

Patient information from BMJ

Last published: Apr 25, 2022

Contraception: hormonal patches, rings, implants, and injections

Like the birth control pill and some types of intrauterine device, these methods of contraception all work by using hormones. You can talk with your doctor about whether they might suit your lifestyle.

Some of these methods are not suitable for all women. Your doctor or nurse should explain clearly who can and cannot use them.

The right contraception for you

There are many types of contraception to choose from, including the birth control pill. But they are not all suitable for everyone.

For example, women with heart conditions might not be able to take the pill. And people allergic to latex won't be able to use latex condoms.

The type of contraception that suits you best will depend on several things including:

- your medical history, including things like allergies and any health conditions that you have
- your lifestyle
- whether you need to think about preventing sexually transmitted infections (STIs), including HIV. For example, this applies to you if you have multiple partners, or if you change partners, and
- your own preferences: for example, you might not want to use some types of contraception because you're concerned about side effects. Or maybe you don't want to use condoms because you want something that you don't want to have to think about "in the moment".

What is hormonal contraception?

Hormonal contraception means preventing pregnancy by taking extra amounts of hormones that women's bodies produce naturally. When you take more of some hormones than the body normally produces, it stops you from getting pregnant.

Contraception: hormonal patches, rings, implants, and injections

These hormones work like this in several ways, including:

- stopping your ovaries from releasing an egg each month
- thickening the mucus (fluid) in your cervix so that it's harder for sperm to travel through it, and
- thickening the wall of the uterus (womb), so that it's harder for any fertilized egg to implant there.

The best-known method of hormonal contraception is the oral birth control pill. To learn more, see our leaflet *Contraception: oral contraceptives (the pill)*.

Another well-known hormonal contraceptive device is the progestogen intrauterine device (IUD). To learn more, see our leaflet *Contraception: intrauterine devices (IUDs)*.

But there are several other ways of using hormones to prevent pregnancy that don't involve taking pills. They are:

- vaginal rings
- skin patches
- implants in the arm, and
- injections.

These different methods mean that women can choose one that best suits their lifestyle. And different hormonal methods of contraception use different hormones.

- Skin patches and vaginal rings use a hormone called estrogen along with a type of hormone called a progestogen. These are called **combined hormonal contraceptives**.
- Injections and implants use a progestogen hormone only.

None of these hormonal methods protects against HIV and other STIs.

Who can use combined hormonal contraceptives (contraceptives that contain estrogen)?

Not all women can use combined hormonal contraception. This is because there is a small chance that estrogen can cause serious health problems for some women, including strokes, heart attacks, and deep vein thrombosis (DVT).

Your doctor or nurse should explain carefully who can't use contraception that contains estrogen. But generally, you should not use combined contraception if you:

- smoke
- get migraines with "aura" (such as flashing lights and problems with your vision)
- have any history of heart disease
- have had a stroke
- have severe liver disease

Contraception: hormonal patches, rings, implants, and injections

- have very high blood pressure
- have ever had deep vein thrombosis.

Some women with diabetes might also not be able to use combined contraception.

Different hormonal contraception methods

The contraceptive implant

The contraceptive implant is a small device that is inserted into the upper arm by a specially trained doctor. It gradually releases a progestogen hormone, which prevents pregnancy in the same way as other hormonal contraception.

The implant does not contain estrogen. So you can use it if you can't use contraception that contains estrogen.

There are two versions of it. One contains two small rods that contain the hormone, while the other contains only one.

The two-rod version lasts 4 to 5 years, while the one-rod version lasts for 3 years. But both versions are not available everywhere. If you live in the UK or US, you will only be able to have the one-rod version.

The implant can cause side effects in some women, including:

- irregular bleeding, or stopping having periods altogether
- headaches
- acne (although the implant can actually cause acne to improve in some women)
- tummy pain
- weight changes, and
- mood changes.

If you decide you want to try to become pregnant, just have the implant removed and your fertility will return to normal quickly.

Contraceptive injections

The contraceptive injection is a progestogen-only contraceptive method. So it's okay to use it if you can't use a contraceptive that contains estrogen.

You have an injection, usually in the upper arm, every three months. Like other hormonal contraceptives, it's very effective.

The possible side effects are similar to those of other hormonal contraceptives. But the injection can also cause a reduced sex drive in some women.

It can also weaken your bones slightly. So if you want to use this method over the long term, you might need to make sure that you are eating a healthy diet and staying active, to make sure your bones stay strong.

Contraception: hormonal patches, rings, implants, and injections

If you decide you want to try to become pregnant, it can take up to a year to become fertile again after you stop having the injections.

The skin patch

The contraceptive skin patch is a combined hormonal contraceptive. This means that it contains both estrogen and a progestogen hormone.

