

How Contraception Works

As policies affecting reproductive health care should be based in evidence, it is important to understand the latest scientific information in order to challenge the myths, misconceptions, and political agendas that cause ongoing confusion about and impede access to available contraceptive methods. Being able to explain each method's "mechanism of action" (or how it works within the body) is a crucial step toward the goal of protecting access to contraception.

Read on to learn about different contraceptive method's mechanisms of action.

Combination Oral Contraceptives

Combination oral contraceptives contain the hormones estrogen and progestin. These pills cause a person's ovary to stop its monthly hormone cycle and egg development, thereby preventing ovulation (the release of an egg). They also thicken the cervical mucus, impeding sperm transport in order to prevent fertilization (a sperm meeting an egg).

Progestin-Only Oral Contraceptives

The second form of daily birth control pills is the progestin-only pill, also known as the minipill. Unlike combination pills, these pills do not contain estrogen. Progestin-only pills work by thickening cervical mucus so that sperm can't reach an egg. In addition, they inhibit ovulation for approximately 60% of users.

The Vaginal Ring

The vaginal ring (brand name NuvaRing®) is a small, flexible plastic ring inserted in the vagina that works to prevent pregnancy by slowly releasing progestin and estrogen into the bloodstream through the mucus membranes in the vagina. These hormones prevent fertilization by suppressing ovulation and increasing the thickness of the cervical mucus to act as a barrier to sperm.

The Patch

The patch (brand name Ortho Evra®) is an adhesive, like a sticker, that is placed on the skin and works to prevent pregnancy by slowly releasing both estrogen and progestin into the bloodstream through the skin. Like the vaginal ring and the pill, the patch suppresses ovulation and thickens the cervical mucus.

The Shot

The shot (brand name Depo Provera®) is a progestin-only contraceptive that prevents pregnancy by inhibiting ovulation and by thickening cervical mucus. While some progestin-only methods only prevent ovulation in some users, the shot will inhibit ovulation in nearly all cases.

The Implant

The implant (brand name Nexplanon®) is a small, plastic, progestin-containing device inserted into the arm. It prevents pregnancy by slowly releasing progestin, thus suppressing ovulation and thickening the cervical mucus to act as a barrier to sperm. Like the shot, the implant reliably prevents ovulation in users.

Hormonal Intrauterine Devices (IUDs)

IUDs are T-shaped devices inserted into the uterus by a health care provider. They come in hormonal and non-hormonal forms. The hormonal IUDs (Mirena®, Skyla®, Liletta™, and Kyleena™) contain progestin and work by thickening cervical mucus to impede sperm transport. They also prevent ovulation in some users.

Non-Hormonal Intrauterine Devices (IUDs)

The non-hormonal IUD is made of copper and is known as ParaGard®. The copper ions emitted by Paragard® are toxic to sperm and prevent them from reaching an egg. Though Paragard® will not disrupt an already implanted egg, it is unknown whether it can prevent implantation of a fertilized egg. Leading medical and scientific organizations define pregnancy as beginning at the [conclusion of implantation](#) of a fertilized egg. This means that even if Paragard® were to interfere with implantation, it would be preventing pregnancy, not causing an abortion. Paragard can be used as routine or emergency contraception.

Levonorgestrel Emergency Contraceptive Pills

Unlike routine hormonal forms of contraception, emergency contraception can be used *after* unprotected sex or contraceptive failure in order to prevent pregnancy. Plan B One-Step® and its generics contain a type of progestin called levonorgestrel. Levonorgestrel EC works by [delaying or inhibiting ovulation](#), thus preventing fertilization from occurring. It does [not prevent a fertilized egg from implanting](#) and [will not disturb an already implanted egg](#). It should be noted that the label on these products states that “it may inhibit implantation (by altering the endometrium).” However, research debunking that assertion has emerged since the label was approved in 1999.

Ulipristal Acetate Emergency Contraceptive Pills

A second type of EC pills contains ulipristal acetate (ella®). The most current research suggests that, like levonorgestrel EC pills, ella® works by [delaying or inhibiting ovulation](#). There is no scientific evidence that ulipristal acetate affects implantation of a fertilized egg. Like levonorgestrel EC, ulipristal acetate will not disrupt an existing pregnancy.