

The Intrauterine Device

The intrauterine device (IUD) is a type of birth control. It is a small, plastic device that is inserted and left inside the uterus to prevent pregnancy.

This pamphlet will explain:

- Types of IUDs
- How an IUD works
- The benefits and risks of using an IUD

Reproduction

To understand how the IUD works, you should know what happens during reproduction. A woman has two ovaries, one on each side of the uterus. Each month, one of the ovaries releases an egg into a fallopian tube. This is called ovulation. It typically occurs about 12–14 days before the start of the menstrual period.

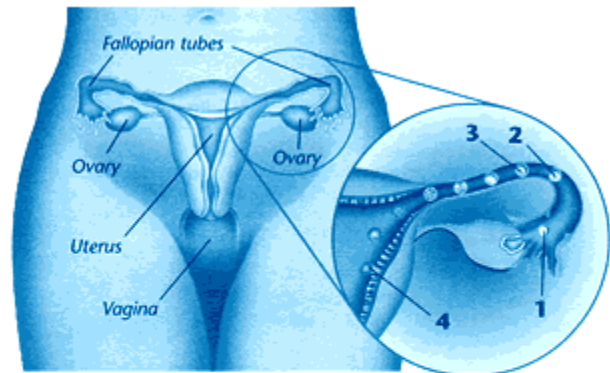
A woman can get pregnant if she has sex around the time of ovulation. During sex, the man ejaculates sperm into the vagina. The sperm travel up through the cervix and into the fallopian tubes.

If a sperm meets an egg in the fallopian tube, fertilization—union of egg and sperm—can occur (see figure). The fertilized egg then moves down the fallopian tube to the uterus. It then attaches to the lining of the uterus and grows into a *fetus*.

Types of Intrauterine Devices

Although there have been several types of IUDs, currently only two are available in the United States: the hormonal IUD and the copper IUD. The hormonal IUD must be replaced every 5 years. The copper IUD can remain in your body for as long as 10 years. As soon as the IUD is removed, it no longer protects against pregnancy.

The IUD is more effective than most other forms of birth control. However, the IUD does



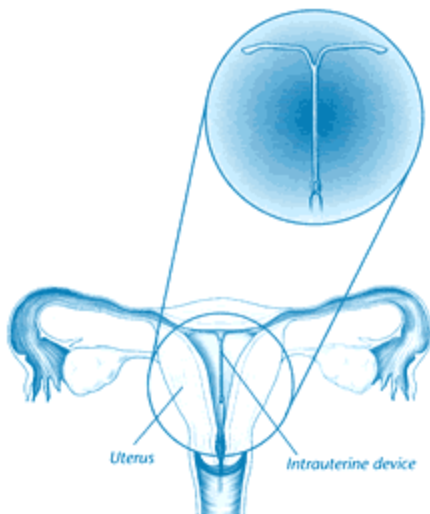
Each month during ovulation an egg is released (1) and moves into one of the fallopian tubes (2). If a woman has sex around this time, an egg may meet a sperm in the fallopian tube, and the two will join (3). This is called fertilization. The fertilized egg then moves through the fallopian tube into the uterus and becomes attached there to grow during pregnancy (4).

not protect against *sexually transmitted diseases (STDs)*.

The IUD is a very popular method of birth control throughout the world. However, in the United States, just 2% of women using birth control use an IUD. Many women are afraid to use an IUD because one type had problems and was withdrawn from the market in 1975. Today's IUDs are safe and more effective. The design was changed, and doctors are careful in selecting patients who can use them.

How an IUD Works

Both types of IUDs are T-shaped, but they work in different ways. The hormonal IUD releases a small amount of the hormone *progestin* into the uterus. This thickens the cervical mucus, which decreases the chance that the sperm will enter the cervix. It may make the sperm less active and make the sperm and the egg less likely to be able to live in the fallopian tube. It also thins the lining of the uterus. This keeps a fertilized egg from attaching and makes menstrual periods lighter.



The copper IUD releases a small amount of copper into the uterus. This can prevent the egg from being fertilized or attaching to the wall of the uterus. The copper also prevents sperm from going through the uterus and into the fallopian tubes and reduces the sperm's ability to fertilize an egg.

Inserting the IUD

A doctor must insert and remove the IUD. Your doctor will perform a routine exam to make sure you are able to use one. This exam may include:

- Reviewing your medical history
- Performing a pregnancy test
- Taking a sample from your vagina and cervix to check for infection

Some women may not be able to use an IUD. The size or shape of a woman's uterus may not be compatible with the IUD. Women who have had a recent abnormal Pap test result or other conditions should not use an IUD (see box).

You may be asked to read and sign a consent form before using an IUD. Make sure you understand everything about the IUD to be inserted. If you have questions, ask your doctor.

The IUD often is inserted during or right after your menstrual period. The doctor puts the IUD in a long, slender, plastic tube. He or she places it into the vagina and guides it

through the cervix into the uterus. The IUD is then pushed out of the plastic tube into the uterus. The IUD springs open into place, and the tube is withdrawn.