The patch is very effective when used properly. You use it like this:

- A pack of patches contains three patches.
- You apply a patch to your skin and leave it there for a week.
- You can put it on most places on your body, but not on your breasts, or where it might get rubbed off by clothes.
- Your body slowly and steadily absorbs the hormones in the patch.
- You use one patch per week for three weeks.
- You then have one week (week 4 of your menstrual cycle) without a patch.
- Then you start again with a new pack of patches.

Your doctor or nurse should explain in detail how to use the patches, including what to do if:

- you leave one on for too long
- a patch comes off by itself (this is rare. The patches are very sticky and they should stay on even when you shower or swim), or
- you forget to put one on after your week without a patch.

The patch can cause side effects in some women, including:

- irregular bleeding
- skin irritation
- headaches, and
- nausea.

In most women, the side effects improve or disappear after the first few months. If they don't get better, talk with your doctor about trying a different type of patch.

The patch might not work as well in women who weigh more than 90 kilograms (about 200 pounds). If you weigh more than this amount, your doctor will probably recommend that you use a different method of contraception.

The vaginal ring

The vaginal ring is a small, soft plastic ring that you insert into your vagina. Like the patch, it is a combined hormonal contraceptive, which means it uses both estrogen and a progestogen hormone.

Contraception: hormonal patches, rings, implants, and injections

It works by slowly releasing the hormones into your vagina over several weeks. Like the patch, it is very effective when used properly.

You leave the ring in for three weeks (21 days). Then you remove it for the last seven days of your cycle.

Your doctor or nurse should discuss with you how exactly to use the ring, including what to do if:

- it falls out by itself
- you forget to take it out after 21 days, or
- you forget to put a new one in after your week with no ring.

The ring can cause side effects in some women, including:

- irregular bleeding
- increased vaginal discharge
- tummy pain, and
- breast pain.

These side effects usually stop after the first few months. If they don't stop, talk with your doctor about trying a different type of ring.

Can hormonal contraception help with difficult periods?

Some women choose hormonal contraception, including the pill, because it can help with various problems they have with their periods. Combined hormonal contraception, which contains estrogen, seems to help the most.

These problems sometimes improve because women stop having periods completely when using hormonal contraception. Or it can just ease the symptoms of various problems, including:

- heavy or irregular bleeding
- premenstrual symptoms, such as headaches, bloating, and mood change
- endometriosis
- menstrual migraines
- anemia caused by heavy bleeding
- flares of rheumatoid arthritis during periods
- acne
- polycystic ovary syndrome (PCOS), and
- menopausal symptoms.

You can talk with your doctor about whether hormonal contraception might help you with problems to do with your periods.

Contraception: hormonal patches, rings, implants, and injections

Combined hormonal contraception also seems to reduce your chances of getting some types of cancer.

Why contraception matters

The number of unplanned pregnancies tells us how important it is for sexually active people to think about contraception. For example, in the US about half of all pregnancies are unplanned.

This is not always bad news, of course. Just because a pregnancy is unplanned doesn't mean it's unwanted.

But many unplanned pregnancies end in abortions, which can cause emotional distress, and sometimes physical health risks, such as infections.

Hormonal contraceptive methods can be very effective at preventing pregnancy, but they don't suit everyone.

But whatever method you choose, planning and taking responsibility for contraception is vital if:

- you are a sexually active girl or woman who could become pregnant, and you do not wish to become pregnant
- you are a sexually active male having sex with females of childbearing age, and you wish to play a responsible part in avoiding an unwanted pregnancy
- you think that you might be at risk of HIV or other STIs (for example, if you have multiple sexual partners) and you want to use a method of contraception that protects against infection.

Very few methods of contraception are totally effective. But planning gives you the best chance of being in control of when and if you become pregnant.

Your doctor or practice nurse will be very happy to discuss contraception and family planning methods that best suit you.

The patient information from *BMJ Best Practice* is regularly updated. The most recent version of Best Practice can be found at bestpractice.bmj.com. This information is intended for use by health professionals. It is not a substitute for medical advice. It is strongly recommended that you independently verify any interpretation of this material and, if you have a medical problem, see your doctor.

Please see BMJ's full terms of use at: bmj.com/company/legal-information. BMJ does not make any representations, conditions, warranties or guarantees, whether express or implied, that this material is accurate, complete, up-to-date or fit for any particular purposes.

© BMJ Publishing Group Ltd 2024. All rights reserved.

What did you think about this patient information guide?



Contraception: hormonal patches, rings, implants, and injections

Complete the [online survey](#) or scan the QR code to help us to ensure our content is of the highest quality and relevant for patients. The survey is anonymous and will take around 5 minutes to complete.

