



Implants, Injections, Rings, and Patches: Hormonal Birth Control Options

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What are hormonal birth control methods?

Besides oral contraceptives (birth control pills) and the hormonal **intrauterine device**, there are several other forms of hormonal birth control: implants, injections, rings, and patches.

How do hormonal birth control methods work?

Hormonal birth control methods work by releasing **hormones** to prevent **ovulation**. The cervical mucus thickens, making it hard for sperm to reach the egg. The **endometrium** thins, making it less likely that a fertilized egg will attach to it.

How effective are these methods?

The number of women out of 100 who will become pregnant during the first year of typical use (when a method is used by the average person who does not always use the method correctly or consistently) of each of these methods is as follows:

- Implant—Less than 1 woman will become pregnant
- Injection—3 women will become pregnant
- Vaginal ring—8 women will become pregnant
- Skin patch—8 women will become pregnant

Do hormonal birth control methods protect against sexually transmitted diseases (STDs)?

Hormonal birth control methods do not protect against **sexually transmitted diseases (STDs)**, including **human immunodeficiency virus (HIV)** (see the FAQ [How to Prevent Sexually Transmitted Diseases](#)). A male or female condom should be used with these methods to protect against STDs if you are at risk of STD infection.

What is the contraceptive implant?

A contraceptive implant is a single rod about the size of a matchstick. A health care provider inserts the implant under the skin with a special applicator.

What are the benefits, risks, and side effects of the contraceptive implant?

- Benefits:
 - The implant protects against pregnancy for up to 3 years.
 - If you wish to become pregnant, the implant can be removed easily by your health care provider, and fertility returns without delay.
 - The implant can be used by women who are breastfeeding.
- Risks:
 - Although rare, if pregnancy occurs while the implant is inserted, there is an increased risk of it being an **ectopic pregnancy**.
 - Problems with insertion of the implant, such as inserting the implant too deeply, are possible.
- Possible side effects:
 - Irregular bleeding
 - Weight gain
 - Mood changes
 - Headache
 - Acne
 - Depression

What is the birth control injection?

An injection of depot medroxyprogesterone acetate (DMPA) provides protection against pregnancy for 3 months. Depot medroxyprogesterone acetate is a type of **progestin**.

How often are injections given?

Injections must be given every 3 months by a health care provider, and you must get the injection on time. The first one usually is given within the first 5 days after the start of your menstrual period.

What are the benefits, risks, and side effects of the injection?

- Benefits:

- The injection may decrease the risk of endometrial cancer.
- The injection may decrease the frequency of menstrual migraines.
- It can be used by women who are breastfeeding.

- Risks:

- Many women and teenagers have a decrease in bone density while using hormonal injections. Bone density appears to return to levels that are normal for the woman's age when the injections are stopped.
- Women who have multiple risk factors for cardiovascular disease, like smoking, older age, or diabetes, may be at increased risk of **cardiovascular disease** while using the DMPA injection. This increased risk may last for some time after the method is stopped. Women with a history of stroke, vascular disease, or high blood pressure also may be at increased risk of cardiovascular disease while using this method.

- Possible side effects:

- Delay in fertility after stopping DMPA: after you stop DMPA injections, fertility returns in about 10 months. For some women, it may take longer.
- Irregular bleeding during the first 6–9 months of use
- Weight gain
- Headaches
- Nervousness
- Dizziness
- Weakness or fatigue

What is the vaginal ring?

The vaginal ring is a flexible, plastic ring that you insert into the upper vagina. It releases **estrogen** and progestin. You do not need to visit your health care provider to have the ring inserted or removed, but a health care provider must prescribe it. You may need to use a backup method of birth control, such as a condom, for the first 7 days of use.

How is the ring used?

The ring is worn for 21 days, removed for 7 days, and then a new ring is inserted. During the week it is out, bleeding occurs. To use the ring as a continuous-dose form of birth control, remove the old ring and insert a new ring every 3 weeks with no ring-free week in

between.

What happens if the ring slips out?

If the ring slips out, you should use a backup method of birth control for 7 days. If it slips out of place often, you may need to choose a different method of birth control.

What are the benefits, risks, and side effects of the ring?

- Benefits:

- The ring may reduce pain during menstrual periods.
- It may improve acne and reduce excess hair growth.
- When used continuously (a new ring every 3 weeks), the ring can help prevent menstrual migraines.

- Risks:

- There is a small increased risk of **deep vein thrombosis (DVT)**, heart attack, and stroke. The risk is higher in some women, including women older than 35 years who smoke more than 15 cigarettes a day or women who have multiple risk factors for cardiovascular disease.
- Discuss your individual risks for these complications with your health care provider.

- Possible side effects:

- Vaginal infections and irritation
- Vaginal discharge
- Headaches
- Weight gain
- Nausea

What is the skin patch?

The contraceptive skin patch is a small (1.75 square inch) adhesive patch that is worn on the skin and releases estrogen and progestin into the bloodstream. It should not come off during regular activities, such as bathing, exercising, or swimming.

How is the skin patch used?

The patch is used on a 4-week or 28-day cycle. A patch is worn for a week at a time for a total of 3 weeks in a row. During the fourth week, a patch is not worn and bleeding occurs. After week 4, a new patch is applied and the cycle is repeated. To use the patch as a continuous-dose form of birth control, apply a new patch every week on the same day without skipping a week.

What are the benefits, risks, and side effects of the skin patch?

- Benefits:

- The patch may improve acne and decrease unwanted excess hair growth.
- Used continuously, it can reduce the frequency of menstrual migraines.

- Risks:

- There is a small increased risk of DVT, heart attack, and stroke. The risk is higher in some women, including women older than 35 years who smoke more than 15 cigarettes a day or women who have multiple risk factors for cardiovascular disease.
- Discuss your individual risks for these complications with your health care provider.

- Possible side effects:

- Nausea
- Headaches
- Skin irritation

Glossary

Cardiovascular Disease: Disease of the heart and blood vessels.

Deep Vein Thrombosis (DVT): A condition in which a blood clot forms in the veins in the leg or other areas of the body.

Ectopic Pregnancy: A pregnancy in which the fertilized egg begins to grow in a place other than inside the uterus, usually in the fallopian tubes.

Endometrium: The lining of the uterus.

Estrogen: A female hormone produced in the ovaries.

Hormones: Substances produced by the body to control the functions of various organs.

Human Immunodeficiency Virus (HIV): A virus that attacks certain cells of the body's immune system and causes acquired immunodeficiency syndrome (AIDS).

Intrauterine Device: A small device that is inserted and left inside the uterus to prevent pregnancy.

Ovulation: The release of an egg from one of the ovaries.

Progestin: A synthetic form of progesterone that is similar to the hormone produced naturally by the body.

Sexually Transmitted Diseases (STDs): Diseases that are spread by sexual contact, including chlamydia, gonorrhea, human papillomavirus infection, herpes, syphilis, and infection with human immunodeficiency virus (HIV, the cause of acquired immunodeficiency syndrome [AIDS]).

If you have further questions, contact your obstetrician–gynecologist.

Designed as an aid to patients, this document sets forth current information and opinions related to women's health. The information does not dictate an exclusive course of treatment or procedure to be followed and should not be construed as excluding other acceptable methods of practice. Variations, taking into account the needs of the individual patient, resources, and limitations unique to institution or type of practice, may be appropriate.