asthma attacks are caused by inflammation and narrowing of your airways, which makes it hard for air to pass in and out of your lungs.

**Randomised controlled trials**
Randomised controlled trials are medical studies designed to test whether a treatment works. Patients are split into groups. One group is given the treatment being tested (for example, an antidepressant drug) while another group (called the comparison or control group) is given an alternative treatment. This could be a different type of drug or a dummy treatment (a placebo). Researchers then compare the effects of the different treatments.

**Placebo**
A placebo is a ‘pretend’ or dummy treatment that contains no active substances. A placebo is often given to half the people taking part in medical research trials, for comparison with the ‘real’ treatment. It is made to look and taste identical to the drug treatment being tested, so that people in the studies do not know if they are getting the placebo or the ‘real’ treatment. Researchers often talk about the ‘placebo effect’. This is where patients feel better after having a placebo treatment because they expect to feel better. Tests may indicate that they actually are better. In the same way, people can also get side effects after having a placebo treatment. Drug treatments can also have a ‘placebo effect’. This is why, to get a true picture of how well a drug works, it is important to compare it against a placebo treatment.

**Sources for the information on this leaflet:**
7. Schachter J, Hook EW, Martin DH. Confirming positive results of nucleic acid amplification tests (NAATs) for Chlamydia trachomatis; all NAATs are not created equal. Journal of Clinical Microbiology. 2005; 1372-1373; 43.


This information is aimed at a UK patient audience. This information however does not replace medical advice. If you have a medical problem please see your doctor. Please see our full Conditions of Use for this content. For more information about this condition and sources of the information contained in this leaflet please visit the Best Health website, http://besthealth.bmj.com. These leaflets are reviewed annually.