You Should Not Use an IUD If You:

- Are pregnant
- Have or have had within the past 3 months *pelvic inflammatory disease*
- Have a known or suspected pelvic cancer
- Have abnormal vaginal bleeding
- Have or have had within the past 3 months certain pelvic infections
- Have an STD
- Have certain liver conditions (hormonal IUD only)
- Are allergic to any part of the IUD
- Have uterine *fibroids* or other problems that may interfere with inserting an IUD

Insertion of the IUD does not require anesthesia (pain relief), although you may have some discomfort. Taking over-the-counter pain relief medication before the procedure may help. Sometimes a doctor will use *local anesthesia* to insert the IUD.

Once the IUD is inserted, the doctor will show you how to check that it is in place. Each IUD comes with a string or "tail" made of a thin plastic thread. After insertion, the tail is trimmed so that 1–2 inches hang out of the cervix inside your vagina. You will be able to tell the placement of the IUD by the location of this string. The string will not bother you, but your partner may feel it with his penis. This should not interfere with his sexual feeling.

It is important to check the string regularly. To do this, you must insert a finger into your vagina and feel around for the string. You can do this at any time, but doing it right after your menstrual period is easy to remember. If you do not feel the string or if you feel the IUD, call your doctor. The IUD may have slipped out of place. Use another form of birth control until your IUD is checked.

If you can feel the IUD, see your doctor. Do not try to remove it yourself.

Benefits

During the first year of use, about 8 out of 1,000 women using the copper IUD and 1 out of 1,000 women using the hormonal IUD will become pregnant. This makes the IUD one of the most effective forms of birth control available. The IUD also has many other benefits:

- It is easy to use. Once it is in place, you do not have to do anything else to prevent pregnancy.
- It does not interfere with sex or daily activities. You can use a tampon with it.

- Physical activity will not dislodge the IUD.

The hormonal IUD may help decrease and, in some cases, treat menstrual pain and bleeding. It also may be used to help treat menopause symptoms in some women. The copper IUD can be used for emergency contraception. To be effective, it must be placed in the uterus within 5 days of having unprotected sex.

Side Effects

Menstrual pain and bleeding, as well as bleeding between periods, are increased with the copper IUD, but decreased with the hormonal IUD. Some women have some cramping and spotting during the first few weeks after the IUD is inserted. Vaginal discharge also can occur. These symptoms are common and usually disappear within a month or two.

Risks

Serious complications from use of an IUD are rare. However, some women do have problems. These problems usually happen during, or soon after, insertion:

- *Expulsion:* The IUD is pushed out of the uterus into the vagina. It happens within the first year of use in about 5% of users. This rate decreases with length of use. It is more likely to occur in women who have not had children. If the IUD is partly or fully expelled, it is no longer effective.
- *Perforation:* The IUD can perforate (or pierce) the wall of the uterus during insertion. This is very rare and occurs in only about 1 out of every 1,000 insertions.
- *Infections:* Infections in the uterus or fallopian tubes can occur. This may cause scarring in the reproductive organs, making it harder to become pregnant later. In women at low risk for STDs, this occurs in as few as 1 out of every 1,000 women using an IUD.
- *Pregnancy:* Rarely, pregnancy may occur while a woman is using an IUD. If the string is visible, the IUD should be removed by a doctor. If the IUD is removed soon after conception, the risks caused by having the IUD in place are decreased. If the IUD remains in place, there are increased risks to the mother and fetus, including increased risk of miscarriage, infection, or preterm birth. If pregnancy occurs, there is also an increased risk that it will be an ectopic pregnancy. However, pregnancy may go to term with an IUD in place. If you are using an IUD and think you may be pregnant, talk to your doctor about your options and risks.

Be alert for symptoms that may signal a problem with your IUD.

Warning Signs

These symptoms may signal there is a problem with your IUD. Call your doctor if you have any of the following symptoms:

- Severe abdominal pain
- Pain during sex
- A missed period or other signs of pregnancy
- Unusual vaginal discharge
- A change in length or position of the string
- The IUD can be felt in the cervix or vagina

Do not try to remove an IUD yourself. An IUD should be removed by a doctor.

Finally...

The IUD offers safe, effective, and reversible protection against pregnancy for many women. Weighing the benefits and risks of using an IUD and knowing your medical and sexual history will help you and your doctor decide whether this method of birth control is right for you.

Glossary

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.

Emergency Contraception: Birth control methods that are used to prevent pregnancy after a woman has had sex without birth control or after the method she used has failed.

Fetus: A baby growing in the woman's uterus.

Fibroids: Benign growths that form in the muscle of the uterus.

Local Anesthesia: The use of drugs that prevent pain in a part of the body.

Pap Test: A test in which cells are taken from the cervix and vagina and examined under a microscope.

Pelvic Inflammatory Disease: An infection of the uterus, fallopian tubes, and nearby pelvic structures.

Progestin: A synthetic form of progesterone that is similar to the hormone produced naturally by the body. Progesterone is a female hormone that is produced in the ovaries and makes the lining of the uterus grow; when the level of progesterone decreases, menstruation occurs.

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

Uterus: A muscular organ located in the female pelvis that contains and nourishes the developing fetus during pregnancy.